Industrialization under the WTO:

The Impact of Asymmetric Free Trade Agreements on Middle-Technology Developing Countries

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ABSTRACT

This dissertation addresses the issue of industrialization in the WTO regime, focusing on the role of asymmetric free trade agreements. It proposes a framework where free trade agreements offer payoffs that countries have not been able to achieve through their WTO commitments. To evaluate these payoffs, I explore the mechanisms through which selected features of free trade agreements are translated into commercial outcomes. The central conclusion of this thesis is that free trade agreements provide developing countries with additional policy flexibility that is often not used to its fullest potential. Existing work on individual features of free trade agreements has focused primarily on those features that further constrain domestic policy options; the proposal that they may also expand policy options has been largely overlooked.

It is a fact that in the WTO regime, the trade policy options available to developing countries have been restricted relative to the set that was available to their predecessors. Developing countries actively agreed to these restrictions with the expectation that growth and development would result from their participation in the WTO regime. This unfulfilled expectation, in combination with a multilateral negotiation structure that is characterized by collective action problems, creates an incentive for WTO members to form supplementary trade associations as they seek to move forward politically and economically. Yet given that free trade agreements are also characterized by an uncertain payoff, this dissertation seeks to provide evidence that they do in fact result in positive industrial outcomes. The model I use here also explains why free trade agreements are able to deliver results that similar unilateral initiatives do not.

I use the case study of the U.S.-Chile FTA to test the theory on a developing country that has specifically targeted free trade agreements as a feature of its industrial strategy. Empirical data from both the negotiation process and commercial outcomes illustrates that in terms of the expected payoffs of export diversity, increased bilateral trade and industrialization in general, free trade agreements offer countries the ability to design and implement elements of an interventionalist industrial strategy that is consistent with their WTO commitments.

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CHAPTER 1 INTRODUCTION

1.1 BACKGROUND

In this dissertation, I will show that asymmetric free trade agreements can be used by developing countries to target sectors in a way that promotes industrialization in a manner that is compliant with their World Trade Organization (WTO) obligations.

Countries that successfully industrialized before 1994 did so using interventionalist development strategies (Bardhan, 1990; Amsden, 1993; Wade, 1990a), many of which were subsequently limited by the WTO. Initially, the developing countries conceded to these limitations with the expectation that the resulting regulatory environment would yield high growth payoffs. Subsequently, the inability of the international regime to generate the expected payoffs resulted in protests against further expansion of the WTO disciplines. But at the same time as the developing countries have been walking away from multilateral trade talks, they have also been negotiating preferential trade agreements that not only include many of the same regulations that they are protesting in the WTO, but in many cases go beyond them.

This dissertation seeks to rationalize this apparent inconsistency by introducing the desire for policy flexibility as an explanatory variable. The problem of unrealized growth payoffs is compounded by collective action problems in the WTO that constrain the ability of developing countries to adjust the multilateral policy regime to account for their development needs. This institutional rigidity creates an incentive for WTO members to form supplementary trade associations that can be used to design incentives that are suited to domestic growth targets. The form, function and popularity of free trade agreements since 1994 suggests a close correlation with this incentive.

¹ They traded their concessions on issues with unknown payoffs (e.g. TRIPs) for greater market access in agriculture (Croome, 1995).

Specifically, my theory is that asymmetric free trade agreements (FTAs)² offer developing countries a number of unique channels to promote industrialization in a way that is within the parameters of their international commitments.

My contention that these channels are unique comes from 2 observations that I will illustrate in the following chapters. First, where FTAs are one tool of a group that all target the same results, they produce outcomes more effectively than the alternative policies. This is a result of dynamics that are specific to the institution of a free trade agreement.³ And second, FTAs offer the ability to target outcomes in ways that are completely unique and not available through alternative channels.⁴

Traditionally, national development strategies were relatively unregulated. Despite this freedom, the policies favored by both industrial and developing countries were strikingly similar. In the now first-world countries, prohibitive tariffs, export subsidies, infant industry protection, and discrimination against imports were popular (Eckes, 1995; Chang, 2003). In the latecomers, Amsden (2001) points to the extensive role played by performance requirements, subsidies, duty drawbacks and reciprocal control mechanisms. The common element among both sets of countries was the preferential targeting of domestic firms. While the causality between interventionalism and industrialization is still in dispute, even skeptics have acknowledged that important growth outcomes resulted from the policies of the latecomers (World Bank, 1993).

The formal multilateral regulation of national development strategies began with the General Agreement on Tariffs and Trade (GATT) in 1947, when contracting parties agreed to follow the guiding principles of reciprocity and non-discrimination. The idea behind the establishment of an institution to regulate international trade was the need to

² Asymmetric free trade agreements are also known as North-South free trade agreements. These are any free trade agreement that partners an industrial country with one or more developing countries.

³ There are 2 cases of this examined in this dissertation - preferential market access and trade capacity building. Both of these features are offered in other fora, but are most successful through the FTA channel. ⁴ Here, I am referring to the case of ROOs examined in this dissertation. In that case, the developing country partner is able to directly provide incentives for producers to link to domestic firms in a way that is, is most non-FTA cases, not compliant with national treatment in the WTO.

limit increasingly protectionist trade interactions in the post-war period (Jackson, 1969). The guiding principles were applied first to goods trade and later expanded to other areas. The decentralized structure of the GATT gave countries the freedom to choose the sectors in which they would be regulated and required to liberalize. In this system, developing countries were largely free riders as they benefited from the tariff concessions of the industrial countries without offering many of their own (Panagariya, 1999). Their lack of participation was the result not only of disinterest by the industrial countries and lack of participation resources (Hudec, 1987), but also a distrust of open markets in the post-colonial period.

In the 1980s and 1990s, the scope of multilateral rules concerning domestic trade policy expanded both formally and informally. Formal changes were precipitated by the rise of the WTO, which not only transformed many of the GATT-era plurilateral agreements into obligations, but also introduced a more effective enforcement mechanism.

Informally, the Washington Consensus discouraged the use of discriminatory policies in a way that was enforced through conditionality in various aid programs (World Bank, 1992; Stiglitz, 2001; Chang, 2005). These changes contracted the available domestic policy set for all members, but had particularly severe implications for developing countries that were now acceding to a system that was largely designed by and for the industrial countries (Weiss, 2005).

Concurrent with expanding multilateral regulations, domestic policy choices have been further affected by the increasing popularity of preferential trade agreements. Though regional agreements are limited in their membership, they are widely popular. Today, nearly every WTO member belongs to at least one preferential trade agreement (WTO, 2005), and the average member subscribes to 6 different preferential agreements (World Bank, 2005a).

Unlike contractionary multilateral regulations, the effect of FTAs on domestic policy space is unclear. The goal of the WTO is fixed, while the goal of an FTA depends on the country. For the industrial countries, FTAs are seen as a means of promoting political

and economic objectives that are not addressed in the WTO, such as the reinforcement of domestic reforms, the creation of more stable relations with neighboring countries and advancement of the rule of law (Lamy, 2002; Zoellick, 2003). In contrast, developing countries are increasingly placing FTAs at the center of their development strategies (World Bank, 2005a) to promote trade outcomes such as the maintenance of access and market share, export growth, attraction of investment, and the diversification of export markets.

In this dissertation, I seek to understand exactly which features of FTAs promote developmental outcomes for developing countries, and to what extent these features are flexible. I do this first by illustrating the extent to which policy space has contracted in the WTO era. I then show that FTAs are not only designed to yield industrial outcomes that are difficult to achieve through the WTO, but also that the mechanisms through which these outcomes occur offer partner countries choices that enable them to target their national economies in a way that they could not otherwise.

To discern these unique features, I examine a representative FTA between the United States and Chile. This particular FTA provides an excellent case study because Chile's extensive experience with FTAs suggests that it negotiated strategically and that it would not face domestic implementation problems that might attenuate the results. In addition, the text of the U.S.-Chile FTA subsequently served as the model for the CAFTA and the Andean initiatives, so the outcomes have additional explanatory power.

1.2 HYPOTHESES AND STRUCTURE OF THE DISSERTATION

The theory I examine in this dissertation is that that asymmetric FTAs offer developing countries a number of unique channels to promote industrialization in a way that is within the parameters of their WTO commitments. This theory is intended to explain a number of different inconsistencies within the new FTA-oriented development schemes we see in the developing countries. First, it provides an explanation for why the number of FTAs has increased significantly since 1994. Second, it explains why the developing countries

are not simply walking away from the WTO altogether. And finally, it explains why FTAs yield more consistent results than the alternatives. I explore each of these hypotheses in depth in the 7 chapters of this dissertation.

Empirically, it is challenging to provide evidence that FTAs have resulted in desirable industrial effects since, as Bagwell and Staiger (1997) have pointed out, there is a lag between the conclusion of negotiations, the implementation of the agreement, and the reflection of trade pattern changes. This presents a problem since the majority of asymmetric FTAs have been negotiated within the past 5 years.

I address this problem by restricting the analysis to features of FTAs that do not require special implementing legislation and so should yield results in the short run. Since FTAs are essentially a bundle of policies, the examination of individual policies within an FTA still tests the overall hypothesis because it is the individual policies that map to economic results, not the entire institution. The elements of the FTA that I chose to examine – rules of origin, preferential market access, and trade capacity building – affect firms directly.⁵

Following, I discuss how I test the theory in the body of the dissertation. Each chapter addresses a hypothesis related to the theory that free trade agreements can promote industrial outcomes.

1.2.1 Chapter Two

Chapter 2 introduces the international events that led developing countries to search for policy flexibility. I begin with a description of the successful industrial policies that were popular during the GATT regime. I then discuss how changes in the international trade

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⁵ By restricting the analysis to these 3 features, I am also purposefully leaving out any analysis of those aspects of the agreement that contain the so-called "WTO-plus" features. I do this for several reasons. The first is that often those features are not immediately implemented, and so any effects will not be reflected in the early data. The second is that WTO-plus aspects are negotiated between the partner countries. Even if they have anti-developmental effects, the developing country partner actively agreed to them. The question of why a country would agree to a feature that it not in its best interests is not immediately relevant to this study. And finally, the actual effect of WTO-plus features depends very much on the initial conditions in the country and the extent to which their laws do not reflect these provisions already.

regime affected this policy set. Since the changes were not exogenous, I also discuss the reasons that developing countries supported the institutional limitation of policies that many of them were actively using. I conclude with a discussion of the reasons that the international regime was unable to meet expectations.

The analysis in this chapter tests the hypothesis that the inability of the WTO to provide members with the development tools they need introduced the incentive to pursue industrial goals through alternative channels.

I test this hypothesis using a 2-part methodology. In the first component, I illustrate exactly how the parameters of domestic industrial policy space have changed since the GATT era. I do this by using the text of the WTO agreements to map policies that were popular in the GATT era to various restrictions and prohibitions. This exercise agrees with existing literature that shows that while many policies are limited, some important policies are not (Amsden, 2005; Shadlen, 2005a). Yet the application of even those industrial policies that are not formally limited by the WTO have also fallen in frequency. I show that these policies are informally discouraged by the existing development policy paradigm which operates through conditionality and integration into international trade strategies.

Once I have established that WTO-era policy parameters are more restrictive than those in the GATT era, I ask why. In the second component of this methodology, I show that developing countries, who were regular users of now-prohibited policies, agreed to restrictions on their domestic policies in exchange for expected growth outcomes. To do this, I first match countries' Uruguay Round draft policies (in selected areas) to what they ultimately signed upon the conclusion of the Round. This illustrates the extent to which countries ceded their initial positions. Then, to illustrate the expected payoffs to these concessions, I offer some published predictions of Uruguay Round outcomes.

There are 2 main findings of this chapter. The first is that it is the overall institutional environment, not just WTO-based obligations that constrains domestic policy space

beyond that which existed during the GATT. The second is that the WTO regulations have not yielded expected payoffs, which has resulted in institutional destabilization. This chapter is not able to explain why the lack of payoffs has not simply led to the collapse of the institution. For that I turn to Chapter 3.

1.2.2 Chapter Three

In Chapter 3, I interpret the unexpected rise of FTAs in the WTO-era as an endogenous response to the unfulfilled expectations developing countries had for the new regulatory environment. Most existing literature explains the role of FTAs as attempts to circumvent or replace their WTO obligations. However, this cannot explain why countries would not simply leave the WTO.

My hypothesis is that FTAs are not intended to replace the WTO, but rather to offer a complementary set of rules that promote key commercial outcomes. Of the many different reasons that developing countries decide to undertake negotiations towards FTAs – the promotion of foreign investment, increased exports, market access and continued economic growth - the common denominator is the fact that they are seeking outcomes that, in theory, were expected to have resulted from the Uruguay Round agreements.

I treat this hypothesis in 3 stages. I first detail the problems and expected outcomes of each of the 3 choices WTO members have in the face of unrealized expected payoffs. Ultimately, in a world where the WTO remains desirable and forward movement is impossible, the choice of designing an institutional supplement is optimal.

The next 2 stages present the reasons why FTAs have become the supplemental institution of choice. First, I show that they are a legitimate and desirable form of organization both internationally and domestically. I do this by illustrating that their outcomes and structure complements the goals of the major actors in both of these spheres.

In the next stage, I present empirical evidence that preferential agreements in general, and FTAs in particular yield the outcomes that developing countries seek in terms of development and growth.

The findings of this chapter are that asymmetric FTAs are a legitimate, desirable, and commercially effective outcome of the structural rigidity of the WTO. Because this chapter adopts the convention in the literature to treat FTAs as a homogenous institution, it is unable to explain the extent to which FTAs can increase policy flexibility by enabling states to use them to target sector-specific outcomes. For this I turn to the case studies.

1.2.3 Chapter Four

Chapters 4-6 return to the notion that FTAs extend policy space by exploring the extent to which they can be manipulated to address local conditions. Chapter 3 showed that asymmetric FTAs yielded expected effects overall, but it was unclear how flexible they were in terms of choosing targets. Each of the 3 chapters in the case study is devoted to a particular element of a U.S.-based asymmetric FTA to draw out the channels through which FTA-based incentives are translated into commercial outcomes.

The hypothesis I explore in these chapters is that FTA channels are more successful than other similar tools as a result of a combination of inclusive, demand-driven negotiating and implementation processes that promote greater utilization rates. My aim is to show that each of the 3 features analyzed here are translated into commercial outcomes in ways that are unique to the institution of asymmetric FTAs.

Generally, I test this hypothesis by interviewing both negotiators and private sector actors involved in the U.S.-Chile FTA to explain exactly how the incentives were designed and subsequently incorporated into the production decisions of firms. In each case, I also discuss the design process and whether it could be more effective.

Chapter 4 begins the case study with an exploration of rules of origin (ROOs). ROOs are a ubiquitous, but poorly understood element of preferential trade relations. There is extensive evidence that the industrial countries use product-specific ROOs in FTAs to achieve positive industrial results (Estevadeordal and Suominen, 2005) – however, both the industrial countries and the international institutions actively promote non-preferential ROOs. This study suggests that this recommendation is misleading for developing countries that want to use them to achieve development results.

My hypothesis in this chapter is that product-specific ROOs can be used to increase production and backward linkages in the manufactured goods industries of the developing country partner in ways unique to an asymmetric FTA. This channel offers the opportunity for actors in the developing country to encourage the use of domestic suppliers through WTO-compliant means such as publicity campaigns, vendor matching programs, government support of quality standards in existing firms and promotion of production that meets the existing demand.

My methodology incorporates the fact that ROOs are both structurally similar to local content requirements and also already used by the industrial countries to achieve targeted economic outcomes. I use local content requirements as a guide to suggest what high-achieving ROOs can achieve.

I then discuss the extent to which these potential targets have been met in the U.S.-Chile case. To do this, I use aggregate outcomes to show that exporters to the United States are using the preferences, and a case study of 2 particular sectors to highlight the variables that affect their propensity to change production in response to the FTA.

Finally, I discuss the stages of the design and implementation process where the benefits of ROOs can be maximized.

The findings in this chapter are that ROOs are a highly malleable FTA feature that offers great potential to be used as a tool. However, their complexity results in some difficulty in implementation which opens the door for government intervention.

1.2.4 Chapter Five

Chapter 5 continues the case study by providing evidence that FTAs amplify the traditional outcomes of tariff-based preferential market access for developing countries. The market access component of FTAs consists of tariff reductions which are nearly identical to the access available under pre-existing unilateral preference programs like the Generalized System of Preferences (GSP). Yet, the trade outcomes of FTAs are not only greater in terms of volume, but they are also broader in the sense that there are increased exports of all goods to all countries, not just those associated with additional access. This chapter establishes a sector-based typology to explain this outcome.

My hypothesis is that the increases in diversification and export volumes come not only from traditional changes in price but also results from the dynamics of the negotiation process.

The methodology I use is intended to determine how the incentives of the FTA are translated by firms and why this differs from other preferences.

I begin by showing that the FTA yields the intended outcomes of increased trade and greater export diversity. I then use a 2-stage argument to explain why this occurs. First, I highlight some unique institution-specific features of FTAs that affect production decisions. Next, I use a case study of 3 "new" exporters to see why they responded to the FTA differently than they had to GSP. This enables me to highlight several incentives specific to the negotiation process that further encouraged targeted outcomes. I use their

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⁶ The comparison is not exact since the United States tends to negotiate FTAs with partners that already have GSP. Upon implementation the GSP access is subsumed by the FTA. According to the U.S. government, all GSP items retain their preferential access under the FTA (i.e. the tariff rates do not increase beyond the GSP level). However, in reality, some GSP rates are adjusted upward or removed altogether for political considerations (e.g. when the United States imposed steel tariffs, related GSP rates were removed under subsequent FTAs).

experience to conclude with a typology that can be used to assist governments to target outcomes more effectively.

The findings are that export experience and quality matter. But more surprisingly, pre-FTA presence in the partner market and exporter perception are important indicators of how sectors will respond to an FTA regardless of the degree of tariff preference.

1.2.5 Chapter Six

In the final chapter of the case study, I show that the trade capacity building (TCB) component of FTAs with the United States can be used directly to encourage technological transfer and increase the ability of governments to evaluate the potential profitability of various sectors of the economy. The potential industrial benefits of this feature are not generalizable beyond the U.S. case because of its particular negotiating process. Unlike the other 2 features, this one is far too new for a successful evaluation of its industrial outcomes. However, the importance of this feature lies in the design process rather than implementation.

The hypothesis I explore in this chapter is that the new TCB process opens a direct channel for countries to direct aid to targeted industries and increase government capacity. I test this hypothesis using interviews with negotiators as well as information from national strategies. The way in which this feature can result in positive industrial outcomes comes from targeted industrial assistance and the potential to increase governance capability in that is fungible beyond the FTA, such as training on quality standards, how to export, and other related issues.

The methodology I use includes 3 steps. First I describe a selected set of non-FTA technical assistance programs. Next I explain why FTA-based TCB is different from other types of technical assistance. To do this, I use data on Chile's TCB outcomes to show that projects supported their existing goals. Then, to determine whether countries are actually themselves doing the targeting, I turn to countries that negotiated their FTAs under the new process to show that they successfully defined the goals and were able to

direct TCB. In the third step, I discuss the steps of the TCB negotiation process to highlight its ability to be used as a tool

My findings are that, as long as countries take the time to complete well-researched national strategies, TCB is a very direct way to transfer technology, select target sectors and gain the ability to better evaluate the domestic economy in the long run. Evidence shows that while some savvy countries are taking advantage of this, others are not.

1.2.6 Chapter Seven

In Chapter 7, I synthesize the results of the previous policy analysis into the existing theoretical framework.

I go through the 3 major areas where this dissertation makes a contribution to the literature. First, my results suggest that government policy remains an important component of any development strategy. The reason for this is that it remains the only entity that can assimilate and promote the needs of various sectors of the economy simultaneously. Industrial policy is not gone.

A second conclusion is that if developing countries do not act strategically, not only will the FTA not necessarily yield intended outcomes, but it may lock in features that hurt development. There are clear economies of scale in the negotiating process; and the ability to attain these scale economies is particularly important in the case of asymmetric FTAs.

The third contribution I make is to suggest that, given the availability of FTAs, developing countries can achieve industrialization in similar ways as their predecessors had under the GATT regime. This is attractive both because of the lack of any alternative blueprint and also be because of the attainability of FTAs in the current system.

1.3 RESEARCH DESIGN

This dissertation uses a descriptive research method that combines elements of both a case-study and a structural model. The case study element is used to provide empirical evidence about how the design of an FTA results in commercial outcomes in a particular type of country. I selected the case study country to maximize the lessons learned about the system as a whole.

The structural analysis of the actors and incentive structures that are associated with FTAs enables me to focus on the various elements of asymmetric FTAs that can have positive developmental outcomes for the developing country partner. The existing literature tends to treat FTAs as a single entity without taking stock of how its different components might engender varying commercial outcomes. Overall, I explore how actors interact and how the FTA can be optimized under the goal of industrialization.

The methodology of this research design consists of 3 features, each of which I describe in a section below. First I define the target actors of this dissertation. Rather than analyzing all developing countries, I focused on a group I call the middle-technology developing countries. This set of countries is most likely to be able to take advantage of developmental tools. Similarly, I chose to examine only FTAs between an industrial and a developing country since that is the form which is most likely to yield targeted results.

Next, I describe the research activities and information gathering methods I used in this dissertation. I explain why I chose the interview targets that I did and the information gather techniques that I used. Finally, I present the case study and why I chose Chile as the representative case.

1.3.1 Research Focus

This dissertation focuses on the broad question of whether FTAs can provide developing countries with the ability to industrialize in the WTO-based regime. Specifically, I treat only asymmetric FTAs and middle-technology developing countries. I chose these

targets because they are best suited to attain beneficial development outcomes. Middle-technology countries are better situated than other, less-developed countries to take advantage of trade preferences and negotiations. FTAs offer the greatest degree of policy flexibility, and when they include partners from different levels of development they engender additional growth results.

Middle-Technology Developing Countries

Unlike the least developed countries, the middle-technology countries have experimented with interventionalist policies in the past, and have promising domestic productive capacity. Yet, unlike the latecomers or the first world countries, they have not yet completed the transition to a domestic structure that would fully benefit from free and open trade. I use the term "middle technology" because they have all exhibited some ability to export high technology goods, though these are generally a very small proportion of the exports. These countries tend to focus their production on higher technology agriculture or lower technology manufactured goods. Other authors have referred to these countries as "post-1980s industrializers" (Dollar and Kray, 2001).

I define middle technology countries through 3 indicators. First, they were included in the World Bank's list of middle-income countries. Second, manufactures make up at least 20 percent of their merchandize exports (2000-2005 average). Third, they export at least US\$1 million per year in high technology goods.

FIGURE 1.1 MIDDLE-TECHNOLOGY COUNTRIES

LATIN AMERICA	AFRICA	MIDDLE EAST	ASIA ASIA	
Chile	Chile Egypt Jordan	Jordan	Indonesia	
Colombia	South Africa	Oman	Philippines	
Costa Rica	Nigeria	Lebanon Thaila		
Ecuador	Kenya		China	
Panama	Mauritius			

Source: World Development Indicators, UN Comtrade

This group of countries is structurally similar to the late industrializing countries during their final industrial push. Specifically, the middle-technology group exhibits levels of educational attainment that should enable them to attract more highly productive firms, a strong base in export production that can enable them to achieve industrial success if they are able to encourage their domestic industries to move to the technological frontier, and finally, all of them have some historical manufacturing experience.

In short, these are countries that have the pre-requisites to industrialization. There has been some work in the economic and political science literature about why certain countries develop and others do not (e.g. Acemoglu and Robinson, 2006). This literature suggests that there are internal conditions that prevent or promote the adoption of the "right" institutions for growth. Gershenkron's (1962) discussion of economic backwardness focused also on various ways that countries could attain the institutions they lacked. However, as I show in subsequent chapters, not only do the middle-technology countries have many of the right institutions, but these institutions have yielded more efficient outcomes than they have in the past. ⁷

Asymmetric Free Trade Agreements

In general, preferential trade agreements are treated as a proxy for counties' desire for regionalism. FTAs are, at most, categorized by partner choice, which assumes away differences in coverage that have important effects on outcomes. In the economics literature, the selection of partner for an FTA is treated as a strategic economic choice.

The assumption that FTAs are all structurally similar is necessary to simplify analyses such as their role in trade creation/diversion and how they affect the overall multilateral

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⁷ Though I follow the economic development mainstream that there are no "pre-requisites" to growth, I also use the political economy literature to account for the importance of pre-existing capacity before countries can fully appropriate the gains to free trade. There is no single accepted set of policies that leads to economic development. In fact models of economic development that focus on specific prerequisites (Schumpeter, 1934; Lewis, 1963; Gershenkron, 1962) or on path dependency (Rostow, 1963), have been soundly criticized. Their critics caution developing countries against attempting to blindly implement previously successful strategies. Different outcomes will likely arise from: different factor endowments (Engerman and Sokoloff, 1997), different internal government structures (Wade, 1990b), different competitive assets and labor costs (Amsden, 1994), more extensive market failures (Stiglitz, 1989).

movements toward free trade. However, a quick survey of FTAs in force reveals that several different models exist (see figure 1.2)

FIGURE 1.2 FEATURES OF EXISTING MODELS OF FTAS

	UNITED STATES	EU	SOUTH-SOUTH
Social clauses	include labor and environmental clauses. Democracy and good governance seen as an important pre-requisite	include a number of social and cultural clauses which are meant to be used to encourage cooperation. This is a result of the more comprehensive format of these free trade agreements.	none
Treatment of sensitive goods	100% of trade is included. Back loading	Not all trade included	leave sensitive goods out of negotiations, but they also tend to be bargained sequentially
Purpose for formation	tends to use FTAs as an award (Jordan) or incentive (Mexico) for cooperation on matters that go beyond bilateral commercial interests	FTAs as a way of assessing fitness for eventual membership into the customs union (Turkey) and creating an area of peace and stability (Egypt).	to encourage political cooperation and to use as a training ground for the global economy

Source: author's comparison

Only now is the literature beginning to explore the effects of those features that go beyond the WTO commitments.

Asymmetric FTAs are the form that is designed to have the most direct trade and growth effects. In terms of the agreement format, FTAs enable a much higher level of policy flexibility than customs unions, which makes them an attractive choice for developing countries that are often concerned with the sovereignty-loss effects of multilateral bargaining. In terms of partner choice, the gains from forming an FTA with a market of the same size include only the possibility of scale effects, and possibly some price effects if the country is a large producer on the world market. The gains from forming an FTA with a larger country are more varied. They include significant welfare effects (e.g. Krishna, 1998; Ethier, 1998), guaranteed access to the market, competitive pressure, and the potential to import pro-growth institutions (deMelo et al, 1993). Asymmetric FTAs

are able to concentrate a variety of pro-growth policies into a single institution that can be targeted in a way that is in keeping with the parameters established by the existing institutional regime.

In this research, I deconstruct asymmetric FTAs to gain insight into how various components affect the developing country partner. This information is important for developing countries to understand so that they are able to make not just strategic partner choices, but strategic chapter choices as well. While some countries, such as Chile or Mexico have achieved economies of scale in the negotiating process (Harrison et al, 2001), many others have not.

1.3.2 Methodology

I begin the research by using trade data to determine how production in general responded to FTAs. The weakness of this data is that it does not reveal any information about which elements of FTAs cause firms to make various production choices. It also does not reveal the subtle nuances of how different FTA features can have unexpected impacts. It is for these reasons that I chose to use trade data as a guide to identify areas for more in-depth research.

Next, I identify several features of FTAs that appear to be able to be designed in such a way that they will result in developmental outcomes similar to those achieved through the use of prohibited industrial policies. This method is structurally similar to the economics literature on preferential trade agreements which identifies how certain types of FTAs can result in positive welfare outcomes, while others can result in negative welfare outcomes. The differences here are that I use a textual rather than quantitative analysis to identify channels, and that I am looking for positive domestic outcomes rather than a general welfare analysis.

I then employ a case study to test the actual outcomes of the hypothesized channels. The case study enables me to make conclusions about the utility of the model and the variables that affect its outcomes. This approach enables me to make conclusions about a

broad range of activities taken by the various elements of the analysis. This will help me to draw evidence from a more diverse literature and bring out alternative methods that exist to achieve desirable outcomes.

Specifically, I examine the case of how Chilean firms have reacted to the FTA with the United States. The first step involved analysis of changes in import and export volumes and values. I examine Harmonized Tariff Schedule trade data at the 4, 6 and 8-digit level from the U.S. Customs Service and the Chilean Central Bank. From this data, I was able to detail changes in the quantity and variety of exports to and imports from the United States. It enabled me to select the industries that appeared to be most affected by the free trade agreement and also to make conclusions about how the FTA had affected the economy in general.

The second step involves qualitative interviews with 14 industry associations in 10 export-oriented sectors in Santiago, Chile. Sectors were selected on the basis of their propensity to export, observed changes following the implementation of the FTA, and competitiveness. These included: wines, salmon, olive oil, dairy, pork, wood products, fresh and processed foods, chemicals, plastics, and metals. From these interviews, I gained a more precise understanding of the dynamics of each of the industries and suggestions about how and why firms may have changed their production in response to the free trade agreement.

The industry associations (by sector) that I interviewed included: 1) Wine: Wines of Chile; 2) Salmon: SalmonChile; 3) Chemicals: Asociación Gremial de Industriales Quimicos (ASIQUIM); 4) Olive Oil: ChileOliva; 5) Pork: Asociación Gremial de Productores de Cerdos de Chile (ASPROCER); 6) Dairy: Asociación de Industriales Lácteos (ASILAC) and ExporLac; 7) Metals: Asociación de Industrias Metalúrgicas y Metalmecánicas (ASIMET) and Asociación de Grandes Proveedores Industriales de la Minería (APRIMIN); 8) Plastics: Asociación Gremial de Industriales del Plástico de Chile (ASIPLA); 9) Fresh and Processed Foods: ChileAlimentos and Asociación de

Exportadores de Chile (ASOEX); and 10) Wood Products: Corporación Chilena de la Madera (CORMA) and Asociación de Industriales de la Madera (ASIMAD).⁸

I also interviewed a number of trade-related organizations. These included: 1) The United Nations' Latin American office: *Comisión Económica para América Latina* (CEPAL); 2) A joint-venture seed fund: *Fundacion Chile*; 3) the Chilean mufacturers association: *Sociedad de Fomento Fabril* (SOFOFA); 4) the American Chamber of Commerce of Chile; and 5) the Chilean exporters association: *Asociación de Exportadores de Manufacturas* (ASEXMA).

Additionally, I interviewed relevant government agencies and ministries which included 1) Corporación de Fomento de la Producción (CORFO); 2) ProChile (investment agency in the Ministerio de Relaciones Exteriores); and 3) Dirección General de Relaciones Económicas Internacionales (DIRECON). Finally, I interviewed several Chilean and American negotiators of various aspects of the U.S.-Chile FTA, a U.S. negotiator for the Colombian FTA, and a Panamanian negotiator involved in that country's FTAs. These interviews were meant to provide insight into the overall negotiation and adjustment process. They also provided me with information about what policies had been implemented to complement the free trade agreement and the process through which they were decided upon.

In the third step of this research, I issued 100 surveys to firms in 10 selected industries. I sent surveys to the 10 largest or most dynamic firms in each of the selected industries. The contacts were suggested by the industry associations. In every case, the 10 contacted firms constituted at least 60 percent of total production by value of that sector. I emailed the surveys and followed up by phone. I also conducted on-site interviews with several firms. This stage of the research gave me information about exactly what was happening

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⁸ The reason that some of the industries had more than one association is in some cases historical and in others the result of separate stages of production. Both the 2 dairy associations (exports and domestic market) and the 2 wood associations (wood and furniture from wood) are combined because they have overlapping membership, the 2 fruit and vegetable associations are divided into fresh and processed foods, the 2 metals associations are divided into metals and minerals.

at the firm level. This data enabled me to differentiate between the types of firms that were making changes in their production, and also to understand the reasons for these changes at the firm level.

I also conducted interviews with a number of U.S.-based agencies and organizations. These included officials at the 1) U.S. Department of Commerce, 2) U.S. Agency for International Development, 3) Organization of American States, 4) Inter-American Development Bank, 5) U.S. Trade Representative, 6) officials at the Chilean Embassy in Geneva, and 7) officials at the Chilean Embassy in Washington DC.

1.3.3 Case Study: Chile

The FTA between the United States and Chile presented a natural case study for this dissertation because of Chile's industrial strategy, and strategic negotiating style.

Chile has a very clearly articulated industrial strategy of liberalizing trade through unilateral openness and FTAs (Butelmann and Meller, 1995). In their 2003 Trade Policy Review, the Chilean government pointed out that its strategy of trade policy making through bilateral agreements is a result of the slow and difficult nature of multilateral negotiations, Chile's limited capacity to influence those negotiations, and the additional benefits it can gain from bilateral negotiations such as concessions on tariff peaks (WTO, 2003). Achieveing assess to foreign markets is important because of Chile's dependence on foreign trade.

Chile's use of FTAs was a component of the free trade oriented regime that began in the 1990s and turned to FTAs during the Alwyn regime (Agosin, 2000). Chile had attempted to join NAFTA in 1994, but because of issues with fast track, did not (Hornbeck, 2001). By the time negotiations began with the United States, in about 2001, Chile had already gained experience through free trade agreements with Mexico, MERCOSUR and Canada. This strategy of multiple, overlapping FTAs is known as "hub-and-spoke" arrangements (Baldwin and Venables, 1995), and was analyzed by Wonnacot as early as 1975. Most authors find that the benefits to the hub country will be larger than those to the spoke

countries (Kowalczyk and Wonnacott, 1992; Krugman, 1993), which suggests the optimality of this strategy.

The U.S.-Chile FTA was concluded in 2003 after many years of negotiations. The United States is Chile's main export destination (ProChile). Exports remain fairly concentrated among certain goods such as salmon, wine, wood products, chemicals and foods. In fact, the top 20 exported goods constitute 75 percent of all exports to the United States

Chile has continued to negotiate FTAs since the U.S.-Chile FTA concluded in 2003. As of 2003, Chile has negotiated free trade agreements that have secured their access to 858 million consumers (Rosales, 2003) and covers 66 percent of Chile's exports (DIRECON).

FIGURE 1.3 CHILE'S FREE TRADE AGREEMENTS

COMPLETE	IN NEGOTIATIONS	
Bolivia (1993)	EU (2002)	India
Brunai (2005)	Korea (2003)	Japan
Canada (1996)	MERCOSUR (1996)	
Central America (2001)	Mexico (1999)	
China (2005)	New Zealand (2005)	
Colombia (1994)	Peru (1998)	
Costa Rica (1999)	Singapore (2005)	
Ecuador (1994)	US (2003)	
El Salvador (1999)	Venezuela (1993)	

Source: DIRECON

There is evidence that the formation of multiple free trade areas can be an optimal policy (e.g. Kowalczyk, 2000), even where overall tariffs are low. One particular reason was pointed out to me by an official at the Central Bank of Chile who noted that since Chile has such an open economy already, the FTA with the United States did not require any first-generation reforms, like privatization or the opening of capital markets.

Chile's FTAs have also had significant and rapid trade results. According to the WTO, Chile's bilateral trade relations have already changed its productive structure (WTO, 2003). In terms of recent agreements, Chile's bilateral trade with the United States has increased 80 percent in the 2 years the FTA has been in effect (U.S. Department of State). And the surge of exports to the Korean economy following the completion of that FTA in 2004 is already resulting in widespread failures of domestic agricultural firms in kiwi, peaches and grapes.

For all of these reasons, we can see that Chile had the experience and know-how to negotiate the best possible agreement with the United States. What I do in this research is take a closer look at selected features of this FTA to evaluate their potential and current use as tools for industrialization.

CHAPTER 2

SHRINKING POLICY PARAMETERS AND THE WTO

The trade regime that emerged from the Uruguay Round negotiations in 1994 was very different from the regime that had regulated international trade for almost half a century before it. The WTO imposed disciplines on a wider range of activities and was better equipped to enforce compliance than its predecessor. This new regime was largely tailored to the policy structures of the industrial countries (Finger and Nogues, 2001; Weiss, 2005), which already followed many of the "new" disciplines and so needed to make few policy adjustments to meet the additional requirements.

In contrast, developing countries were faced with the task of making extensive revisions of their existing policy structures.¹ Few of these countries had signed onto the Tokyo Codes, and so the Uruguay Round introduced restrictions on many domestic interventions that had been popular with these countries. Evidence suggests that developing countries understood the utility of the prohibited policies, but were willing to bargain away some policy space in return for the expected payoffs of a stronger multilateral regulatory regime.

In this chapter, I address the impetus for and outcomes of the Uruguay Round bargain that led the developing countries to accept an institution that hindered their ability to make discretionary domestic policy choices.

I test the hypothesis that the failure of the WTO-based regime to provide members with successful development tools gave rise to the search for supplementary policy instruments. Specifically, once it became clear that the expectations on which the

¹ This is most evident in a comparison of pre- and post-Uruguay Round Trade Policy Reviews. It shows, for example that the United States made almost no changes in its trade policies between 1991 and 1996. In contrast, a typical developing country made significant changes during the same period. For example, in 1991, Thailand was using local content requirements, import licenses, export taxes and various other forms of infant industry protection. By 1995, these were phased out and legislation had been initiated to comply with many aspects of the new regimes like TRIPs.

developing countries had based their agreement would not be realized; domestic constituencies had to be satisfied through alternative methods.

I begin in the first section by describing the industrial policies that were popular among developing countries during the GATT regime. I use a representative set of industrial policies that were applied by a selected set of countries. I describe each policy in terms of its intent, predicted outcomes and actual results. I also embed this policy set in the institutional context by showing that the extensive policy space available to developing countries in the GATT regime was largely the product of benign neglect.

In contrast to the GATT era, Trade Policy Reviews after 1994 show a sharp decline in the application of certain policies. In the second section, I address this discontinuity in applied set of industrial policies between the GATT and WTO eras. This change can be traced to 2 major changes in the international trade policy regime. The first change was the rise of the WTO, which expanded the scope of policy regulations and included more stringent compliance requirements than had existed under the GATT. The second major change in the post-GATT era was the shift in the development paradigm. This is a behavioral constraint that resulted in developing countries self-limiting even those policies that are, in theory, allowed under the WTO.

In section 3, I try to answer the question of why countries would agree to limits in their established policy regime. I discuss the initial expectations developing countries had for the Uruguay Round and what payoffs they expected in return for their support for the new disciplines. The large gap between their proposals in various new agreements and the outcomes suggest that they expected significant returns for their limitations. I conclude by showing not only that these outcomes have still not been realized, but also that the lack of payoff was one of the reasons for the recent recalcitrance of developing countries in WTO negotiations.

2.1 POLICY SPACE IN THE GATT ERA

To facilitate a comparison between the GATT and WTO policy parameters, I use the policy set implemented by the latecomer countries as a control set. These are an appropriate measure because while policies may change, the goals of industrialization do not.²

The policy parameters of the GATT allowed developing countries a considerable amount of policy space in which to define their industrial strategies. Not only were GATT obligations limited to trade in goods, but institutional norms were such that violations were largely ignored. In this section, I describe the policy regime that developing countries gave up in the Single Undertaking. I begin by introducing the latecomer countries. They are structurally similar to the countries which constitute the analytical target of this dissertation; the main difference lies in the international regime under which each group is attempting to industrialize. I then offer an illustrative list of policies and describe them in terms of their intended outcomes. Subsequent sections will revisit this list to measure how it holds up under the new parameters.

2.1.1 The Control Group

The control group I use in this dissertation is the set of developing countries that industrialized most recently. The latecomer countries are known in their various combinations as the "Asian Tigers" "Latecomers" and "Newly Industrialized Countries." For the purposes of this research, I create a single set of latecomers using the World Bank's categorization of countries into tiers of development. I include all of the first tier

² Industrial policies are development strategies that are aimed specifically at shifting the productive mix of an economy away from primary products in favor of manufactured goods (Syrquin, 1989). They generally focus on adjusting the industrial structure of the domestic economy to favor certain types of high value added industries over less profitable sectors. Countries pursue these types of policies because they expect that an economy based on manufactured goods will lead to continual productivity growth, more stable export prices, and more accessible externalities (See e.g. Pack, 1989). Industrial policies often do not conform to economic ideals because they are embedded in national priorities which are not necessarily economically efficient (Brown and Stern, 2006). In the post-colonial era, for example, industrial policies focused on the goal of sovereignty, not efficiency. In fact, the definition of industrial policy itself has the underlying assumption that markets do not work efficiently (Pack and Saggi, 2006).

and the higher performing second tier countries.³ The countries in this set all had (1) high growth rates, (2) developmental, interventionalist governments, (3) discriminatory industrial policies, (4) active industrial policy, and that (5) began their industrial push during the time when GATT was the main institution of international trade. Though the precise policy set differed in every country, policies commonly focused on regulating foreign investment and cultivating domestic industries to the point where domestic producers could innovate on their own.

In the latecomers, development policies were often influenced and carried out by planning boards and development banks. These types of institutions included South Korea's Economic Planning Board and Brazil's *Banco Nacional de Desenvolvomento Economico e Social*. They were staffed by technocrats and carefully chose which projects were funded and supported. These institutions encouraged projects that addressed the coordination problems and missing markets that are typical in developing countries. Planning boards selected target sectors based on economic analyses of the economy, and then allocated subsidies in such a way that firms would be encouraged to invest in risky projects.

The interventionalist development policies that were common in all of these countries successfully changed the productive mix of their economies. South Korea went from being a primarily agrarian nation to an export-oriented manufacturing power in just decades. This rapid industrial transformation would not have been possible without government intervention (Amsden, 2001).

Despite the positive industrial results, there is disagreement in the literature about the extent to which there was direct causality between state-led industrial policies and

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³ The single set of latecomers I examine include: Brazil, India, South Korea, Hong Kong, and Taiwan. This list is a simplified group of both first and second tier NICs using an adapted definition based on the criteria used in the East Asian Miracle Report (World Bank, 1993). The first tier is defined as the 4 tigers, which are all are commonly classified as high-performing Asian economies. This tier includes: South Korea, Hong Kong, Taiwan, and Singapore. The East Asian Miracle Report describes the second tier as "newly industrializing economies." While the report deals only with Asia, I use their criteria to also include countries such as Brazil since it also falls into the top 20 growth group the same as the second-tier Asian countries. Second Tier countries can thus be defined to include: Brazil, India and Malaysia.

industrial development. According to some scholars, discriminatory industrial policies served to encourage new industries (Amsden, 2001), increase productive capacity (Wade, 1990b) and build up national technological capability (Singh, 1994). However, other scholars have argued that governments do not have better information than the market and cannot be expected to choose the right products to promote (Krueger, 1990), that industrial policy is likely to be captured by protectionist interests (Grossman and Helpman, 1994; Olsen, 1982), and that industrial targeting impedes market adjustment (Bhagwati, 1988).

Even though the precise role of the latecomers' policies is subject to debate, there is broad agreement that industrial policies did have some affect on development. Even the skeptical East Asian Miracle Report, which disagrees that discriminatory policies were necessary for industrialization, admits that these policies contributed to development (World Bank, 1993). Because there is broad agreement that industrialization occurred at the time when these policies were in place, I assume that the policies in the latecomer's set are an appropriate indicator of the types of outcomes necessary for industrialization.

2.1.2 The Policies

The complete set of industrial policies used by the latecomers was very diverse, and different policies were used in different combinations under varying conditions. In the figure below, I offer a composite of the industrial policies that were most popular in the latecomers during their industrial push periods.

FIGURE 2.1 POLICIES OF THE LATECOMERS

GATT Compliant	Policy Instrument		WTO Compliant	
~	Goods:	Tariff sequencing		
✓		Import licenses		
V		Duty drawbacks	>	
	Subsidies	: Export		
√		Production		
✓		R&D	(actionable)	
	FDI:	Local content		
✓		Tech transfer	✓	
		Trade balancing		
√	IPR:	Selective patents		
v		Compulsory licensing	v	
~	Other: Skills building		~	
~		State-run firms	~	

Source: Author's comparison based on Amsden (2001), Singh (1996) and Wade (1990a). *I assume that these policies are applied in a specific way and do not take into account de minimus allowances.

The chart above shows that the GATT regime is considerably less restrictive than the WTO in terms of the industrial policies that are allowed. Below, I discuss each of the policies above in terms of their intended targets and type of intervention.

The overall policy set in Figure 2.1 can be divided into 2 types of policies based on their goals (Lall and Teubal, 1998). *Horizontal* market interventions are intended to attenuate existing market failures such as the existence of infant industries and the fact that

knowledge is proprietary. These industrial policies aim to shift the costs of low-return activities away from firms. Examples of horizontal strategies include skills upgrading and research and development subsidies. In general, horizontal market interventions are restricted by neither the GATT nor the WTO.

The other category of policies is *selective* market interventions, which target specific industries and are intended to regulate foreign investment and cultivate domestic industries to the point where domestic producers can innovate on their own. In many of these cases, the industrial policies followed a strategy that was described by Wade (1990a) as "simulating an ideal market." These were policies, such as tiered pricing and exchange rate management, which used existing distortions as tools to achieve their industrial goals (Amsden, 1997). These policies enabled governments to selectively support different sectors and to discriminate among industries (Wade 1990b), and were specifically intended to keep the market from adjusting. Though selective market interventions are generally discouraged as a result of their dependence on the competence of the implementing authority, in some cases they are considered to be necessary to address existing market failures. For example, as Bhagwati and Rameswami (1963) pointed out, the discussion over infant industries is whether to use tariffs or subsidies, not whether or not to protect them.

Following, I go through some of the major policies in figure 2.1 and describe them in terms of their relationship to industrial outcomes. Specifically, I ask what development issues they are intended to address, how the economics literature treats these issues, and finally what outcomes the literature predicts for each policy. I do not classify them by importance since this is still subject to intense debate in the literature.

⁴ As Amsden (2001) notes in her discussion of "getting the prices wrong" the open market pricing system is not necessarily an efficient coordinating mechanism. Under perfect markets, prices reflect scarcity, which serves to incentivize production. However, in a world where profits in many sectors are tied to proprietary knowledge, prices provide inadequate indicators. This problem was recognized early on by Alexander

Gershenkron (1962), who suggested that more than a market signal would be necessary in order to stimulate investment in non-traditional markets

Horizontal Interventions

R&D Assistance

Subsidizing research addresses two market failures that affect all developing economies. The first is that knowledge is proprietary which means that some firms will hold an unfair advantage over others because their technology is not directly transferable. Subsidies can decrease the costs that firms face in discovering new technologies. A second failure is that research will be underprovided since its social value is higher than its private value. R&D subsidies address the incomplete incentive structure that exists for private firms.

The literature suggests that R&D subsidies can: (1) bring private valuation of R&D closer to its social value levels (Griliches, 1992; Mansfield et al, 1977; Mansfield, 1996); (2) increase private R&D investment (Lach, 2000; Gonzalez and Pazo, 2005; David et al, 1999), (3) produce technology spillovers for other firms (Leahy and Neary, 1999), and (4) improve productivity and absorptive capacity in firms (Cohen and Levinthal, 1990).

The economics literature tells us that the effect of research subsidies on technological progress is unambiguously positive (Grossman and Helpman, 1991; Klette et al, 2000).

Skills Upgrading

Skills upgrading policies such as funds for education and training address 2 important development issues. The first is that education is a public good with positive externalities. These externalities lead these types of investments to increase the efficiency of economic and political institutions (Schultz, 1988). Existing research suggests that countries with higher skills will be better able to attract FDI and absorb technology (Keller, 2004). And once they have attracted FDI, it will be of the type that further emphasizes training and other skills building measures (Ripoll, 2005).

The second development issue that can be addressed by this type of policy is that for developing countries in particular, initial conditions at the time of liberalization matter. Countries with lower levels of market access tend to have lower levels of educational attainment (Redding and Schott, 2003). So not only will education benefit domestic

firms, but it will also attract foreign firms, since FDI tends to favor higher skilled locations.

There are a number of benefits countries can gain from skills upgrading policies. Most basically, the literature finds that it leads to economic growth (Solow, 1956; Lucas, 1988; Li and Liu, 2005). Much of this comes out of simple trade theory that stresses the quality of human capital as a critical factor in determining comparative advantage (Wood, 1994). The literature also points out that higher skilled populations will (1) attract FDI, since education can act as a signal for firms that have little experience in the domestic market, (2) increase productive capacity, (3) facilitate the adoption of new technologies, since the skills most important to managing are not codified (Lall, 2002; Beaudry and Francois, 2005).⁵

There is also empirical evidence that supports the predicted effects listed above. Feenstra and Hanson (1996) find a positive relationship between FDI and skill upgrading in Mexico. Pavcnik (2000) finds that capital deepening contributes to skills upgrading in factories in Chile.

Performance Requirements

Performance requirements are intended to increase the potential for technology and skills spillovers from foreign investment, and also to smooth information flows about the operations of recipients of government subsidies. Performance standards as they were used by the latecomers can be divided into two types – those which are a condition of investment, and those which act as a control mechanism for the receipt of support.

There is a wide literature on the effects of performance requirements that are imposed on foreign firms as a condition of their investment. The literature tells us that in the presence of spillovers, performance standards can: (1) act as a coordinating mechanism (Davies and Ellis, 2001); and in the presence of barriers to trade, export performance

⁵ There is also some literature that has tried to measure the minimum level of human capital above which FDI increases productivity and below which technology cannot be transferred effectively (Borzenstein, deGregorio and Lee, 1988)

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requirements can be a useful way to (2) maintain the trade balance, particularly in the developing countries (Brewer and Young, 1996), and (3) mitigate the distortionary effects of foreign capital inflows, which is welfare enhancing (Rodrik, 1987). These results are especially important in developing countries where there is evidence that foreign capital can crowd out domestic capital.

There is some debate, however, about how export performance requirements affect technology transfer. For example, Kokko and Blomstrom (1995) offer a model where performance requirements may negatively affect technology transfer if production is oligopolistic.

The other form of performance requirements – as a control mechanism used by governments that grant subsidies to domestic enterprises - has also been treated by the literature. Theories of control mechanisms and interventionalist governments tend to focus on whether or not government intervention solves or exacerbates the market failures that it is intended to address. As Haussman and Rodrik (2003) pointed out, there is often uncertainty about which goods a country should be producing. They point out that making the right investment decisions is key for future growth, since it determines the pattern of specialization.

The benefits of performance requirements stem from their ability to ensure expected outcomes. In a paper where he asked if industrial policies slowed or sped growth, Pack (2000) noted that performance requirements gave firms strong incentives to improve productivity and may have increased the manufacturing rate of growth by up to 1 percent.

Selective Interventions

Production Subsidies

Production subsidies were used by the latecomers as a means of encouraging domestically owned firms to increase their capacity to produce, mainly for the export market. This was important, particularly in industries where there were economies of

scale. Production subsidies were also used to encourage production in non-traditional industries.

The literature predicts that production subsidies will increase production, and may be a first best response in the case where tariff barriers exist. In fact, Bagwell and Staiger (2004) go so far as to suggest that the WTO rules that limit these types of subsidies may limit the ability of tariff negotiations to efficiently expand market access. Maggi (1996) built on the Brander and Spencer's (1985) export subsidy model to show that a subsidy to a firm's productive capacity can be designed in such a way that it will always at least weakly increase the home country's income regardless of the type of competition.

Import Controls

The industrial issue that import controls can be used to affect is the ability to regulate production and investment to meet development goals. Non-automatic import licenses give the implementing authority a chance to regulate production and investment in given sectors and also to impose additional performance requirements on investors as a condition of the license. As Chang and Green (2003) point out, in the 1980s Korea still limited or prohibited investment in 50 percent of sectors. Even in the open industries, FDI was often kept to a minimum ownership percentage. The use of import licenses in the latecomers was, and still is, widespread (see figure 2.6).

The literature on import controls and licenses offers results that are sensitive to the form of industrial structure in place. If there is a domestic monopolist that is facing increasing competition from foreign firms, then an import license can serve to raise the quality of domestically produced goods (Donnenfeld et al, 1985). If the license is on final goods, then it can serve to increase domestic production (Spencer, 1997). And in the event that the government is attempting to maintain market share, import licensing can serve to lower the cost of protection for the implementing authority.

⁶ Since production subsidies are a more efficient instrument than tariffs to increase production (e.g. see Aiello, 2002).

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Export Subsidies

Export subsidies are implemented as a means of encouraging firms to product for export in order to force them to move up the learning curve and to balance foreign exchange levels.

Brander and Spencer's (1985) model of imperfect competition shows that export subsidies can improve domestic welfare in the presence of exiting distortions (such as imperfect competition). This occurs when the domestic firm is induced to increase its output while the foreign firms will decrease output. Overall, subsidies are an attractive rent-shifting policy tool for countries that want to give less-productive domestic producers the ability to produce for the international market. Export subsidies are particularly popular in agriculture and have been used by all countries to assist the development of their domestic industries (Brander and Spencer, 1985).

As in many market interventions, models of export subsidies are extremely sensitive to the mode of competition (Maggi, 1996). As a result, even in the cases where the implementing authority may have better information than producers, the export subsidy could hurt domestic welfare if the market is not defined properly. Because the results of export subsidies depend on the type of industry that is being subsidized, there is even evidence that this type of subsidy might also shift rents to foreign firms (Ishikawa and Spencer, 1999).

The empirical evidence about export subsidies can be split into two geographically centered results. The first set of evidence comes from the Asian latecomers. In these countries, governments strategically used subsidies that were accompanied by performance requirements. This enabled them to be used as a carrot for industries to innovate and learn to become profitable on the world market. The push for domestic firms to export is supported by evidence that it is the least productive firms that produce only for the domestic market and that more productive firms export (Helpman et al, 2004). In a recent paper on South Korea, Hahn (2004) found evidence that firms that

exported were more productive. This was a result both of self-selection of more productive firms into the export sector, and also dynamic learning effects.

The existing evidence for the Latin American countries serves to highlight the importance of control mechanisms as a means of ensuring export subsidies accomplish their intended goals. In that region, subsidies were not accompanied by control mechanisms and so led to bloated subsidized firms with limited profit potential (Amsden, 2001).

The majority of the literature on export subsidies views them as a negative policy intervention. Specifically, the literature focuses on the fact that producers are likely to have greater knowledge of product markets than governments do. As a result, much of the political economy literature assumes subsidies are an inefficient way to encourage firms to export. Yet, it needs to be noted that research on the disciplines of subsidies by the WTO has shown that, in contrast to the GATT disciplines, the Agreement on Subsidies and Countervailing Measures does limit the application of a range of efficient behaviors (Bagwell and Staiger, 2006).

Weak Intellectual Property Protection

Strong controls on intellectual property are intended to be used to encourage inventions and investment by IP-sensitive firms. However, this also discourages domestically owned firms from being able to access expensive technology which could make them more viable on the international market.

The literature suggests that stronger patent regimes will result in higher rates of technology transfer (Branstetter et al, 2005), and more patents (Branstetter, 2004). Additionally, anecdotal evidence from IPR-sensitive industries suggests that firms reinvest less in countries where pirating is rampant (AOL-Time Warner interview, 2002; IIPA interview, 2002). The incentive to engage in creative activity depends on the strength of intellectual property protections since weaker protections increases the value of pirating and decreases the value of new ideas (Grossman, 2000).

However, when one takes into account the way that the latecomers used intellectual property, the literature provides some different results. Stiglitz (1988) notes the different dynamics between innovators and imitators. Innovators have to worry about how to appropriate returns on their R&D investment. Imitators on the other hand, are concerned with profitably adapting and adopting different technologies. As Amsden (2001) points out, the latecomers were imitators.

The literature suggests that for the developing countries, (1) stronger patent regimes will actually deepen their technology dependence (Ullrich, 2004), (2) the ability to pirate technology may actually give firms in developing countries the greatest welfare gains (Chin and Grossman, 1988), and (3) non-enforcement of intellectual property is welfare enhancing under existing conditions (Markusen, 1998).

There is empirical evidence that weak patent regimes were used by some of the latecomers, such as India, in order to address the situation discussed by Ullrich (2004) above – that strong patent regimes keeps knowledge proprietary and unaffordable to developing countries. In short, constraints on knowledge flow will ultimately benefit only the holders of the patents. This is a situation where the ultimate level of knowledge in developing countries is limited.

Local Content Requirements

Almost all countries used local content requirements (LCRs) during their industrial periods as a means of building up domestic productive capacity and encouraging foreign firms to include domestic enterprises in their supply chains. The latecomers were no exception. LCRs were a popular industrial strategy, particularly in industries that displayed economies of scale, such as automobile, sea vessel and aircraft production. LCRs were intended to increase sources of demand for domestic suppliers who might not otherwise have had sufficient incentive to increase their productive capacity or product quality. Not only did the latecomers use local content requirements during their industrial push periods, but they continued to use them well into the WTO era, and beyond their compliance deadlines of 2000.

In cases where the latecomers successfully implemented such requirements, they have had significant stimulatory affects on domestic industries. Shapiro and Taylor (1990) point out that content requirements on automotive assembly factories in Brazil were a key reason that these industries were able to grow at the rate at which they did. Amsden (2001) also presents evidence that LCRs were a key component of the policy set that resulted in positive trade balances for auto industries in Brazil, Korea, Mexico, and India.

Despite their success, LCRs are a risky means of encouraging domestic industry, since governments must be able to carefully evaluate parts and components industries (Amsden, 2001). The latecomers addressed this by often coupling LCRs with other policies such as production subsidies and tax breaks for investors (Veloso et al, 1998) and by using development banks to identify target industries.

The theoretical literature expounds on the distortions that can be caused by the imposition of LCR. Under the assumption of perfect competition, LCRs are unambiguously welfare deteriorating since they distort producer incentives and raise the price of the final good (Grossman, 1981). In particular, the response of foreign firms is such that LCRs increase price competition and reduce domestic profits. As a result, both manufacturing efficiency and foreign welfare decrease (Belderbos et al, 2002).

This conclusion however, is based on the assumption of perfect competition, and equality among investors. Once this assumption is removed, there are a number of effects that can benefit domestic industries. For example, LCRs can (1) protect vertically integrated domestic industries, and (2) induce inward FDI in intermediate goods production. They can also (3) act as a mechanism for raising employment levels, and (4) shift profits to domestic firms if foreign firms rely on imported inputs more than do domestic firms (DeSilanes et al, 1993).

The predictions of the literature are dependent on the way in which content is defined, the nature of the production process, the structure of the domestic market, and wage

differentials between the host and source country. Because of all of these variables, the actual degree of protection is unpredictable (Grossman, 1981).

2.1.3 Treatment of Developing Countries

Though the GATT text allowed for a wider set of interventionalist development policies than the WTO eventually would, the policies in the center column of Figure 2.1 were not all GATT-compliant. Several of the policies that were popular among the latecomers in the GATT era were also technically prohibited by that institution. The reason that the developing countries were able to implement these policies came from their lack of overall integration into the trade regime.

There were 3 features of the GATT regime that explain its lack of governance of its developing country members. The first feature is that the way that the GATT operated – initially through product-by-product tariff reductions - was of little interest to the developing countries. The GATT was developed as a temporary tool of the industrial powers and so negotiations were carried on accordingly (Hudec, 1975). Negotiations were largely bilateral affairs regarding items of interest to the 2 industrial partners which were then generalized through MFN to the rest of GATT members. Though this technique eventually became cumbersome and was replaced by linear reductions and the movement into non-tariff barriers, the developing countries were rarely active partners since reductions in their tariffs did not interest the industrial counties.

A second feature is that, in addition to their limited attractiveness as negotiating partners, the developing countries participated in only a limited set of issues. As Jackson (1969, p.649) points out, "many of the developing nations have very short Schedules or, in some cases, no Schedules at all." They were rarely engaged in tariff reduction negotiations, and instead spent their efforts extending tariff exceptions. They formed both UNCTAD and the G77 in 1964 as a means to expanding their influence, but both of those organizations also focused mainly on extending exceptions rather than shaping the institutional parameters.

The third feature of the GATT that made its regulations only weakly binding for developing country members was that institutional enforcement was particularly poor. As a review of the 132 adopted and unadopted GATT-era cases shows, only 8 involved a developing country as the defendant (where redundant panels are consolidated).⁷ And of those 8 cases, only 6 specifically dealt with industrial policy (see Figure 2.2).

FIGURE 2.2 GATT DISPUTE SETTLEMENT ACTIONS INVOLVING INDUSTRIAL POLICIES OF DEVELOPING COUNTRY MEMBERS

Country	Issue	Industrial Policy	ID number
India	tax rebates (1948)	Wanted to raise bound rates on textiles to avoid internal failures	Bisd 11/12
Brazil	internal taxes (1949)	Law discriminated between products of national origin and	
Korea	restrictions on beef imports (1989)	When beef imports rose, the government stopped issuing tenders and imports stopped.	Bisd 36s/202, 234, 268
Thailand	taxes and restrictions on cigarette sales (1990)	Rarely granted import licenses for foreign cigarettes.	Bisd 37s/200
Korea	ADD on resin (1993)	Before 1988 did not produce domestically, once learned how, imposed ADD on imports to limit them	Bisd 40s/205
Brazil	CVD on milk (1994)	Felt EEC was subsidizing	Scm/179

Source: GATT-era panel reports

The chart above illustrates that of the cases that dealt with a non-compliant development strategy in a developing country, most involved policies that directly affected politically powerful export sectors in the industrial countries. In effect, these disputes only reinforce the impression that the GATT era was one where developing countries were able to

⁷ Available at worldtradelaw.net

choose which limitations on their domestic policies to follow and ignore those obligations they thought would be the most cumbersome.

2.2 POLICY SPACE IN THE WTO-ERA

In this section, I ask how the latecomers' policies would hold up today. To do this, I describe how their policy parameters have been affected by changes in the international commercial regime.

Despite their success, rather than establishing a new model for rapid structural change, the strategies of the latecomers have come to represent the end of an era. Many of the policies discussed above were subsequently limited as a result of 2 changes in the international economic regime that culminated in the early 1990s - the shift in the development paradigm and the founding of the WTO. As a result, developing countries that are pursuing economic development today find themselves facing a very different set of policy incentives and constraints.

Below, I explain how both the formal regime change and the informal paradigm shift have moved the parameters of the industrial policy set.

2.2.1 Formal: GATT-WTO

The goal of the regime change from the GATT to the WTO was to expand formal governance of the world trading system into all relevant aspects of trade. The wide policy parameters the latecomers enjoyed under the GATT were shrinking even towards the end of the 1980s. This meant that it was increasingly difficult to maintain the types of policies in their strategic set.

The progression of the regime beyond goods trade had begun in the Kennedy Round (1964-1967) of the GATT when countries began discussing the need to extend trade talks beyond tariff rules. However it was in the subsequent Tokyo Round (1973-1979) that countries officially tabled recommendations to extend the agreement beyond goods. The

resulting Tokyo Round Codes were plurilateral which meant that their coverage only extended to signatory countries, which were primarily the industrial countries (see figure 2.3). Despite the expansion of institutional reach at that time, developing country participation remained largely defensive until the Uruguay Round (Finger, 2001).

FIGURE 2.3 SELECTED GATT PLUILATERAL AGREEMENTS BY NUMBER OF SIGNATORIES (1981-1982)

	Total signatories	Developing country signatories
TBT ("standards")	338	8
Government Procurement	129	2
Subsidies	1410	7
Import licensing	2311	8

Source: GATT committee reports (see footnotes for individual agreements)

The chart above illustrates the fact that through the GATT was becoming increasingly involved in new areas, its signatories were largely limited to the industrial countries.

In contrast to the passive nature of the GATT, the WTO was more domestically invasive in terms of its regulatory regime. Though the WTO regime affected the policies available to every WTO member country, it was particularly constricting for those members that had not yet built up the domestic capacity to take full advantage of free trade. In

⁸ These 33 include: Argentina, Austria, Belgium, Brazil, Canada, Chile, Denmark, EEC, Finland, France, Germany, Hungary, Ireland, Italy, Japan, Korea, Luxemburg, Netherlands, New Zealand, Norway, Pakistan, Philippines, Romania, Singapore, Spain, Sweden, Switzerland, Tunisia, UK (Hong Kong), U.S., Yugoslavia. Source: Second Annual Review of the Operation of the Agreement, Committee on TBT, Oct, 1, 1981. (document number TBT/6/Suppl.1)

⁹ The 12 include the EEC. Total signatories by country are: Austria, Belgium, Canada, Denmark, Finland, France, Germany, Hong Kong (via UK), Ireland, Italy, Japan, Luxemburg, Netherlands, Norway, Singapore, Sweden, Switzerland, UK, U.S. Source: Second Annual Review of the Implementation and Operation of the Agreement, Committee on Government Procurement, 01/201983 (document number GPR/16).

¹⁰ The 14 include: Austria, Brazil, Canada, Chile, Egypt, Finland, India, Japan, Korea, New Zealand, Norway, Pakistan, Spain, Sweden, Switzerland, UK (Hong Kong), U.S., Uruguay, Yugoslavia, EEC. Source: Report of the Committee on Subsidies and Countervailing Measures, June 1, 1983. (document number 1/5496).

¹¹ The 23 include: Argentina, Australia, Austria, Canada, Chile, Czechoslovakia, Egypt, EEC, Finland, Hungary, India, Japan, New Zealand, Norway, Pakistan, Philippines, Romania, South Africa, Sweden, Switzerland, UK (Hong Kong), U.S., Yugoslavia. Source: Report (1982) of the Committee on Import Licensing. (document number 1/5411)

particular, there are 3 elements of the regime change that affected the ability of WTO-member countries to enact development policies similar to those used by the latecomers.

The first limitation stems from the fact that the WTO disciplines a wider variety of trade and non-trade policies than did the GATT (see figure 2.4). The expansion of issue coverage directly restricts the set of policy instruments available to address the market failures that are common in developing countries. Where the latecomers used weak intellectual property protection and technology transfer requirements to reduce the adverse consequences of proprietary knowledge, for example, today's developing countries can do neither of these things.

FIGURE 2.4 GATT VERSUS WTO ISSUE COVERAGE

GATT coverage (required)	WTO coverage (required)		
	Goods	Intellectual property	
	Agriculture	Investment measures	
goods	Services	Subsidies	
	SPS	Anti-dumping	
	TBT		

The chart above is a visual representation of the issue coverage of the GATT versus the WTO. The WTO agreements have moved the opportunity to make decisions about industrial structure away from governments and into the hands of the regulated market. As a result, today's developing countries tend to rely on the international market to build domestic productive capacity through investment, rather than trying to build up domestic firms (Krueger, 1999).

The second constraining element of the regime change is comprehensive required compliance. This removes the GATT-era choice of which sectors to regulate. In the GATT, all of the agreements that went beyond trade in goods were plurilateral which means that member countries chose which ones they wanted to follow. In contrast, the

WTO was signed as a Single Undertaking which means that countries agreed to follow every agreement that is covered under the WTO. 12

A third element of the regime change is that compliance is not only required, but also enforced. Many of the industrial policies discussed in the previous section were non-compliant with both the WTO, and the GATT. However, the GATT did not enforce compliance in the developing countries for two reasons. The first was the previously mentioned lack of interest in the policies of the developing countries. The other reason was that the dispute settlement mechanism was designed such that the defendant could block the adoption of any adverse decisions.

The WTO made a number of changes to the dispute settlement mechanism that had existed in the GATT era. Changes such as "automaticity" (the automatic adoption of panel decisions) addressed the potential for blocking that existed with GATT panels. In combination with the introduction of compliance timelines, both features introduced additional coercive elements to the dispute system. This reduction in state-level decision making is generally seen as a positive outcome (see e.g. Chorev, 2005).

Figure 2.5 below illustrates the extent to which the dispute settlement mechanism has become involved in limiting the application of industrial policies that violate countries' WTO obligations. This level of activity contrasts with figure 2.2, which illustrated that the dispute settlement mechanism had limited involvement in industrial policy choices in the developing countries.

¹² There are some exceptions for the developing countries through Special and Differential treatment and extended compliance timelines, but these are only temporary exceptions.

FIGURE 2.5 PANEL CASES INVOLVING PROHIBITED INDUSTRIAL POLICIES (1995-2005)

Defendant	Local Content Requirements	Import Controls	Export / production subsidies 13	Tax manipulation	IPR Enforcement
Developing Countries	11 (Brazil, India, Indonesia)	19 (Argentina, Brazil, India, Korea, Malaysia, Mexico Philippines)	3 (Brazil, Korea, Philippines,)	10 (Chile, Dominican Republic, Korea, Mexico, Peru)	5 (Argentina, India, Pakistan)
Industrial countries	0	4 (EC)	18 (Australia, Belgium, Canada, EC, France, Greece, Ireland, Japan, Netherlands, US,)	4 (Japan, EC)	10 (Canada, Denmark, EC, Greece, Japan, Portugal, Sweden)
Total	11 (3%)	23 (7%)	21 (6%)	14 (4%)	15 (4.5%)

Source: WTO chronology of cases in the dispute settlement mechanism.

The chart above illustrates 2 important facts. First, prohibited policies remained in practice both in both developing countries and industrial countries in the WTO era. And second, the Dispute Settlement Mechanism has spent a large proportion of its time adjudicating industrial policies. Taken together, panels that deal with prohibited industrial policies constitute 25 percent of total cases brought to dispute settlement. This percentage is considerably higher if export subsidies on agriculture are included. This means that more than a quarter of all cases in the WTO dealt with getting rid of a tool used by developmental states.

To sum up, I use figure 2.6 to illustrate the extent to which developing countries have adjusted their industrial policies in the WTO regime. Figure 2.6 shows that though trade-distorting industrial policies were widespread among developing countries during the GATT era, by the time of the WTO, these policies had largely been changed in favor of a trade policy regime more in line with their WTO obligations (Singh, 1996).

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¹³ Non-agriculture only

FIGURE 2.6 LATECOMERS MAINTAIN DISCRIMINATORY POLICIES (SELECTED LIST) INTO 1990s, DECLINING AFTER 1994

	Local C Require			port trols		oort itives	Perfo	port rmance rements
	GATT	wto	GATT	wto	GATT	wto	GATT	wto
Brazil	x	0	x	0		0		0
India	x	0	x	0	x			
Indonesia	x	0	x		x			
Malaysia	x	0	x	0	x		x	
Mexico	x		x	0	x		x	
South Korea	x		x	0		0		
Thailand	X		x		x			

Source of GATT data: Trade Policy Review Reports, Meeting Minutes, and related documents 1990-1993. Source of WTO data: DSB cases, Trade Policy Review Reports 1994-2005

Despite these limitations, the WTO does enable countries to continue to implement a number of important developmental industrial policies. It allows countries to maintain (1) some autonomous decision making ability (Amsden and Hikino, 2000), (2) some capital compensation, (3) policies, such as duty drawbacks, that may approximate developmental results (Shadlen, 2005a), and (4) non-specific industrial policies such as generalized content rules. In addition, developing countries bound many of their tariffs at higher rates than applied, which gives them the option of raising tariffs in those areas. There are also a number of extended compliance deadlines and other exceptions, such as *de minimus* subsidies, that enable developing countries to continue some forms of industrial policy.

Yet, even policies that are not prohibited are no longer popular with developing countries. As Figure 2.6 above indicates, countries are increasingly withdrawing their use of export performance requirements even though the WTO does not specifically limit

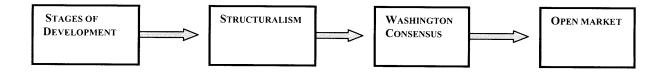
this discipline. This suggests there is another source of restriction to countries' industrial policy set.

2.2.2 Informal: Paradigm Change

The second change in the international regime is more subtle than the WTO commitments, but just as binding. This is the rise of the free trade paradigm. The development paradigm governs what is considered to be "acceptable policy behavior." It is the policy model that underlies the programs and recommendations of the international institutions. It is perpetuated through conditionality, aid, and various requirements in international trade arrangements. Since most developing countries will come into contact with an international institution at some point, this serves as a deterrent to implement a policy that may later have to be removed.

During the GATT era, the trends in international development policy leaned first towards import substitution and then towards export orientation. As a result, interventionalist policies were not actively discouraged. Since the rise of the WTO, the free trade paradigm has come to dominate the recommendations and policies of the international institutions. In this section, I will briefly look at the evolution of development policies, the coalescence of the free trade paradigm and the outcomes this is expected to have on the middle-technology countries.

FIGURE 2.7 DEVELOPMENT PARADIGMS 1950-PRESENT



Stages of Development

Early development theorists equated development with output growth. Capital formation through savings was the key to growth (Nurkse, 1962; Lewis, 1963). Because the developing countries were thought to follow the same trajectory as the industrial

countries, authors in this period focused on whether or not stages of development could be skipped or jumped over (e.g. Gershenkron, 1962). This school viewed the government as a key component of industrialization since it could affect the level of savings and the rate of capital accumulation.

Structuralism

The subsequent development paradigm advocated strong government intervention in reaction to the neoclassical notion that development would come through the export of primary products (the "comparative advantage" of the developing countries). Structuralism was the beginning of the split of development economists since it also advocated the notion that the problems of the developing countries went beyond the same problems that the industrial countries had had at similar levels of development (Hirschman, 1958).

It eventually came to be articulated by Prebisch and Singer into the dependency model. The Prebisch-Singer dependency hypothesis came out of evidence that the terms of trade for developing countries in their trade with the advanced countries had a tendency to decline over time. Technological progress was hindered by the type of specialization countries focused on. Policies in this period focused on encouraging domestic production through import substitution. However these types of policies are subject to corruption, and lead to various forms of market distortions (Little et al, 1970). Import substituting policies ultimately failed to have the expected effects and development policy focused on export-oriented prescriptions for growth.

Washington Consensus

The next model of export orientation eventually yielded to support for liberalization which came to be known as the Washington Consensus (Williamson, 1994). This is a policy strategy that focuses on reigning in government intervention in the economy to that which is considered to be economically efficient, unlike previous strategies which held a very distinct role for government intervention. As more countries reached the middle stages of development, the focus of the institutions that were providing financial

support for development strategies moved to alleviating conditions of poverty, rather than creating the conditions for industrial evolution. This new thinking became ingrained as the Washington Consensus, and by the time of the Uruguay Round, it was firmly in place as the "correct" development strategy. This laissez-faire policy has been further refined by the international financial institutions into a prescription that government intervention should focus primarily on poverty reduction strategies (World Bank, 1995).

The Washington Consensus was not a theory that was later applied, but rather a set of observations an economist made about the types of policies that were being consistently implemented and supported. It was developed in the late 1980s along with the collapse of the Soviet Union and central planning. As Naim (1999) points out, the Washington Consensus did not provide developing countries with any guidance about the phenomenon of globalization.

Open Market Paradigm

The development paradigm that exists today is, to some extent, a reaction to the lack of sustained growth in the current regime. ¹⁴ It includes a neoclassical focus on the efficiency of the free market and prescriptions for functional support by the international institutions to guide government policies to poverty alleviation rather than industrial intervention. This affects the ability of the middle technology countries to follow their predecessors by supporting specific enterprises and intervening in markets.

The open market paradigm answers the questions the Washington Consensus left open. It recommends financial opening and trade liberalization. However these recommendations do not account for existing resources and political constraints of member governments. They essentially assume that governments have unlimited resources and freedom to implement whatever policies are recommended. There is no ranking of what policies are "most" developmental.

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¹⁴ Ostry (2000) credits the change in the paradigm to the combination of the debt crisis of the 1980s and the fall of the Berlin wall.

Evenette (2005) points out that the Asian Financial Crisis and the failure of much of Latin America to grow are the 2 main reasons that the previous development paradigm was rejected. He also makes an important point about what I defined as the open market paradigm – it is not so much a new alternative development model as the embodiment of the rejection of the Washington Consensus.

The change in the development paradigm is different from the change in the institutional regime because of its formality. It came mainly from shifts in international lending and aid policies of the industrialized countries.

This informal policy constraint affects the policy choices of developing countries through two different channels. The first is conditionality associated with assistance from both industrial countries and international financial institutions.

To continue with the example offered above, performance requirements are not prohibited by the WTO, but they are discouraged by the development paradigm. An official from Peru pointed out that his country had changed their use of industrial policy before the WTO in response to pressure from the World Bank and IMF (Embassy of Peru interview, 2002). We can see examples in various forms of conditionality that would discourage the use of these policies (see figure 2.8)

FIGURE 2.8 EXAMPLES OF LIMITATION OF PERFORMANCE REQUIREMENTS

WTO	GSP	ATPDEA	U.SChile FTA
"Except as provided in the Agreement on Agriculture, the following subsidies, within the meaning of Article 1, shall be prohibited: (a) subsidies contingent, in law or in fact, whether solely or as one of several other conditions upon export performance"	"in determining eligibility the President should take into account: (6) "The extent to which such country has taken action to - (a) reduce trade distorting investment practices and policies, (including export performance requirements);"	"The President shall take into account – (5) the degree to which such country uses export subsidies or imposes export performance requirements or local content requirements"	"Neither Party may impose any of the following requirements, or enforce any commitment or undertaking, in connection with the establishment, acquisition, expansion, management, conduct, operation, or sale or other disposition of an investment of a Party or of a non-Party in its territory"

The chart above illustrates the extent to which a WTO-compliant policy is prohibited by its inclusion in other elements of the international trade regime. Yet this is not the only way that the informal constrain affects countries.

The second way that this informal constraint affects policies is through its direct integration into the international trade strategies of the developing countries. Finger and Schuknecht (1999) observe that even before the Uruguay Round introduced new restrictions on the use of balance of payments provisions, developing countries had already begun to remove these GATT-consistent restrictions.

To illustrate a tangible outcome of this, I offer the example of the lack of local content requirements in government procurement policies. The WTO allows countries to implement LCRs in their government procurement policies. There are formal limits through the Agreement on Government Procurement, but since it is a plurilateral agreement, its rules should not have any affect on countries that do not sign it (see figure 2.9). This is a potential means through which developing countries can affect their industrial goals. While realistically, few developing countries have public sectors that are significant enough to use this as a tool (Evenette and Hoekman, 2005), this did not stop the smaller latecomer countries in their industrial policies.

FIGURE 2.9 GOVERNMENT PROCUREMENT MEMBERS AND OBSERVERS

Members	Observers	
Canada	Albania*	Moldova*
EC	Argentina	Mongolia
Hong Kong	Armenia	Oman*
Iceland	Australia	Panama*
Israel	Bulgaria*	Sri Lanka
Japan	Cameroon	Taiwan*
Korea	Chile	Turkey
Liechtenstein	China	
Netherlands (for Aruba)	Colombia	
Norway	Croatia	
Singapore	Georgia*	
Switzerland	Jordan*	
U.S.	Kyrgyz Republic*	

Source: wto.org

The above chart shows that there are a very limited number of developing countries acceding to this agreement. This suggests that developing countries have room to use LCRs in this instance. ¹⁵ A survey of Trade Policy Reviews from the past 3 years for the middle technology countries ¹⁶ reveals that half of 10 countries reviewed - China, Egypt, Malaysia, Thailand and Indonesia - actively favored domestic firms or content. This is notable because other countries are not more actively using LCRs in their procurement policies.

^{*}in the process of acceding

¹⁵ Local content requirements here are any situation where either there is a specific requirement to use domestic goods/firms or where there is evidence that domestic goods/firms are favored. This does not include cases like Brazil, where local content may be favored if there are 2 identical bids; cases like Nigeria where Ministries are encouraged to buy locally where quality is sufficient, or cases like Singapore where preference is give to firms/goods from FTA partners.

¹⁶ These included: 2006 – China and Malaysia, 2005 - Egypt, Philippines, Ecuador and Nigeria, 2004 - Brazil and Singapore, 2003 – Thailand and Indonesia.

This is example is meant to show the extent to which developing countries are limiting policies that have industrial potential and are not elsewhere limited in response to recommendations by international organizations.

2.3 THE BARGAIN

In the previous section, I illustrated the extent to which the new regime has constricted developing countries' policy options in terms of set of policies popular in the GATT era (figure 2.1). In this section, I seek to explain why this happened.

The existing suggestion in the literature is that the completion of the Uruguay Round was possible because of what Ostry (2000) has called the "Grand Bargain." This bargain was that the developing countries agreed to new limits on their domestic policy space in return for the industrial countries' promise to reduce tariffs in their markets of interest such as textiles and agriculture. Hathaway and Ingco (1996) point out that while participants in the Uruguay Round did not expect large cuts in agricultural tariffs, they certainly did not expect the high tariffs that resulted.

Following, I illustrate the extent of the bargain in order to make the response understandable. I begin with a discussion of the extent to which developing countries ceded their initial positions. I use their initial proposals to the Uruguay Round to indicate the importance they placed on policy independence. I then compare these initial positions to the ultimate outcomes of the Uruguay Round in 2 of the new covered agreements.

To illustrate the expected payoffs of this bargain, I use published predictions of the commercial outcomes of the Uruguay Round. In addition to numerical outcomes, I also break out the industrial outcomes that countries were expecting that are difficult to quantify, but played heavily into the bargain, such as increased investment.

Finally, I argue that the failure to realize these payoffs introduced an incentive for developing countries to block additional forward movement as we have seen in the last few Ministerial failures.

2.3.1 Submissions and Outcomes

In this section, I describe the extent of the bargain in terms of 2 new disciplines – the Agreement on Subsidies and Countervailing Measures (SCM) and the Agreement on Trade-related Investment Measures (TRIMs). I do this by showing the gap between the initial positions of the developing countries and the ultimate outcomes of the Uruguay Round.

SCM

In terms of the subsidies negotiations, many of the developing countries saw subsidies as a tool for development and so were initially unwilling to accept additional regulation (Negotiating Group on SCM, 1987). They were also concerned with the active use by the United States of countervailing duties (Stewart, 1993).

Initial proposals were submitted by Colombia, Egypt, and later, Brazil, Korea and India. Throughout the negotiating process, the drafts remained contentious as the least developed countries did not like red light (prohibited) subsidies, while the United States and other industrial countries wanted to further restrict the green light (non-prohibited) category (Stewart, 1993). The developing countries largely did not want regulations to extend into domestic subsidies (India and Korea, but also supported by the EC).

The chart below begins this analysis with a comparison of the SCM proposals that were circulating during the Uruguay Round and how they compare to the ultimate outcome.

FIGURE 2.10 URUGUAY ROUND SCM SUBMISSIONS

Issue	India	US	EC	WTO outcome
Prohibited Subsidies	No modifications to current list. No prohibition of domestic subsidies	Export subsidies in illustrative list, subsidies contingent on export performance or that promote use of domestic goods, export subsidies on primary and non-primary products, grants covering operating losses, loans at interest rates below government rates	Subsidies on illustrative list or if contingent on export performance.	2 categories: export subsidies, and local content requirements
Actionable Subsidies	Only measures constituting a charge on the public account	All specific subsidies that are not non-actionable	Only measures constituting a charge on the pubic account	All that have at least one adverse effect including injury, prejudice or nullification or impairment.
Specificity	Essential criterion		Essential criterion	included
Non- Actionable Subsidies	Generally available, R&D, regional, worker adjustment assistance, export subsidies for raw materials	Provision of basic human services, national defense, extraction, processed natural resources, infrastructure, worker assistance	Generally available, de minimus, R&D, regional, indirect, basic human services, national defense, structural adjustment, energy savings, prevent pollution	R&D, regional assistance, environment, science and technology.
De minimus	If per unit incidence of a subsidy is less than a specified minimum CVD should be terminated	Setting of a minimum market share prevents evaluation of case- specific facts	Subsidy that does not exceed a specified percentage is presumed to have a de minimus effect	Less than 1% AV
Treatment of developing countries	Continue S&D under Subsidies Code Art. 14 unchanged	Full integration into system, assumption of all obligations. Allows for a transition period.	Should assume GATT obligations.	Transition period. 3% de minimus

Source: Stewart (1993)

We can conclude that, in the case of subsidies, the developing countries, as represented here by India, desired greater domestic policy freedom and limited international governance. Of the 6 categories listed above, the developing country proposal was

accepted in whole or in part in 3 areas. But in these 3 areas, their interests overlapped with an industrial country.

TRIMs

Similar to subsidies, investment measures were initially seen by the developing countries as an important tool for development. During the TRIMs negotiations, the developing countries illustrated their awareness of the importance of various investment measures for growth and development. The Malaysian representative pointed out for example that: "TRIMs as cited in the Group such as those for example dealing with export performance or local contents as used by the developing countries in my view certainly are measures that are directly relevant to the trade and economic development of less-developed contracting parties..." The delegate then went on to describe how these measures should fall under GATT Part IV.¹⁷ Similarly the delegate from the Philippines, in representation of the ASEAN countries, pointed out that "it had to be recognized that investment measures were important policy instruments employed by governments, particularly of the developing countries, for the development of their economies." ¹⁸

India also pointed to the fact that many of the TRIMs policies are issues of national sovereignty and have important domestic effects that should not be limited multilaterally. Singapore argued that to the extent that TRIMs only affect the domestic economy (e.g. do not materially injure another party) they "are legitimate government policy instruments to restructure the economy, to diversify production, to promote local employment or upgrade the technological level of the economy."²⁰

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¹⁷ Statement by Malaysia, Negotiating Group on TRIMs. June 16, 1988 (MTN.GNG/NG12/W/13)

¹⁸ Note by the Secretariat, Negotiating Group on TRIMs, Sept. 27, 1990 (MTN.GNG/NG12/90)

¹⁹ Submission by India, Negotiating Group on TRIMs, Sept. 11, 1989, (MTN.GNG/NG12/W/18)

Statement by Singapore, Negotiating Group on TRIMs, July 28, 1989 (MTN.GNG/NG12/W/17).

FIGURE 2.11 URUGUAY ROUND TRIMS SUBMISSIONS

Subject	Developing Countries	Industrial Countries
All GATT exceptions available	х	
Temporary deviations for developing countries	х	
Notification		х
Transitional arrangements allowing delays in elimination of prohibited practices	х	
transparency		X

Source: Stewart (1993)

Unlike the SCM agreement, TRIMs was a completely new agreement and had not been a part of the Tokyo Round Codes. The chart above illustrates the extent to which developing and industrial countries were at odds with their expectations about these measures. Ultimately, all countries were required to notify and conform.

2.3.2 Expected Payoffs

The reasons that developing countries would ultimately accept outcomes that differed so significantly from their initial submissions require a dual-pronged explanation. The one that the literature tends to focus on is the fact that the developing countries simply did not have the ability to prohibit results that would not benefit them directly, such as the accession of new agreements. Because of the diversity among developing countries, limitations of policies benefit some countries while hurting others. As a result, despite the many interest groups designed to assist the developing countries, they still find it difficult to stand together. And also, more simply, developing countries simply lack overall bargaining power and negotiation experience.

Yet as Hoekman (1993) and Page (2001) point out, developing countries have had various successes in international negotiations in the past, so their lack of bargaining ability and influence cannot be the whole story. Developing countries also had goals for the Round, although they were different from those of the industrial countries.

Specifically, the industrial countries wanted to add rules in the Uruguay Round, while the developing countries focused on removing tariffs in target sectors (Page, 2001).

The second part of the explanation of why developing countries accepted such a bargain is that they really did expect that the outcome would result in positive payoffs for them. Below I characterize these expected outcomes in terms of trade and non-trade results.

FIGURE 2.12 INCOME GAIN ESTIMATES FROM THE URUGUAY ROUND AGREEMENTS

Study	World Low (high)	Developing Countries Low (high)
Harrison, Rutherford and Tarr	\$52.5 (\$188.1)	\$4.8 (61.7)
Francois, McDonald and Nordstrom	\$51.4 (251.1)	\$1 (22.6)
GATT Secretariat	\$230	\$65
World Bank	\$213	\$78
Nguyen, Perroni and Wigle	\$212.1	\$36
OECD	\$274	\$89.1

Source: Epstein, 1998

In terms of trade-based results, a number of sources that predicted the gains that were expected to result from the Uruguay Round Agreements (see Figure 2.12).

In addition to the overall income gains that countries expected there were 3 other outcomes they anticipated in return for their concessions to the new disciplines.

The first was that they would attain better terms of access in agriculture and textiles, which were both highly protected markets in the industrial countries. Increased exports of the products of greatest interest to developing countries were expected to give them a boost in growth. In terms of textiles, the existing Multi-Fibre Arrangement was simply integrated into the WTO through tariffication, the tariffs themselves were not subject to any required level of reduction. In addition, there was significant back-loading and most quotas were not converted into tariffs until the final 2005 deadline.

In terms of the Agreement on Agriculture, there were 2 problems. The first is that the conversion to tariff equivalents was based on a high-protection year. This, in combination with dirty tariffication, resulted in high levels of protection that were in many cases higher than that under the quota system, even after subsequent cuts (Hathaway and Ingco, 1996).

The other problem was that the tariffication of quotas again did not require reduction of protection. As Finger and Nogues (2001) point out, though the negotiations detailed year-by-year tariff reductions, these were not legal obligations. And subsequently, the OECD countries have not significantly reduced their support and protection (Diakosavvas, 2001). In fact, OECD (2002) points out that the industrial countries support to their domestic agricultural industries actually increased from 1997-1999.

The second anticipated gain was that investment flows would target developing countries that followed intellectual property rights and investment measures. This expectation is derived directly from the literature on institutions which tells us that when property rights are secure, it will be in the interest of private agents to invest and generate higher levels of income (North and Thomas, 1973).

A third gain was more simply that countries would grow more quickly if they were members of the international regime than if they were outsiders. While there is a great deal of evidence that outsiders to preferential trade agreements often lose, there is little evidence that insiders to the WTO have grown more quickly than outsiders.

2.3.3 Evidence of Instability

Despite these high hopes, the reality of the WTO-based environment has resulted in a stalemate. The regime did not yield the promised outcomes for 2 reasons. First, the process of accession was more costly than developing countries had anticipated. They realized the costs of domestic adjustment would be high (Finger and Schuler, 2000), yet they were promised technical assistance from the industrial countries that never materialized (Ostry, 2000).

Second, the payoffs were lower than anticipated. The agricultural market access the developing countries expected did not materialize. Even former U.S. Trade Representative Rob Portman pointed out that the Uruguay Round was "pathetic in terms of its agricultural market access."²¹

These 2 outcomes, combined with increased assertiveness by developing countries in the WTO era, have resulted in institutional instability. This instability is illustrated by the failures in Seattle and Cancun; and more recently, by the decision to suspend the Doha Round negotiations altogether.

Despite the fact that developing countries' expectations have not been fulfilled, and the institution has not been able to move forward much beyond the initial Doha agenda, these countries continue to adhere to the parameters of their WTO obligations. This is a curious outcome given their desire to industrialize and their staunch support of domestic sovereignty. In the next chapter I turn to suggest an explanation about why developing countries continue to support an institution that does not fulfill their development needs.

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²¹ Press Release, U.S. Mission in Geneva, October 12, 2005.

CHAPTER 3

FREE TRADE AGREEMENTS

There are many different reasons that developing countries decide to undertake regional trade negotiations. These include the promotion of foreign investment, increased exports, market access and continued economic growth (Schiff and Winters, 2003). The common denominator of all of these justifications is that they are all outcomes that, in theory, were expected to have resulted from the Uruguay Round. This chapter is about what happened when they didn't.

My hypothesis is that the recent popularity of FTAs is a direct response to WTO era policy limitations. Specifically, when it became clear that targeted outcomes would not be forthcoming, countries turned to the existing institution of FTAs, which offered WTO members access to a sufficiently flexible set of alternative rules with a proven ability to yield growth results.

Though the concept of FTAs as an industrial instrument has been mentioned in the legal literature (Jackson, 1969), the literature on industrialization and development has not treated them in that role. In the 2 sections of this chapter, I aim to show that their recent history suggests that they have the right combination of popularity, legitimacy and targetability to function as an effective tool for industrialization in the current international regime.

In the first section, I detail the 3 types of responses countries could have to the WTO's lack of development-based payoffs. They could walk away from their obligations, try to change the institution, or find an alternative means of achieving their goals. I suggest that the option of supplementing the institution is optimal since withdrawal is undesirable given existing realities (Winters, 2002), and attempts to move forward internally are unlikely due to the existence of a collective action problem in the WTO (Fernandez and Portes, 1998; Mansfield and Reinhardt, 2003).

The second section of this chapter proposes an explanation for why FTAs have become the supplement of choice. I go through the institutional specifications necessary for a sustainable supplemental form of organization in the multilateral regime. Specifically, an optimal supplement is one which maximizes targeted outcomes while satisfying the participation constraint posed by existing international and domestic norms. I first use the organizational behavior literature to argue that FTAs are legitimate tools in terms of both international and domestic constraints. I then show that of the various designs available for a regional agreement, an asymmetric FTA is the design most likely to yield desired outcomes.

This chapter concludes that developing countries are forming FTAs in response to their inability to achieve developmental goals through existing channels.

This chapter contributes to the literature on why countries chose to negotiate FTAs, which contributes to the overall theory that FTAs can promote industrialization. However, this chapter cannot explain why FTAs are able to yield results that similar instruments are not. I will detail exactly how the dynamics of FTAs affect commercial outcomes in subsequent chapters.

3.1 POTENTIAL RESPONSES TO REGIME LIMITATIONS

The developing countries gave up their industrial policy independence with the expectation that the system governed by the WTO would enable them to accomplish their development goals without them. The WTO was not designed with these goals in mind; ¹ rather, the negotiation process generated these expectations. When they went unfulfilled, countries were left not only with less policy space, but fewer tools with which to manipulate it.

¹ Authors have pointed out that the organization has the ability to address poverty-related issues (Winters, 2002; Trachtman, 2003b), but non-governmental organizations suggest that it largely has not been exploited.

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The literature on institutional change leads us to expect that when an institution is not able to fulfill the needs for which it was established, that its members will either seek institutional change or it will be abandoned. This is particularly true of institutions which have been specifically designed to accomplish a specific outcome rather than those which are the results of societal norms.

For the developing countries, this means that they need to find another way to address their trade-related development goals. In this section, I go through the 3 options that they have to choose from. Specifically, they can choose to leave the WTO, which is unlikely given the evidence that being outside the system is even more dangerous than existing inside the system. They could also choose to try to change the system from within. The WTO was designed to be able to accommodate institutional change, however, I will show that changes in the goals of its members along with an increasing number of members has resulted in an currently insurmountable collective action problem. This leaves members with only one other response, which is to establish a supplementary institution or set of rules through which they can accomplish their development goals.

3.1.1 Leave the WTO

A basic solution to the problems of participation in an institution that is not able to address their needs is for affected countries to defect altogether. In the case of the WTO, this is even easier because there is no formal compulsion for countries to remain in the system, the only cost is losing the rights of membership. Yet while we have seen countries end their accession proceedings (such as Vanuatu in 2001), there has not yet been a case of a country removing itself from WTO membership.³

There are 2 reasons that defection is not the option of choice for developing countries. The first is that there are very obvious benefits to being a member of the club, and the

² In an article on institutional change, North (1993) points out that when new opportunities are made known to institutional members, actors are induced to either instigate internal changes, or to alter the effectiveness of existing rules. In this dissertation, my focus on the WTO leads me to add a 3rd alternative – defection from the institution since this is also a possible, though unlikely outcome.

³ Though China, which was an original GATT founding member, withdrew from that organization in 1950 after the split with Taiwan.

benefits of membership are excludable. For example, MFN is offered only to members. Membership also signals to investors that the member country maintains certain desirable characteristics. AOL-Time Warner, for example, will not invest in any country that is not a WTO member (AOL-TW interview, 2002). In their case, before 1994 they only invested in industrial countries, but following the TRIPs agreement they have expanded into Thailand, the Philippines and Chile among others.

Along the same lines, by remaining outside the system, countries will find themselves unable to affect changes in international norms that develop therein. The WTO has proven to be reluctant to include the input of any non-members. This was clear during the fight to allow NGOs to submit opinions in the dispute settlement mechanism, or even to allow non-national lawyers to represent countries in panel proceedings. There is a great deal of give and take among the international standards-setting institutions such as WIPO, the WTO and others. Changes in one are often observed and translated into changes in the others. As a member of the WTO, a country can at most block a consensus-based outcome, and at least have its opinion voiced during the negotiations.

For these reasons, defection from the institution is not an optimal solution for developing countries whose goals are growth and development.

3.1.2 Change the WTO

A second option available to actors when the realized outcomes do not meet expectations is to change the institution. The WTO is structured to facilitate the gradual evolution of the institution as members' conditions change. However, these mechanisms were designed at a time when membership was relatively small, and have been overwhelmed in the current 148-member environment.

The literature on institutions provides numerous examples of persistent institutions that outlast the circumstances that prompted their creation. For the most part, the existence of institutional overhang is blamed on the inability of internal adjustment mechanisms to account for changing circumstances (Acemoglu et al, 2001; Banerjee and Iyer, 2005).

Though the structure of the WTO does contain mechanisms that provide for institutional adjustment, they have proven to be more problematic than helpful.

Internal Mechanisms to Allow Change

Mechanisms for institutional adjustment include ministerial conferences which are held every 2 years and include all of members. These are the highest of the meetings that are held regularly. While changes can be made in committee or other levels of the WTO, it is here where the broadest membership meets. It is here where new issues are approached (Singapore in 1996) and new negotiating rounds are launched (Doha in 2001). Another way to affect institutional change in the WTO is through the Dispute Settlement Mechanism.

The developing countries as a group have made some progress in their attempts to move the WTO in a direction that is more suitable for their needs in several ways. These include the launch of the Doha round, and the fact that the multilateral agreement on investment was dropped.

The Collective Action Problem

Yet, as the literature on institutions points out, even where there are mechanisms to allow for endogenous change, sometimes they can be overwhelmed. Such a situation serves as an impetus for more significant changes (Hall and Taylor, 1998). This appears to be the case with the WTO. Existing WTO mechanisms are unable to operate through consensus in the fact of a broad membership.

The increase in the number of members of the WTO has rendered the existing consensus-based approach to institutional evolution unable to maintain momentum. This process not only impedes forward movement on issues where countries disagree, but perversely, also prohibits forward movement on issues where there is broad agreement, such as on the continuation of green-light subsidies.⁴

⁴ Both developing and industrial countries are largely in agreement that these subsidies should remain; however, because they are unable to reach consensus on whether to expand them to keep the existing list,

3.1.3 Supplement the WTO

The third option available to members of the WTO that desire outcomes that it is unable to provide is to construct supplementary institutions. There are many examples of this activity in the literature on inefficient public institutions. In most of these cases, the new institution creates an alternative channel for affected actors. Actors then stop using the old institution in favor of the new.

The supplement does not have to be this severe however. As Grief and Laitin (2004) point out, change is more often a refinement of the existing institutional process and not a significant departure from the situation that existed prior. This I argue is what has occurred with the rise of FTAs in the WTO system, in this case, FTAs do not replace the WTO, but rather augment its functioning in areas where movement is problematic. The FTA functions as, in the words of a Chilean negotiator, a "strategic substitute" (Central Bank of Chile interview, 2005).

As we saw in earlier arguments, developing countries have a stake in the maintenance of the WTO, and have not made any calls for the general rejection of the institution. Yet, they have made it clear that there are certain outcomes that they require that it is not able to provide. For this, they are looking elsewhere.

3.2 WHY DID FTAS BECOME THE SUPPLEMENT

Given the choices available to the developing countries, the decision to seek alternative institutional channels was straightforward. In this section, I seek to explain why FTAs are the alternative of choice given the range of other potential policies. In particular, I suggest that FTAs have low entry costs, since most countries already had some experience with them; that they fit into exiting domestic and international norms; and that, given the choice of forms, FTAs are optimally designed to accomplish growth outcomes.

the entire category has timed out and is now actionable. However, in the Doha Declaration, members agreed to exercise due restraint in challenging these subsidies (paragraph 12 of the Doha Declaration).

Despite the lack of explicit causality between the problems with the WTO and the rise of FTAs, there is evidence of covariance between the institutions. Mansfield and Reinhardt (2003) point out that regional agreements and cooperation tend to rise following adverse panel decisions in the WTO. There is also a spike in FTA announcements in the period following failed Ministerials in both Seattle in 1999 and Cancun in 2003. Similarly, accession to the WTO is correlated with an increase in a country's propensity for form FTAs - This was the case with China, which before its accession to the WTO in 2001 had no FTAs at all, and by 2006 has negotiated or is in the process of negotiating at least 6.5

In addition, much of the expanded coverage that accompanied the WTO was rooted in regional trade agreements. As Cho (2001) pointed out, regional agreements often have a "laboratory effect" where they serve as a testing ground for new types of policies and regulations. Sampson (1996) agrees and asserts that many of the new covered agreements were first tested out in FTAs. And conversely, changes in the WTO, such as the Doha Round goals, are reflected in FTAs as well, in this case through the formalization of technical assistance chapters into the text of asymmetric agreements.

Since a quantitative analysis is not feasible in this dissertation, I offer a political economy approach to advocate for causality. I show that FTAs are able to achieve development-friendly outcomes while satisfying both international and domestic constraints. Given the extent of these requirements, it is unlikely that any other institution is able to do so.

3.2.1 History

Although preferential trade agreements (PTAs) are not new to the trade regime, they were fairly uncommon among GATT members in the early years, and they were certainly not a significant aspect of their industrial strategy. As Ethier (1998) points out, the regional initiatives of the 1950s and 1960s amounted to "virtually nothing." In fact, South Korea did not ratify its first FTA until 2004.

⁵ Partners include: ASEAN, Australia, Chile, India, New Zealand, and Thailand.

By the time of the WTO, most members were party to at least one PTA, (WTO, 1995) and several, such as Chile and Mexico, have used the formation of PTAs with their major trading partners a pillar of their development strategy. As Baldwin and Venables (1995) note, as a result of regional agreements stemming from the United States and EU alone, over 40 percent of world trade is affected by regional agreements.

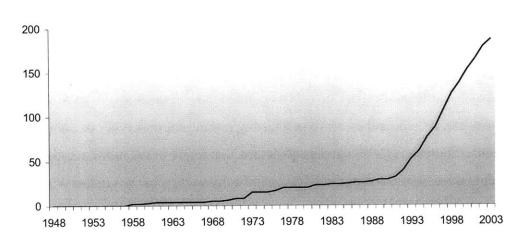


FIGURE 3.1 NUMBER OF PTAS REPORTED TO THE WTO

Source: WTO Secretariat

The chart above is a graphic illustration of this acceleration. The reasons for the recent popularity of regional agreements comes from both a herd affect as countries seek to remain in the system; and also from the desire for states to take advantage of the benefits offered by this institution while they are still available. There is wide evidence that countries that do not form FTAs are losing out to their neighbors.

The increase in popularity of FTAs was accompanied by a shift in their focus. As Srinivasan (1999) noted, initially the popularity of PTAs was a political phenomenon. The literature on institutions leads us to expect this change in character, since FTAs are

⁶ The acceleration of FTAs is also predicted by the institutional literature that points out that when an institution is shows to be successful, it will continue to proliferate (Axelrod, 1984).

⁷ This is particularly true in the case of the FTAA which would have rendered any existing preferences moot for the Latin American countries.

an institution of international trade, and as exogenous circumstances change, the institution, which is endogenous to the circumstances, will adjust accordingly (Weingast, 1996).

3.2.2 Fit in International Regime

To be an effective industrial instrument within current international constraints, a policy needs to do more than simply yield desirable results. It also needs to be legitimate and lie within the resource constraint of the implementing country. These 3 requirements are more stringent than the parameters under which the late industrializers implemented development policies.

Under GATT, developing countries had little reason to select their domestic policies based on their complementarity with existing international obligations (Hudec, 1987). In the current international environment, however, international legitimacy of domestic policies has become an effective requirement. This new requirement is a result of the evolution of various forms of bilateral and multilateral dispute settlement mechanisms that are designed to ensure that members are fulfilling their international obligations even at the local level by making it costly to circumvent existing rules. This means that for an industrial strategy to be feasible under the current international regime, it needs to operate within the guidelines of both domestic and international obligations.

Because PTAs operate at both the domestic and the international level, the evaluation of legitimacy in their overall operating environment requires both levels of validation.¹⁰ Though this policy constraint is a soft constraint, the attainment of it is an importance aspect of the ultimate success of the organization (Claude, 1966; Dowling and Pfeffer, 1975; Meyer and Rowan, 1977). In the following analysis, I focus only on the idea of

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⁸ I do not address here the availability of compensation instead of compliance or the degree of non-compliance to these dispute settlement systems. See Kohler (2004) for a discussion of the dangers of non-compliance through the WTO Dispute Settlement Mechanism. As early as 1966, scholars recognized that the legitimacy of state-level policies depended in part on approval by international organizations (Claude, 1966).

⁹ The legitimacy of a trade institution is important because it is an alternative form of governance. If it is not legitimate, it cannot effectively execute governance.

¹⁰ see Kostova and Zaheer, 1999 for an example of this type of analysis for multinational firms.

pragmatic legitimacy as a subset of organizational legitimacy (Suchman, 1995). To accomplish this evaluation, I use a framework adapted from Fambry and Harper (2005). They posit that in order for an institution to be legitimate, it needs to be accepted in 3 contexts – legal, sociopolitical, and bureaucratic. I examine these outcomes on both the national and the international levels.

I begin the analysis by showing that PTAs are an internationally legitimate institution. At first glance this seems intuitive, after all they are an established presence and, though there are persistent calls for increased regulation of their activities, there have been no real challenges to their existence.¹¹

The character of the international trade regime is shaped by a variety of international institutions, regulatory regimes, and multinational country groupings. For simplicity of analysis, I assume the policy constraints posed by the WTO are representative of all of the existing international institutions. Below, I show that PTAs are accepted legally in GATT Article XXIV; socio-politically because they complement the interests of the other major institutional players; and bureaucratically because they build and maintain systems for managing their goals in such a way that attainment is expected.

Legal

The legal aspect of legitimacy is the most conventional of the 3 types mentioned here. I establish legal legitimacy by first discussing the history behind the WTO text that governs the design of FTAs. I then ask how the text has been applied in practice. This is similar to Abott et al's (2000) characteristics of legalization of an organization. They suggest that it needs to include obligations, unambiguously define the conduct it requires and delegate to third parties the implement the rules.

Even before the GATT, PTAs as a class had been mentioned in the text of the international organizations. During the negotiations for the International Trade

¹¹ Yet, the fact that nearly every country is a party to some form of PTA might suggest that this lack of challenge comes from self-interested actors perpetuating a regime that benefits them specifically.

Organization (ITO), the United States submitted a proposal to include an exception for customs unions (for a history see Chase, 2005), that was eventually broadened to include FTAs (Mathis, 2002). During the pre-GATT regime, regional trade arrangements were not uncommon, but they were considerably less complex. As Jackson (1969) points out, the problems of regionalism at that time focused mainly on defining the scope of the territory. The language from the ITO follows.

- "1. Members recognize the desirability of increasing freedom of trade by the development, through voluntary agreements, of close integration between the economies of the counties parties to such agreements. They also recognize that the purpose of a customs union or free trade area should be to facilitate trade between the parties and not to raise barriers to the trade of other Member countries with such parties.
- 2. Accordingly, the provisions of this Chapter shall not prevent, as between the territories of Members, the formation of a customs union or of a free trade area or the adoption of an interim agreement necessary for the formation of a customs union or of a free trade area;" 12

This exception was folded into the GATT regime that followed the collapse of the ITO. During the GATT era, regional trade agreements were formed and notified with very little regulation. This lack of regulation was the result of 2 forces. First, the requirement of "substantially all trade" was, and still today has not been specifically defined (Panagariya, 2000). The other reason was that during the GATT regime, dispute notifications could be blocked by the defendant, which meant that regional trade agreements were effectively protected from interpretation through the dispute settlement process. So though there were a number of different offices set up to review trade agreements, few were notified and none were rejected during this period. Sampson (1996) has called this the "most unsatisfactory of all GATT procedures," The language from GATT 1947 is nearly identical to the ITO text. It is as follows.

"4. The contracting parties recognize the desirability of increasing freedom of trade by the development, through voluntary agreements, of closer integration between the economies of the countries parties to such agreements. They also recognize that they purpose of a customs union or of a free trade area should be to facilitate trade between the constituent territories and not to raise barriers to the trade of other contracting parties with such territories.

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¹² Article 44: Customs Unions and Free-Trade Areas. United Nations Conference on Trade and Employment, Havana Charter 1948.

5. Accordingly, the provisions of this Agreement shall not prevent, as between the territories of contracting parties, the formation of a customs union or of a free trade area or the adoption of an interim agreement necessary for the formation of a customs union or of a free trade area;" 13

The WTO also uses the GATT 1947 text on PTAs. However, by 1994 it was clear that the guidelines offered by Article XXIV were too vague. As a result, the WTO attempted to address some of the existing ambiguities in the GATT text through the addition of the explanatory note (which clarifies different aspects of Article XXIV – see *Turkey-Textiles* for a more specific comparison) and Ad Article XXIV (which clarifies paragraphs 9 and 11 on re-export and the India/Pakistan issue). But even with these new explanations, the WTO still has not defined the substantially all trade requirement. And while it sets out specific requirements about the coverage and operation of PTAs, and requires submission for approval, the review committee has not been particularly restrictive in their interpretation of the Article. One of the problems in the Committee on Regional Trade Agreements is a lack of consensus as a result of interpretive issues (Mathis, 2002).

The problems with ambiguity of this article come from the lack of interpretative adjudication in the GATT and WTO systems. Cho (2001) points out that the article was designed to regulate the formation, not the operation, of regional agreements and that it will not work in a legal way because it lacks a legal discipline. Most interpretation of existing text is done through the dispute settlement mechanism. However, in this case, region trade agreements have not been directly challenged, though some of their components have been addressed in GATT (Bananas I and II) which addressed a unilateral preference that cross-subsidies for ACP bananas and the WTO (Turkey Textiles). There have also been a number of safeguard cases where it was determined that a member of an FTA/CU cannot impose safeguards on only non-FTA/non-CU imports unless they can show that it is they which caused the harm (US-Safeguards on

¹³ Article XXIV, GATT 1947.

¹⁴ And Cho (2001) mentions that an unadopted panel report in 1985 specifically declines to rule on issues that pertain to Article XXIV because it was the responsibility of the contracting parties. (EC-Tariff treatment of imports of citrus products, 1985)

¹⁵ Turkey Textiles adopted a view of Article XXIV that allows for exceptions beyond Article I (MFN).

Line Pipe, 2002; Argentina-Footwear, 2000). However, these did not offer any significant new understanding or changes to the existing text.

As Mavroidas (2006) points out, the variety of PTAs in existence has not been affected by the satisfaction of a legal regime, since one does not yet, in effect, exist. However, I argue here that the simple fact that the dispute settlement mechanism has been used in relation to this article suggests that preferential agreements are subject to governance at that level. Their outcomes also suggest that PTAs are established in the text and will not be legislated out of existence, but rather refined. For these reasons, preferential agreements fulfill the requirements of legal legitimacy on the international level. In addition, a new mechanism was recently approved for the notification of regional trade agreements to the WTO. It will be implemented on a provisional basis and modified if needed for adoption with other changes in the Doha Round (WTO, 2006). The mechanism presents clearer data requirements and timelines than that which existed previously. While notification can come after ratification, this requires that it occurs before application of preferential treatment, which considerably shortens the timeline.

Sociopolitical

Sociopolitical legitimacy is measured by the extent to which an organization embodies or conforms to the standards that already exist in its environment (Aldrich and Fiol, 1994). It is most commonly applied to studies of the adoption of new technologies and tends to function as a barrier of entry. The goal of multilateral free trade has become the hallmark of both development theory and the direction in which the international institutions are working towards with their policies. As a result, sociopolitical legitimacy in the international community is based on the extent to which PTAs encourage or result in freer trade.

In this section, I measure sociopolitical legitimacy by first asking whether preferential agreements affect the overall multilateral movement towards free trade. Once I establish that they do not negatively affect the overall multilateral movement towards free trade, I

then ask if they have positively contributed to their objective by reducing average tariff rates beyond what they would be in the absence of a preferential agreement.

There is an active debate in the trade literature about whether PTAs impede or encourage the multilateral movement towards free trade. The disagreement focuses mainly on whether regionalism is a substitute or a complement for multilateral free trade. Those authors who claim that PTAs slow or complicate the ultimate movement towards multilateral free trade cite a number of reasons ranging from the fact that the rules governing the formation of trade agreements undermine the liberalization process (Zissimos and Vines, 2000) to the fact that regionalism is simply a coordination failure (McLauren, 2002), and as such is a second best solution to liberalization when countries choose between multilateralism and regionalism.

The other side of the debate argues that regionalism does not negatively affect the overall multilateral movement towards free trade. Ethier (1999) in fact argues that features of regionally based liberalization actually serve to further multilateral liberalization. Overall, this literature is mainly focused on the functional results of preferential agreements - they reduce barriers between members, and encourage intra-bloc trade (Schiff and Winters, 2003).

I use elements of both of these literatures to argue that PTAs have not slowed the multilateral free trade trajectory, and as such, do not violate the norms of activity for the international institutions. Both literatures acknowledge that overall, trade in the current period is subject to fewer barriers than it was in earlier periods (World Bank, 2000). I quantify this by showing that average tariff rates overall have declined.

I use the average tariff rate because it is commonly used as a measure of protectionism. The WTO also uses this measure to determine the rate at which member countries need to liberalize agriculture. For example, by 2000, developing countries had to cut their average agricultural tariffs by 24 percent of bound rates. I adopt the practice of using a decline in average tariff rates as a sufficient indication that countries that are members of

PTAs are following and not going against the goals set out by the other actors in the international environment.

The chart below shows the average tariff rates of selected countries both before and after the conclusion of PTAs. In nearly every case there has been a decrease in the average tariff rate. This enables us to conclude that regionalism does not make trade less free for all countries in general. Admittedly, this measure does not indicate if the rate is slower than it might have been without the union.

FIGURE 3.2 AVERAGE TARIFF RATES IN SELECTED COUNTRIES (WEIGHTED MEAN TARIFF)

		Pre-PTA	Post-PTA
Chile	1992 (2004)	11	3.7
Mexico ¹⁶	1991 (2004)	11.9	13.8
South Africa	1988 (2001)	12	5.6
US	1989 (2004)	3.8	1.8
EU	1988 (2003)	3.7	1.3

Source: World Development Indicators 2005 (section 6.6)

It needs to be pointed out that in the case of customs unions, some member countries may increase average tariffs above the rate that was in place before the customs union. In fact there is some theoretical work that suggests that customs unions offer incentives for countries to impose a common tariff above the Nash equilibrium of each individual member (Bond and Syropolous, 1996; Abrego et al, 2005). However, as a result of GATT Article XXIV requirements, "the duties and other regulations of commerce imposed at the institution of any such union or interim agreement in respect of trade with contracting parties not parties to such union or agreement shall not on the whole be

decreasing more quickly than MFN average rates. According to the WTO, the increase in Mexico's agricultural tariff was the result of tariff escalation within bound rates in sensitive sectors.

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¹⁶ The increase in Mexico's average tariff rate is a result of a large rise in average tariffs on primary products – from 8.3 percent in 1991 to 20.3 percent in 2004. However, this had nothing to do with its overlapping free trade agreements. In fact, in the case of Mexico's most important preferential agreement, the NAFTA, agricultural tariffs between Mexico and the US have fallen from 15 percent in 1982 to 4.2 percent in 1997. The WTO in a 1997 Trade Policy Review also pointed out that preferential tariff rates are

higher or more restrictive than the general incidence of the duties and regulations of commerce applicable in the constituent territories prior to the formation of such union..."¹⁷ So while some countries may raise their external tariffs to meet the Common External Tariff, there will not, on the whole be a higher average customs territory tariff. Thus the average tariff of the entire customs territory is not higher than what existed if the members had been grouped as a territory before the conclusion of the union.

A second aspect of the sociopolitical legitimacy of PTAs is whether they positively contribute to the goal of free trade. We know that the average tariff rates offered to partners in PTAs are lower than those offered to non-member countries, which means that they are actually promoting free trade beyond MFN. This microcosm of free trade can be helpful to developing countries that may not yet be ready to completely open their markets.

Additionally, there are numerous cases where developing countries are using PTAs as part of a larger liberalization strategy, which means that they continue to bring down MFN tariffs in addition to the preferential rates they offer the partner country. There is evidence of this occurring in both ASEAN (Lloyd and Maclaren, 2004) and Latin America (Estevadeordal, 2002). However, this result does not hold for either customs unions which have a fixed external tariff or the northern partners of FTAs.

We can conclude then, for the entire class of PTAs that not only have they not prevented the overall multilateral movement to free trade, but also they had resulted in additional liberalization beyond that required by the WTO.

Bureaucratic

The third source of legitimacy that PTAs need to attain is the ability to perform the function that it was designed to do. In this case, there are many international institutions, including foremost, the WTO, that are designed to promote free trade. As a result, I look

¹⁷ GATT Article XXIV, paragraph 5(a)

at whether PTAs are able to perform their activities without overlapping or constraining the activities of other institutions in its environment.

In particular, I examine 2 facets of the interaction between preferential agreements and other institutions promoting free trade. The first brings out the fact that PTAs directly violate the MFN requirement of the WTO. Is this overlap a constraint of the work of the WTO? The second facet of this interaction comes from the fact that preferential agreements often include disciplines on sectors that are also regulated by the WTO. Does this constitute a redundancy or impinge on WTO requirements?

We have already answered the first question in the previous section. While the WTO enables "violation" of the MFN requirement in GATT Article XXIV, countries have not used this to actively raise their MFN tariffs. It may occasionally occur in customs unions, but it is uncommon.

The second question results from the fact that there are some clauses of preferential trade areas that have the potential to impinge on WTO agreements. For example, many PTAs include some form of dispute settlement, which may be invoked to address trade disputes in areas that are also covered in the WTO. Most of the overlap occurs where trade agreements restrict the usage of tools that are valid under the WTO such as use of safeguards or subsidies (see WTO, 1998).

The lack of provisions that specifically impinge on similar WTO-based processes is very likely a result that PTAs, while they existed prior to the formation of the GATT and the WTO have essentially matured under an international system that takes the WTO covered agreements as its parameters. While there are aspects of preferential agreements that go beyond the WTO based rules (the so-called "WTO-plus" provisions), they do not supersede the organization.

Sampson (1996) has pointed out the additional fact that regional agreements have developed disciplines that were later adopted by the WTO covered agreements (such as

services). This is apparently still a concern as noted by Trachtman's (2003a) discussion of former U.S. Trade Representative Zoellick's concern that if the United States is not a partner in new regional agreements, international standards will be formulated without U.S. input.

As a result of the fact that PTAs appear to meet all of the requirements of organizational legitimacy at the international level, I conclude that they are an acceptable activity in that sphere. We saw that these institutions are designed under WTO guidelines, subject to WTO governance, do not actively prevent the multilateral movement towards free trade, and in fact in many ways actually complement this movement. I now turn to the second level of analysis – whether preferential agreements are a legitimate activity at the state level.

3.2.3 Fit in the Domestic Regime

It is more straightforward to establish the organizational legitimacy of PTAs at the state level, since preferential agreements are initiated and designed by states. However, even this needs to be examined in depth given the outcomes of the WTO. That is also an organization formed by states, but one which has been accused of evolving in ways that are counter to their interests.

In the section on international legitimacy, I showed how preferential agreements carried out a discrete and focused role in the promotion of free trade. In this section, I zero in on how well they carry out that role. Specifically, if they are intended to promote free trade, how well do they match up against states' alternative policy choices for carrying out that goal?

Legal

PTAs attain legal legitimacy in member states through the ratification process in their domestic legislative systems. Once a preferential agreement is signed by the partner countries there are a number of steps that take place before the provisions are actually applied.

After it is signed, the agreement needs to attain ratification by the domestic legislative body. This generally involves a delegated study of the expected impacts of the agreement to be completed before the presentation before the voting body. In most countries the ratification process is uncontroversial. This is a result of the fact that the negotiation process is highly participatory among interest groups in the involved countries. In the United States, participation occurs through responses to Federal Register notices, presentations at public hearings, and participation in working groups.

Once it is ratified, the individual provisions need to be integrated into domestic law. For example, existing laws may need to be repealed or adjusted to meet the standards of the agreement. In other cases, entirely new laws may need to be passed. This results in a substantial lag in the complete implementation of these agreements, but it also increases their legitimacy by knitting their provisions directly into domestic law.

Within the United States, trade promotion authority constitutes an alternative ratification method to the usual legislative debate process. This is a method that is unique to the U.S. legal system that enables the executive to present a trade agreement to the legislative branch for approval with no ability to make amendments. Because of the highly contentious nature of the U.S. system, without this ability, the executive branch has experienced problems garnering sufficient public support to ensure ratification. In the recent case of the CAFTA-DR, the agreement was passed by only 1 vote.

To summarize, the legal legitimacy of FTAs comes from the fact that they are endogenous to the domestic political process (Ornelas, 2005).

Sociopolitical & Bureaucratic

Because the issue of the trade outcomes of preferential agreements was so thoroughly explored in the previous section, here I look at whether PTAs can legitimately be chosen over other means of liberalizing trade. I combine the notions of sociopolitical and bureaucratic legitimacy since sociopolitical legitimacy (does the institution achieve the

goals it set out) and bureaucratic efficiency (is it able to develop the processes to carry out those goals) have similar requirements in this regard. We saw in the previous section that the argument can be made that PTAs in general have moved substantially towards their goal of liberalized trade. In this section, I show that in addition to simply moving towards liberalized trade, PTAs have proven to be the most efficient way to do so.

Trade liberalization is desirable overall because of the established link between liberalization and higher investment and growth (Boubakri at al, 2005; Devreaux, 1997). This occurs because resources will be used more efficiently. However, while liberalization is desirable, it is also politically difficult. Thus while market liberalization may be a desirable goal, it may also not be one which is attainable given the political climate in a country.

Here, I detail the unique challenges and opportunities associated with the different methods of liberalizing trade. I begin by asking whether the benefits of unilateral liberalization are as significant as economic theory suggests. I then discuss the benefits and problems of using multilateral channels to liberalize. Finally, I suggest the reasons that preferential or regional liberalization is the most efficient for political economy reasons.

Unilateral Liberalization

Unilateral market liberalization is shown in the literature to be an unambiguous first best means of market reform when there is perfect competition. However unilateral liberalization is often not feasible for countries that may face political and economic constraints domestically (Bagwell and Staiger, 1990; Dixit, 1987). These constraints come from, among other things, entrenched economic interests that would be hurt by liberalization, and the potential for political instability that might result from the closure of uncompetitive firms. Additionally, unilateral liberalization does not entail any change in the tariffs that characterize partner markets. As a result, bilateral liberalization is likely to create greater gains in terms of exports (Puga and Venables, 1996).

Unilateral liberalization is particularly difficult in democratic countries where the government is expected to reflect the interests of its constituents (Virmani, 2005). This is one of the reasons scholars have cited for the slow pace of India's reform process. Because of these constraints, trade reforms often require a crisis to get jump started (Rodrik, 1996), since the power of lobby groups becomes diffused when a response is required. China is one of very few countries that have taken on market reforms in the absence of a crisis, but it is illustrative of a special set of countries where reforms are implemented by a strong government that is immune to the sway of lobby groups (Virmani, 2005). This was also the case of Chile in the 1970s. And even in the case of these countries, authors tend to find that the government relied on both coalition building and compensation to ensure support (on Chile, see Edwards and Lederman, 1998).

Another problem associated with unilateral liberalization has been called the "bicycle theory" (Bhagwati, 1988; Staiger 1995). If trade liberalization is stopped for some reason (such as a change in the political environment), it will not only be difficult to cut tariffs further in the future, but the government will also have trouble maintaining the newly lowered level of tariffs.

For these reasons, unilateral liberalization, though desirable, is generally not the first best choice of representative governments.

Multilateral Liberalization

A second level at which countries can pursue trade liberalization is multilateral liberalization. Since 1994, the pace of this level has been defined by countries' WTO commitments. This method holds greater promise in terms of results. According to the World Bank (2000), average tariffs on manufactured goods have fallen from 40 percent in the late 1940s to less than 5 percent currently. The WTO also introduced a number of new disciplines that had not been addressed by the GATT such as services, intellectual property, and sanitary and phytosanitary measures.

In addition to an established liberalization track record, countries may prefer to affect liberalization through the multilateral channel for domestic political reasons. Reforms are locked in such that they cannot be changed by domestic policies, they are liberalizing at the same time as their neighbors and so are not subject to distortionary trade flows as a result of their commitments, and they are protected from domestic lobby groups.

However, multilateral liberalization also has a number of features that work against continuity and do not promote acceleration of the process. These include the fact that many countries bound their tariffs very high and so taking them down to zero will take a long time. Another problem is that the burgeoning number of members makes progress on future tariff reductions very difficult. A third problem is that activists have increasingly targeted annual ministerial meetings for disruption which slows the process even more.

Because of its difficulty incorporating the varied requirements of all of its members with additional tariff reductions, it appears that states have changed their perception of the WTO. While they used to see it as the premier promoter of free trade; now it is generally regarded more as a set of rules that establishes the parameters within which liberalization can proceed. As a result, the multilateral means of liberalization does not serve as the most efficient means of liberalization in the current period.

Regional Liberalization

PTAs move most countries furthest along with liberalization, while being the least detrimental to the elements of the nation state and mass politics. Regionally-based liberalization does not face the same degree of domestic resistance as unilateral liberalization, and it does not bypass mass politics to the same extent that multilateral liberalization does.

The benefits of regional liberalization are that it can (1) enable countries to undertake reform and liberalization on the scale greater than they would be able to accomplish unilaterally (Dornbusch, 1992), (2) offer the southern partner a degree of protection from

the international economy (Bhagwati and Panagariya, 1996), and (3) give the southern country consistent and expanded access to foreign markets beyond that which they would gain from unilateral liberalization (Wonnacott and Wonnacott, 1981).

The previous discussion of the other 2 forms of liberalization mentioned their benefits and costs. Below, I discuss situations where regional liberalization will be preferable to other forms.

The literature on regionalism versus unilateral liberalization tends to find that regional liberalization is the more effective route given political economy considerations. Conway et al (1989) point out that both unilateral liberalization and trade agreements are changes to the rules of the game. However general equilibrium models show that unilateral liberalization cannot offer all of the gains that will result from trade agreements. DeMelo et al (1993) shows that in the presence of external trade restrictions, it is welfare superior for the developing country to join a bloc rather than unilaterally liberalize. Puga and Venables (1996) point out that though both unilateral liberalization and concerted action can result in industrialization, larger gains can be incurred through regional arrangements.

A comparison of regionalism with multilateral liberalization also tends to come out in favor of regionalism mainly because PTAs can resolve the problem of bureaucratic stasis in the activities of the WTO. The literature points out that bilateral agreements: (1) provide a quicker turn-around time for trade results than navigating the WTO bureaucracy (WTO, 2001), ¹⁸ (2) offer their members greater bargaining leverage within the WTO (Mansfield and Reinhardt, 2003), and (3) cover trade issues that are not treated in the WTO agreements.

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¹⁸ The former WTO Director General Supachai Panitchpakdi pointed out that the slow pace of multilateral trade deals is an impetus for countries to conclude bilateral deals instead (quoted in Far Eastern Economic Review, 2003). Even the WTO itself has noted that various unilateral preferences, such as the EU's "everything but arms" initiative and the U.S.'s African Growth and Opportunity Act, were quicker to promote trade results than any changes that resulted from the initiation of the Doha round (WTO, 2001).

Preferential agreements can also translate the WTO's goal of leveling the playing field more precisely at the domestic level. This occurs when FTAs: (1) enable sub-state actors to bring petitions to dispute settlement, (2) liberalize tariffs more quickly and in more sectors than the WTO, and (3) integrate specific national laws and regulatory systems in the text of the agreement.

The previous discussion leads me to conclude that, given the options countries have under the WTO, regionally-based liberalization is the form which is most likely to yield domestically palatable liberalization while conforming to the constraints that exist in the international environment. Yet in addition to legitimacy, an instrument also needs to be effective. The previous discussion showed only that preferential agreements do not work against the ongoing liberal trajectory of the international regime. In the next subsection I will argue that as a tool for liberalization, FTAs are the form that is most effective.

3.2.4 Asymmetric FTAs are Optimal

The above argument centered on the broad class of regional agreements. However, the rise we see is largely FTAs (see figure 3.3 below). In this section, I attempt to explain why FTAs in general, and asymmetric FTAs in particular are so popular. I begin by discussing the benefits of customs unions versus FTAs. I then look specifically at FTAs to get a better idea of what features and partner choices can do in terms of commercial outcomes.

In this section I use the literature on institutional design to guide a discussion about which form of preferential agreement is optimal given exiting conditions. I am not attempting to explain why there are such wide variations in institutional design (for one approach to this, see Koremenos et al, 2001).

Free Trade Agreements vs. Customs Unions

There are a number of different types of PTAs that countries can choose to pursue.

Balassa (1961) lists 5 different formats – preferential agreements, FTAs, customs unions, monetary unions and economic union. Each of these involves different levels of

integration, institutionalization, and long and short term gains. Because of their popularity, I focus only on the differences between FTAs and customs unions. The primary divergence between these two agreements comes from the degree of institutionalization that is required by each. While there may also be some differences in economic outcomes, numerous models have shown that it is possible to design either type of agreement to have negative, positive, or neutral welfare effects. As a result, in this discussion of which agreement format has the greatest potential for use as a tool for development outcomes, I will focus on the question of which format requires the least degree of policy convergence and so leaves the most policy space for their member countries.

Definitionally, FTAs and customs unions are very similar. A customs union is an organization of independent countries that eliminate all tariffs among members, but maintains a common tariff on non-member countries. An FTA is also an organization of independent countries that eliminates all tariffs among themselves but each country maintains independent external tariffs.

As articulated in GATT Article XXIV,

" a customs union shall be understood to mean the substitution of a single customs territory for two or more customs territories, so that (i) duties and other restrictive regulations of commerce...are eliminated with respect to substantially all the trade in products originating in such territories, and, (ii) ...substantially the same duties and other regulations of commerce are applied by each of the members of the union to the trade of territories not included in the union;"

"A free trade area shall be understood to mean a group of two or more customs territories in which the duties and other restrictive regulations of commerce...are eliminated on substantially all the trade between the constituent territories in products originating in such territories."

At least partly as a result of the greater policy convergence involved in customs unions, FTAs (FTAs) are by far the most popular. Almost 70 percent of all preferential agreements that have been notified to the WTO since 1995 are FTAs. There are a number of reasons why we see a proliferation of FTAs over customs unions or common

markets. FTAs are the easiest form of negotiated agreement to set up, they can be based on standardized models more easily than customs unions which must be carefully tailored to the countries, and ongoing multilateral liberalization promotes less politically integrated trade agreements (Schiff, 2000).

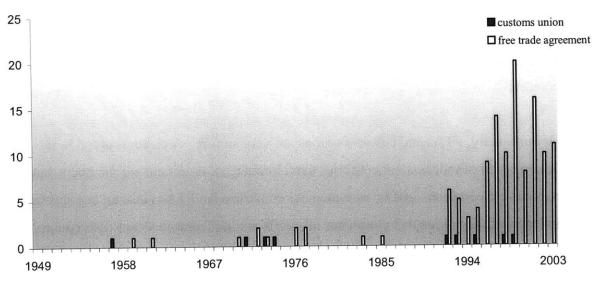


FIGURE 3.3 FREE TRADE AGREEMENTS AND CUSTOMS UNIONS

Source: www.wto.org

There are 2 features of customs unions that make them considerably more restrictive in terms of policy space than are FTAs. Their restrictiveness stems from the fact that customs unions require a greater amount of policy harmonization and coordination between members than do FTAs. As a result, it takes away the ability of their members, or weaker members to implement independent domestic industrial policies.

The first restrictive feature is that member countries of a customs union must uphold the common external tariff (CET) to the extent that it is required. On the other hand, the members of an FTA can choose to ignore rules of origin (ROO) in their production and export decisions. The choice to follow or ignore ROOs is made by goods producers and so, does not constrain government decisions in any substantial way. The CET on the other hand is implemented and maintained by governments and cannot be changed or

ignored unilaterally. This is a substantial constraint of the ability of customs union members to affect policies.

This leads to the second restrictive feature which is that in a customs union, member countries cannot make independent decisions about tariff sequencing or further liberalization. In fact, in customs unions, there is generally a member or two that ends up harmonizing their tariffs upward to meet the CET. This was the case for example with Paraguay and Uruguay in MERCOSUR. For the case of a reform minded country, the requirement of a CET will prohibit the country from liberalizing any further. Additionally, in a customs union, not only the tariff, but essentially all trade policies need to be the same for all member countries. DeMelo et al (1993) call this need to coordinate both policies and rules "institutional arbitrage." The required policy coordination does not end when the deal is signed, countries need to continually adjust and coordinate policies. The authors mention that this "may imply a loss of sovereignty over trade policy instruments and revenue sources," (DeMelo, 1993, p.82). This extreme restriction is the opposite of the situation that is needed for industrialization.

As a result, we can conclude that FTAs are the form of PTA that offers the most freedom in terms of existing policy space.

Choice of Partner

The second customization that can be designed into a preferential treatment is the choice of partner. This choice, like the choice of format, also affects the ultimate effectiveness of a preferential arrangement as a means of stretching the policy space and industrial outcomes that are available to member countries. In the previous section we saw that FTAs are the format choice that constrains policy space the least. For that reason, in this section I will look only at how the choice of partner in a FTA affects the potential commercial results.

Unlike the overwhelming popularity of FTAs that we saw in the previous section, there is no statistical preference for choice of partner. Of the FTAs that have been notified to the

WTO, the vast majority are symmetric, that is, between partners at equal stages of development.¹⁹ However, when we look only at those agreements that include a developing country partner (17 are north-south, and 13 are south-south), we end up with a nearly even break.

FIGURE 3.4 FTAS BY PARTNER (2005)

North-South	South-South	
Canada - Chile	ASEAN - China	
Canada - Costa Rica	India - Sri Lanka	
EC - Palestinian Author.	Panama - El Salvador	
EC - South Africa	Mexico - Nicaragua	
EC - Mexico	Chile - El Salvador	
EC – Egypt	Chile - Mexico	
EC – Chile	Chile - Costa Rica	
United States - Chile	China - Macao, China	
NAFTA	China - Hong Kong, China	
CAFTA/DR	SAPTA (SOUTH ASIA)	
Australia - Thailand	CEMAC (Central Africa)	
Japan – Mexico	EAC (East African)	
Thailand-New Zealand	South Korea-Chile	
Israel-Mexico		
EFTA-Mexico		
EFTA-Palestinian Authority		
EFTA-Chile		

Source: www.wto.org

There are 2 primary reasons that the choice of partner will affect the commercial outcomes of a FTA. The first is that the size of the partner market will affect both imports and exports. This is exhibited both in trade theory and through empirical evidence. The gains from forming a FTA with a market of the same size stem mainly from the possibility of scale effects (Puga and Venables, 1996). However when an FTA

¹⁹ Of the 109 WTO-notified free trade-type agreements, 84 percent are symmetric.

is concluded with a larger country, there are more varied gains. There can be significant welfare effects (e.g. Krishna, 1998; Ethier, 1998), guaranteed access to the market, competitive pressure, and the potential to import pro-growth institutions (deMelo et al, 1993).

The other reason that the choice of partner will affect the outcomes of an FTA stems from the notification requirements. FTAs that include a northern partner are notified to the WTO under GATT Article XXIV. FTAs that are concluded between 2 southern partners are notified under the Enabling Clause which has looser requirements and regulations. This has resulted in the development of 2 very different levels of product coverage and time to implementation. The chart below presents a partial comparison of the obligations that exist for FTAs concluded under GATT Article XXIV and the Enabling Clause. While Article XXIV based agreements have a definitive set of timelines, and proscribed product coverage and interaction with MFN, those notified under the Enabling Clause have considerably more vague parameters and requirements.

FIGURE 3.5 NOTIFICATION REQUIREMENTS

	Coverage	TIMELINE	PURPOSE	INTERACTION WITH MFN
ARTICLE XXIV	substantially all the trade between the constituent territories in products originating in such territories.	The "reasonable length of time" referred to in paragraph 5(c) of Article XXIV should exceed 10 years only in exceptional cases.	"to facilitate trade between the constituent territories and not to raise barriers to the trade of other contracting parties with such territories."	the duties "shall not be higher or more restrictive than the corresponding duties and other regulations of commerce existing in the same constituent territories prior to the formation of the free-trade area"
ENABLING CLAUSE	products imported from one [developing country to] another	-none-	for the mutual reduction or elimination of non-tariff measures, on products imported from one another;	"shall not constitute an impediment to the reduction or elimination of tariffs and other restrictions to trade on a most- favored-nation basis;"

The effects of the looser notification requirement that exist for southern symmetric FTAs have resulted in the fact that not only do symmetric southern FTAs tend to leave sensitive goods out of negotiations, but they also tend to be layered in so far as different sectors are negotiated over long periods of time. These results lead to the technicality that the actual agreements that results from Enabling Clause-based agreements do not meet the criteria of a "free trade area" that was set forth under GATT Article XXIV. The main difference being that these symmetric agreements do not cover "substantially all the trade." In practice however they function and are referred to as "FTAs" which is a convention I adopt here.

Following, I categorize 4 types of outcomes that are generated by the formation of an FTA that illustrate the extent to which asymmetric FTAs hold greater industrial potential. These 4 effects are trade effects, scale effects, investment effects, and harmonization effects.

Trade Effects

The most well-studied outcomes of asymmetric FTAs are their static effects, which are changes in imports and exports. Countries choose to negotiate FTAs for many reasons, such as to avoid being left out of a global trend (South Korea), to gain preferential access to a desirable market (Panama), or to increase overall cooperation with neighbors (Asia), among other reasons. But in all of these cases, countries expect beneficial trade outcomes from the reduction of barriers to trade.

Southern symmetric FTAs do not tend to have very significant positive trade outcomes for the partner countries. The reason for this is that southern countries are small markets and tend to produce similar goods. On the empirical side, Coulibaly (2006) has pointed out that even though many African countries are involved in trade agreements with each other, this does not appear to improve their bilateral trade.

²⁰ Despite the limitation of small markets, scholars have pointed out that one of the countries is a large producer of a good in the world market, then a symmetric agreement could have very important trade effects (Gupta and Schiff, 1997).

Asymmetric agreements on the other hand, exhibit a number of beneficial trade effects. They increase exports to the partner country, increase the ability to import capital goods from the partner country, and generally result in a greater diversity of exports. These are all very attractive to a developing country. The chart below uses some results from the U.S.-Chile FTA as an illustrative case. From it we can clearly see that while the trade balance was on the rise, the slope changed with the conclusion of the FTA.

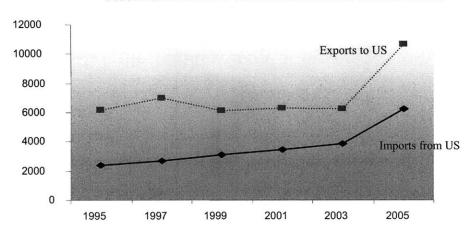


FIGURE 3.6 TRADE BETWEEN CHILE AND THE UNITED STATES

Source: Central Bank of Chile

Because trade effects are so much broader and more significant in asymmetric agreements, this suggests that, at least in this measure, this institution holds the better potential to function as a tool for industrialization. The rise in bilateral trade also suggests that asymmetric FTAs can enable the developing countries to accomplish a wider variety of developmental tasks such as export diversification, technology transfer, and the shifting of dynamic comparative advantage.

Another variable that affects the outcome of partner choice is the trade relationship that already exists. In the case of the United States, nearly all of the FTAs that have been negotiated to date have been either with other developed countries that have low external tariffs, or with developing countries that have GSP (see figure 3.7). The reason that it is desirable for a country to negotiate with a partner that already has preferential market

access is because if there is a large drop in tariffs, there is a high potential for a flood of imports, which would make the internal adjustment process difficult (Businessweek, 2005).

FIGURE 3.7 U.S.-BASED FTA PARTNERS AND THEIR GSP STATUS AT THE TIME OF NEGOTIATIONS

	STATUS (YEAR COMPLETED)	GSP
Bahrain	(2006)	yes*
CAFTA	(2005)	yes
Chile	(2003)	yes
Jordan	(2001)	yes
Malaysia	negotiating	no*
Morocco	(2004)	yes
NAFTA	(1994)	yes
Oman	(2006)	yes
Panama	negotiating	yes
SACU	negotiating	yes
Thailand	negotiating	yes

Source: USTR website

Trade effects are also affected by the form of the agreement since southern symmetric agreements have significantly less product coverage, phased in over considerably longer timelines than do asymmetric agreements. As a result of the tighter product coverage, and also the fact that this often encompasses those sectors that do not have tariff peaks, the actual trade effects will be smaller.

Scale Effects

Scale effects are the extent to which the FTA integrates and therefore enlarges markets. The scale effects promoted by preferential agreements have been long recognized (Bhagwati, 1968).

^{*}Bahrain was scheduled for an income-based graduation in 2006, Malaysia was graduated in 1998.

While it is immediately obvious that asymmetric FTAs expand market size more than symmetric southern agreements, it is useful to go through the effects that this might have on firms. Scale effects are an important determinant of the pattern of trade (Antweiler and Trefler, 2000) so the greater the extent of scale effects, the more developmentally beneficial a trade agreement can be. Since the incentivization of firms is an important aspect of industrialization, we can expect that the availability of scale effects is very attractive in an industrial instrument.

An important result of the existence of scale effects is the facilitation of economies of agglomeration. This occurs when certain sectors with strong backward linkages all locate in the same country and access the partner market that way (Harrigan and Venables, 2004). The expansion of the preferential market access can lead to a change in the proximity-concentration benefits tradeoff that firms make (Brainard, 1997).

Though scale effects are not limited to asymmetric agreements, they tend to be considerably smaller and less important for south-south agreements. In terms of scale effects, the World Bank (2000) points out that southern agreements also have some beneficial scale effects, particularly if this is planned in advance by the negotiators. The problem attaining scale effects in the southern symmetric FTAs comes not only from their small market size, but also from limited product coverage, which further limits the potential market size.

Investment Effects

There is a good deal of empirical evidence that the expanded size of the overall market will attract foreign investment (Olarregea, 1998). The conclusion of an asymmetric FTA with a major market will directly lead to an increase in foreign direct investment in the developing country. It will consist mainly of third-country firms that are interested in accessing the industrial country's market using the developing country's relatively cheaper labor and inputs.

Alternatively, there is little evidence that symmetric FTAs have any investment effects. This is mainly the result of the fact that they are often between 2 small countries. Authors have found positive investment effects in NAFTA (e.g. Frischtak, 2004, Waldkirch, 2001), but none for the Andean Pact or Central American Common Market (World Bank, 2005a).

In addition to the traditional benefits of increased investment, the relationship between FDI and gross domestic investment remains ambiguous. While both individually have been correlated with higher economic growth (Borzenstein et al, 1998 and Levine and Renelt, 1992), there is conflicting evidence about whether FDI encourages or crowds out domestic investment.

Standards Effects

The final difference in economic outcomes is the effects on standards; specifically, the extent to which countries harmonize quality standards to meet international levels. There is a growing literature about the fact that those countries that were successful in industrializing did so, in part, by learning how to follow, and in some cases, create international quality standards.

The reason that I introduce standards as a helpful industrial effect is because in order for a country to effectively compete on the international market, it needs to be able to meet or exceed international quality requirements. This is one of the greatest challenges for firms that previously produced only for the domestic market, they are often not able to achieve international quality standards.

The issue of standards in FTAs is often an aspect of provisions on sanitary and phytosanitary (SPS) measures or agriculture. In the case of an asymmetric FTA, the developing country is often required to meet higher quality standards for various items. To reduce the amount of resource diversion in already over-extended government agencies, these types of trade agreements nearly always include trade capacity building or other technical assistance measures to help the partner country to achieve these standards.

In many cases, this represents a positive externality since the FTA provides resources to achieve international standards that can increase overall exports. However, in the case of the EC, Crawford and Laird (2001) point out that the harmonization of standards is generally harmonization to the EC not international levels.

Symmetric southern agreements are less likely to include SPS or agriculture quality standards and as such will have no effect on the ability on incentive of firms in the area to meet these standards. This is a result of the form of FTAs that is encouraged by the Enabling Clause. It allows countries to form FTAs that leave out sensitive sectors and this is almost always the case in symmetric southern agreements.

Conclusion

In this chapter, I sought to establish the fitness of asymmetric FTAs as an alternative channel through which developing countries could pursue growth outcomes. I embedded the rise of FTAs in the context of institutional change. By showing that designing supplemental channels was the only feasible choice for developing countries in the face of realized growth outcomes, it became straightforward to show that FTAs contain many attractive and necessary characteristics.

Developing countries are negotiating FTAs at a rapid rate. On the one hand this is beneficial since additive regionalism can reduce trade diversion, lower the effective tariff rate and provide improved market access (Harrison et al, 2001). However, these agreements also lock in certain policy regimes and render some WTO-compliant industrial policies off-limits. This may prove to be problematic in the long run if countries do not knowledgeably negotiate these agreements.

While this chapter was able to show that, in the aggregate, FTAs fit nicely into existing parameters, it is not able to detail the reasons for FTA outcomes. Specifically, there are a number of other institutions and policies that target the same outcomes as FTAs. It is not clear why FTAs are more efficient means of achieving targets than the alternatives. To

prove this point, I need to show exactly what incentives in the FTA structure promote growth outcomes. I will do this in the next 3 chapters.

CHAPTER 4

RULES OF ORIGIN

Previous chapters detailed the incentives and expectations that prompted states to adopt asymmetric FTAs as a policy device. I showed that FTAs are a WTO-consistent method of achieving positive commercial outcomes in aggregate terms. However, to function as a tool for industrial policy, they need to be able to specifically target discrete domestic outcomes (Pack, 2000).

Over the next 3 chapters, I show that FTAs can be used to incentivize industrial sectors in a way that is unique in the international system. Their unique outcomes stem from their ability to both generate domestic results that are un-targetable through other policies in the WTO-compliant set and more effectively yield results than do similar alternative policies.

To explain how FTAs generate these outcomes, I break down the institution into its component policies. I unbundle 3 policies that have overlapping incentives with other WTO-compliant policies – rules of origin, preferential market access, and trade capacity building. I then examine the dynamics of each and how they are affected by being enacted through the institution of an FTA. I trace the incentives offered by each policy all the way down to the level of the production choice in order to highlight how the incentives are integrated into the firm's decision-making process. While there is a wide literature on the importance of firm heterogeneity for various economic outcomes (e.g. Melitz, 2003), there is none, to my knowledge, on how this applies to the particular effects of FTAs.

My focus on the U.S.-Chile FTA means that the results are particular to that agreement. However, the revealed channels provide some insight into why firms react as they do, and how FTAs can be designed to have even more significant results.

In this particular chapter, I begin the case study by examining the commercial outcomes of product-specific rules of origin (ROO) in the U.S.-Chile FTA. ROOs in preferential trade agreements are used to ensure that preferential treatment is restricted to goods produced in the partner territories. This is necessary because, unlike customs unions, FTAs do not have a common external tariff to regulate imports.

Because of the malleability of ROOs, they have been called a "superbly targetable instrument" (Estevadeordal and Suominen, 2005). Empirically, the industrial countries have used ROOs to protect strategic industries (Bair and Peters, 2005; Suominen, 2003) and to deter use of preferential access (Krishna, 2005; Anson et al, 2005). Additionally, the similarity between ROOs and local content requirements provides further support for their potential to result in similar outcomes such as increased intermediate production and backward linkages.

The key to ROO's developmental potential lies in the fact that they constrain the supply choices available to exporters. By reducing their choices to only 2 countries, ROOs enhance domestic producers' sales opportunities. Yet because ROOs are an unbinding incentive, in order for a country to use them in a strategic way, there needs to be a very clear understanding of why firms choose to fulfill them. To approach this understanding, I use a case study of 2 sectors whose production outcomes do not follow predictions as a way to reveal the variables that affected that decision.

Because of the complexity inherent in ROOs, I begin in Section 1 with a detailed description of their forms and purposes. I go through the history of the use of ROOs in customs calculations and explain how they evolved into preferential forms.

The second section describes the potential outcomes of ROOs. I use the similarities with local content requirements as a guide in this exercise.

In section 3, I look at actual outcomes for the U.S.-Chile case. This section uses trade data to show that Chilean producers are fulfilling ROOs. However, in order to determine

whether producers are changing their suppliers and linkage decisions in a developmentally helpful way (i.e. to buy from the developing country), I need to go beyond the aggregate data. To do this I introduce a specific case study of 2 sectors to examine the channels through which they interpret incentives of ROO to link and buy locally. I show that the design of ROO is not enough since each sector has outcomes that do not meet what is predicted.

The fourth section takes both theory and the case study to show how ROO can be designed to have the optimal outcomes. Specifically, I identify the aspects of the negotiation and implementation process where these outcomes can be manipulated.

This chapter yields 2 key findings. First, even restrictive rules can be an effective tool for developing countries. This is important because it contradicts existing advice that rules should be non-preferential (Cadot et al, 2006). By designing non-preferential rules, developing countries may be missing an important opportunity to shape industrialization.

The second finding is that complementary government policy is a critical component of the outcome of ROOs. The literature on ROOs has identified the fact that their complexity can deter eligible exporters from filing the necessary paperwork to receive the preference. However the case study here indicates that even when ROOs are not complex, as in the case of chemicals, utilization rates may be low in sectors where there are informational asymmetries.

4.1 INTRODUCTION TO RULES OF ORIGIN

There are 2 basic forms of ROOs – preferential and non-preferential. The non-preferential type is the traditional format and serves as a relatively non-discriminatory means of keeping track of goods for customs calculations. Each country maintains its own non-preferential ROOs. The U.S. form of non-preferential rules is a substantial

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¹ Palmeter (1994) points out that the non-preferential ROOs are not defined by statutory law, but are judgemade. The resulting vague description opens ROOs to interpretation by customs agents.

transformation test. It requires that "a new and different article with a distinctive name, character or use must emerge from the manufacturing process." This guideline is used to determine the origin of goods for MFN and quota purposes.

Preferential ROOs are the FTA-based equivalent of the common external tariff in a customs union. They are specific processing and input requirements that apply only to goods that are shipped between the territories included in the trade arrangement. They are a means of ensuring that goods that receive preferential access to the partner market embody a negotiated level of intra-territory processing (Estevadeordal and Suominen, 2003). Unlike non-preferential ROOs, preferential ROOs affect trade flows. In fact, Lederman and Ozden (2004) point out that they are a critical determinate of the trade flows between partner countries in a trade agreement.

The rise of preferential ROOs in the United States was precipitated by the formation of preferential trade arrangements. The United States, for example, has different ROO regimes for MFN, GSP, each FTA in existence, each unilateral preference program, and various other trade policy instruments. To further complicate the matter, within these programs, there are often country-specific rules.

FTA-based ROOs have evolved since their debut in NAFTA.³ Specifically, the value content calculation has been simplified and product specific rules are less restrictive. The reason for this is that the U.S. negotiating position is closely tied to industry lobbies. Under both informal practice and formal requirements, negotiators are mandated to consult with industry during the design process.⁴ As the consultation process has smoothed over time, ROOs have come to more closely reflect the needs of U.S. industry, which prefers less restrictive ROOs in general.⁵

² Anheuser-Busch Brewing Association vs. United States, 207 U.S. 556 (1907).

³ The 1985 U.S.-Israel FTA did not include product-specific ROOs.

⁴ Sect. 2104 (f)2 of 2002 Trade Promotion Authority Act (P.L. 107-210) Title XXI.

⁵ There are still problems with the process. For example, according to a U.S. negotiator, the U.S. automobile industry was unhappy with the ROOs in the U.S.-Chile FTA. The ITAC had not been set up yet, so they had not been consulted in the design process (Department of Commerce interview, 2006).

Though the literature on ROOs acknowledges their development potential, it largely focuses on their negative features such as their complexity and costs of fulfillment (Carrere and deMelo, 2004). A common conclusion is that if the rule is too complex, or if administrative costs are too high, they will serve as a disincentive to invest (LaNasa, 1993). Of the few papers that treat ROO's potential positive outcomes, these overwhelmingly focus on political outcomes such as complementing commercial goals (Kingston, 1994) and gaining the support of interest groups that might otherwise oppose the FTA (Duttagupta and Panagariya, 2003).

If developing countries are to use ROOs to accomplish their industrial goals, they need to begin with the negotiation process. As Suominen (2003) points out, and I can confirm from experience, in North-South trade negotiations, the foundation from which the negotiation begins is the Northern partner's trade model. This immediately moves the developing country to the role of responder. This is problematic because Suominen also notes that industrial countries favor particular ROOs which therefore vary little between agreements. In fact, in EU agreements, ROOs are nearly identical for every partner.

The problems of the negotiation process, particularly for ROOs are that the developing country is the responder. Yukl (1974) showed that when an initial "hard" offer was made, the respondent was ultimately able to claim less value. In a more recent study of

⁶ Much of the research focuses on ROOs for textiles, which are, as Morici (1993) points out, "rules of origin at their worst." For this reason, this discussion excludes ROOs on textiles.

⁷ The process in general is that the U.S. negotiating team submits an FTA template with bracketed sections where changes should be made. According to the Chilean head negotiator of the U.S.-Chile FTA, in that case they actually used the Chile-Canada FTA test. This was acceptable to the U.S. side because that text had been based on NAFTA. A Chilean negotiator pointed out that the Chile-Canada FTA was intended as an interim agreement and that the Canadians hadn't wanted to "change even one comma from the NAFTA." (former Chilean FTA negotiator, 2006).

⁸ U.S. ROOs are also very similar among agreements. According to a ROO negotiator, ROOs from the U.S.-Chile agreement forward are nearly identical. The U.S. designs new ROOs in advance so the negotiation process is largely the developing country making adjustments to existing ROOs (Department of Commerce interview, 2005). DIRECON confirmed the EU practice and pointed out that during the EU-Chile negotiations, the EU negotiators essentially handed the Chileans their ROOs and claimed that they already used the same model with 31 other countries so they must sign (DIRECON interview, 2006).

distributive bargaining (over a price negotiation), Oesch and Whyte (2002) found that across all types of conditions, there was a significant first mover advantage.⁹

Another problem arises from myopia in terms of potential benefits of ROOs. Since the developing countries are more concerned with the natural resources they currently export, they often do not focus on the potential limitation ROOs might have for their manufacturing potential. This may result in lock-in of inefficient ROOs if it is not addressed. These problems are all surmountable as long as the developing country recognizes them. ¹⁰ In the next few subsections, I suggest how developing countries can overcome these problems and maximize the benefits of ROOs.

4.2 POTENTIAL OUTCOMES

Before I discuss how to optimize ROOs, I need to establish the potential maximum benefits that they can yield. I use the structural similarity between ROOs and local content requirements to identify these.

Local content requirements are rules that require that some specific percentage of value-added of a final exported product is produced domestically. They were a popular policy tool among the latecomers during the GATT-era. These types of policies were used to encourage foreign investors to establish backward linkages to domestic suppliers and to encourage the movement of domestic firms into intermediate supply. Not only did local content requirements increase domestic production of existing goods, but as Dixit and Grossman (1982) point out, they can increase the range of processes undertaken domestically. Below, I discuss each of these potential outcomes.

⁹ Although it is important to point out that U.S. negotiators generally change with each agreement, so this first mover component is specific to the region of the world that is included in the FTA. The U.S. federal government is territorial insofar as that negotiators from the Western Hemisphere office are not "loaned" to the Middle East section, for example, during their negotiations. So while regional FTAs are similar, all US FTAs have different models based on different regions.

¹⁰ A Chilean negotiator pointed out that when they were negotiating the Chile-South Korea FTA, the Koreans were asking for very strict and complex ROOs on products that Chile does not currently producer. These were a source of contention because Chile realized their potential and negotiated simpler ROOs.

4.2.1 Backward Linkage

One potential developmental outcome of ROOs and other similar instruments is backward linkages between foreign investors and domestic suppliers. For local content requirements, this outcome is strictly binding and no outside incentive is required to have it take effect. If a foreign investor enters the domestic market, this requirement was factored into the production decision.¹¹

Backward linkages are encouraged by host countries as a means of promoting positive externalities. Some goals of linkage strategies include technology transfer (Hoekman et al, 2005), increased competition for domestic firms, skills transfers and client links (UNCTAD, 2001).

The reason that linkages need to be directly encouraged comes from the informational asymmetry that exists for foreign investors. Though investors may want to source locally, they may be unaware of suppler firms, and unfamiliar with business rules.

UNCTAD in 2001 listed a number of different strategies that countries could use to promote linkages. The common thread among the diverse strategies was government funding. This is a natural requirement for a public good, but infeasible for many developing countries to undertake without outside assistance.

4.2.2 Increased Production of Intermediates

Another outcome of LCRs is that local production increases, since investors are required to source locally.

The reason that domestic producers may want to encourage production is three-fold. Increased production in certain sectors may promote the industrial goals of the government; there is likely to be technology transfer since foreign firms are more likely to produce high quality goods; and increased production is also related to increased

¹¹ It is the bindingness of LCRs that lead the literature to point to this as a negative outcome. However, as a number of studies have shown, when the bindingness is removed (such as would be the case of a ROO) outcomes can be efficient (Krishna and Itoh, 1988; Beghin and Sumner, 1992).

product diversity, which, as Imbs and Wacziarg (2003) have shown, is a feature of development in the period before specialization occurs.

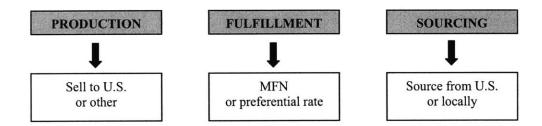
4.2.3 Parallels and Differences

The 2 outcomes detailed above were particular to local content requirements, but can also be extrapolated to ROOs because of the similarity in their incentive structures. However, they are not identical, so I use this section to discuss how the 2 main differences between ROOs and LCRs will affect the parallelism of their outcomes.

The first difference is that ROOs are not dependent on the domestic market size of the developing country to incentivize firms to follow them. Local content requirements are useful only if the domestic market is attractive enough that investors will be willing to accept supply constraints. In the case I study here, the size of the domestic market does not matter since the FTA territory includes the United States. For this reason, ROOs can be used in a wider variety of countries which is beneficial for developing countries at the smaller end of the spectrum.

The second difference is that the non-bindingness of ROOs means that it must affect multiple stages of the production decision to have any effect, while local content requirements are integrated directly into the investment decision. Under a ROO, firms can still export without fulfilling the origin requirement, they simply will not receive preferential access to the partner market. In addition, firms can fulfill ROOs by sourcing from the partner market rather than the domestic market. Below I offer a schematic of the 3 choices that producers make under ROOs. At each stage, the firm may decide to ignore the ROO or to use it in a non-developmental way.

FIGURE 4.1 STAGES WHERE ROO AFFECTS PRODUCTION



In the first production stage, producers decide if the partner market is a desirable target for exports. This depends on the size of the market and the growth opportunities associated with it. In the next stage, the exporter decides if the preferential rate is worth the cost of fulfilling the ROO. If not, they export under MFN. If it is, the producer moves to the third stage and decides to either source locally or import from the partner market. The choices in the above illustration do not exist under local content requirements. This suggests that there is much more room for the government to enact complementary development policies that promote fulfillment of ROOs and local sourcing.

In the next section, I use these stages as I attempt to discern how firms interpret ROO-based incentives. I look specifically at 2 selected manufacturing sectors in Chile to see how firms responded in each case. By highlighting exactly why firms respond to ROOs as they do, I can make recommendations on how they can be manipulated by developing countries to attain optimal responses.

4.3 ACTUAL OUTCOMES AND FIRM SPECIFICS

Overall, Chilean manufacturers are taking advantage of preferential access to the U.S. market. This suggests that ROOs in the case of the U.S.-Chile FTA at least, open up space for development by successfully constraining the supply choices of exporters. Trade has increased and ROO fulfillment rates are high.

In order to determine whether constrained supply choice has resulted in actual changes in sourcing, I need to go beyond the aggregate data. The outcome of this third choice is the key to whether ROOs can be used as a feature of industrial policy. In the second part of this section, I offer a case study to suggest what variables affect firms supply and utilization choices.

Since I cannot extrapolate results for all manufacturing industries from 2 sectors, I take a slightly different approach. I choose 2 sectors in Chile that did not have the outcomes that the design of their ROOs would lead us to expect. By understanding the reasons for variation in these outlying cases, I can better assess whether ROOs can reasonably be expected to be a targetable tool and if so, how they can best be used.

4.3.1 Aggregate Response

Chilean manufacturing firms responded rapidly to the FTA with the United States. A representative from ASEXMA (Chilean manufacturers association) noted that while the FTA with the EU has not had significant effects, manufacturing saw immediate outcomes from the FTA with the United States.

In terms of exports, figure 4.2 shows that manufactured exports from Chile to the United States have increased in volume by 25 percent since the FTA. This indicates that trade has increased. But if this increase in simply the result of trade diversion from other sources, then it is not developmental.

However, the increase in the volume of manufactured exports to the United States is accompanied by a decrease in the proportion of Chile's overall manufactured exports destined for the United States (of total manufactured exports) by 5 percent since 2002 to only 15 percent of total manufactured exports. This indicates that Chilean exporters are producing more manufactured goods overall, which suggests that the export increase following the FTA was largely in new production rather than diversion of existing capacity.

FIGURE 4.2 PROPORTION OF MANUFACTURED EXPORTS (THOUSANDS US\$) STEADY THROUGH 2004¹²

Year	Manufactured EX (total) ¹³	All EX (total) ¹⁴	Manufactured EX (to US) ¹⁵	All EX (to US) ¹⁶
2004	14,307 (46%)	30,901	2,200 (15%)	4,568
2002	7,994 (45.8%)	17,430	1,651 (20%)	3,483
2000	8,423 (46%)	18,215	1,380 (16%)	3,007

Source: World Trade Atlas 2005

In terms of fulfillment, a high proportion of U.S.-bound manufactured exports filled ROOs. According to a U.S. Customs study, 8 months after implementation, more than 40 percent of exports from Chile fulfilled the required ROOs. I updated their estimates for the year 2005 to show that 2 years after the FTA, 62 percent of eligible imports of manufactures from Chile were imported under tariff preferences.¹⁷ This number is consistent with the utilization rates that Lederman and Saenz (2004) found for other FTAs.

This aggregate data shows that the existence of ROOs has opened up some space for the Chilean government to promote domestic suppliers. Since the FTA, Chilean manufacturers have ramped up their capacity in U.S.-bound exports and have chosen to fulfill ROOs in order to gain preferential access. What this does not tell us is whether this fulfillment is coming from domestic sources or if producers are importing U.S. inputs instead. To determine this, I now turn to 2 specific sector studies.

¹² My definition of "manufactures" is derived from a list developed from SITC codes by Victor Bailey of the U.S. Department of Commerce for the World Trade Atlas.

¹³ list of manufactured exports to the US from WTA, plugged in each HTS number into UN Comtrade to reveal total exports to world of that HTS number for 2004.

¹⁴ From WTA

¹⁵ Sum of column from WTA

¹⁶ From WTA "CL exports by country"

¹⁷ This number is understated somewhat since I do not account for TRQs where the fulfillment of the preference is 100 percent, but exports continue at a non-preferential level. The remaining 38 percent either did not apply for the preference or chose not to try to fulfill the rule of origin.

4.3.2 Specific Response

In this section, I introduce 2 specific sectors – chemicals and plastics - that exhibited behavior that did not fit with what we would expect from the ROOs and access that they had under the FTA. I use these sectors to understand some of the firm-level dynamics that affect a firm's choice to fulfill ROOs. Both sectors are established exporters, but also sell in the domestic market. Both also require inputs that are produced locally, regionally and in the United States.

The FTA changed the conditions under which both of these sectors could access the U.S. market. Tariffs went to zero on most products in both sectors which was a moderate improvement over GSP levels. The major change was ROOs. Chemicals had previously faced complex ROOs which negatively affected fulfillment rates. Conversely, the non-preferential ROO that faced plastics was replaced by product-specific ROOs under the FTA. Below, we can see that both sectors responded positively to the FTA.

FIGURE 4.3 GROWTH RATES OF EXPORTS OF SELECTED MANUFACTURING INDUSTRIES TO UNITED STATES

	Ex of manufactures*	Chemicals	Plastics
2001	6.9	23.9	3.1
2002	8.3	29.8	29.3
2003	-0.4	-16.7	34.1
2004	31.7	16.1	39.2
2005	36.7	7.9	-5.7

Source: USITC Dataweb *excludes 7403 (copper)

The chart above shows that chemicals had a growth turnaround, while plastics continued the existing growth trend for that sector. Yet, the increase in chemical exports was largely not using preferential access even 2 years after implementation (figure 4.4).

FIGURE 4.4 FULFILLMENT RATES OF FTA PREFERENCES (2005)

	Total exports to US (thousands of US \$)	Claiming preferences	Utilization rate
Plastics	21608	20,171	93 percent
Chemicals	281,320	164,630	54 percent

Source: USITC Dataweb.

*data does not account for TRQs.

The rate of chemicals fulfillment is particularly curious given that the ROO on chemicals was considerably simplified in the FTA specifically with the goal of promoting exports.

Below, I look at some characteristics of the industry to see if they explain what happened.

Chemicals Industry Characteristics

The Chemicals sector (excluding fuels) is made up of firms that produce mainly methanol, calcium carbonate and sulfuric acid/soda ash. 65 percent of the industry's approximately 130 firms are Chilean-owned. Foreign-owned firms are generally branches of multinationals.

Low utilization is not explained by lack of export experience. Approximately half of all production in the chemicals sector is destined for the export market. Exports are concentrated in methanol, gasoline, potassium nitrate and iodine, and are sent mainly to the EU (24 percent) and the United States (21 percent). There has been little change in the proportion of exports as a percentage of total production.

FIGURE 4.5 SOME CHEMICAL FIRMS

	Produce	Ownership	Suppliers
Methanex	Methanol	Multinational	50% local, 50% Argentina
Oxyquim	Resins	Chilean	import
Occidental Chemical	Soda ash and chlorine	US subsidiary	local
Petroquim	Polypropylene	Chilean	local
Enaex	Ammonium nitrate	84% Chilean	Malaysia, Caribbean, Russia

Source: Author's surveys

Exporting firms in this industry (see above for examples) were very involved in the FTA with the United States. The industry association, ASIQUIM, has a department dedicated to FTA lobbying. They began their involvement in 1993 and trained with the Mexico and Canada FTAs. Their interest in the U.S. FTA was in cementing tariff free access to the U.S. market, since many of their products had graduated from GSP tariff free access. This involvement suggests that asymmetrical information does not hold the answer.

FIGURE 4.6 AVERAGE U.S. TARIFF RATE FOR CHEMICALS UNDER VARIOUS IMPORT RESGIMES

	MFN	GSP*	FTA
Chapters total	2.9	.9	0
Chap 28	2.2	0.3	0
Chap 29	3.6	1.6	0

Source: USITC Dataweb

*GSP tariff rates do account for product graduation.

The chart above shows that the FTA offered chemical exports a higher preference margin than what they were getting before. Though this sector already had preferential access to the U.S. market through GSP rates prior to the FTA, most product lines had graduated from GSP and so were subject to MFN tariffs. TRQs are also frequent in Chemicals. ASIQUIM suggested that the preclusion of tariff escalation with the FTA is a significant benefit.

In addition to the degree of potential preference, the FTA designed a much simpler ROO for the chemical sector.¹⁸ Under GSP, firms needed to fulfill percentage content which, for this sector, is very complicated and has a high administrative cost.¹⁹ The U.S.-Chile FTA introduced a new calculation which is more straightforward and easier to fulfill. This was original to the U.S.-Chile agreement and represents a new standard (U.S. Department of Commerce interview, 2006). The high preference margin, and easy ROO would lead us to expect strong rates of utilization given that exports had increased.

¹⁸ According to interviews, the 2 percent preference is significant for chemicals exporters.

¹⁹ Percentage content is difficult to track when the production process involves chemical reactions. In fact, most firms pointed out that it was so difficult to track that it was a prohibitive requirement.

Plastics Industry Characteristics

Most of the firms in this industry (53 percent) are involved in packaging. The rest is in industrial construction. There are approximately 500 firms in this industry, most of which are foreign-owned. Most firms are medium to large (e.g. employ more than 100 workers). Production in plastics is mainly destined for the export market. The United States is the main destination for exports of plastics products, it is followed by Peru, Argentina and Mexico.

This industry was not involved at all in the negotiations for the FTA with the United States. The industry association expressed disinterest in the process and suggested that the manufacturers industry knew what was important for each industry (ASIPLA interview, 2006).

The increase in exports to the United States following the FTA was in established products. There was a similar increase in these exports to Mexico and Canada following the conclusion of those FTAs, but to a lesser degree than the United States. There was not a large increase in exports to the EU because of distance.

FIGURE 4.7 AVERAGE U.S. TARIFF RATE FOR PLASTICS UNDER VARIOUS IMPORT RESGIMES (SECTORS WITH LARGEST EXPORT INCREASES ALSO INCLUDED)

	MFN	GSP	FTA
Chapter 39 (average)	4.4 %	0.9 %	0
3913	4.1	1.5	0
3915	0	0	0
3924	4.1	0	0
3926	4.1	0.7	0

Source: USITC Dataweb

Figure 4.7 illustrates the average tariff rates that plastics producers were facing under the various U.S. tariff regimes. In addition to the average tariffs for the entire chapter, I also included the tariff rates for those 4-digit items where the changes were most significant.

This illustrates that plastics already had a large preference under the GSP which was driven to zero under the FTA.

In addition to the small change in the preference level, plastics gained a more restrictive ROO in the FTA than that which they had faced under GSP, which was non-preferential. This would lead us to expect little change in exports, which was not the case – exports increased and fulfillment was very high almost immediately.

Outcomes

Here I look at how sector-specific features affect the incorporation of ROOs in the export decision. In this section I detail both the explanatory variables suggested by the literature and indicated by the firms in the surveys. I use data from firms that export to the United States to determine how their fulfillment choices are affected by ROOs.

Choice 1: Preferential or MFN access

When a firm is deciding whether or not to use preferential rates, they consider a number of features. These include the restrictiveness of the rule, the existing MFN rate, availability of local sourcing, product quality, product cost, production capacity, and administrative costs (Estevadeordal, 1999). Here I ask how exporting firms in these 2 industries decided on their mode of access.

There have traditionally been problems with ROO fulfillment in various agreements. Exporters do not fulfill ROOs for various reasons. In GSP, one of the most important reasons is the lack of information about the preference. The highest fulfillment rates of that preference have been in countries, such as Singapore, that establish dedicated offices to promote the preference.

According to firms in the chemical sector that did not fulfill ROOs, their choice to use MFN was based on the inability of domestic suppliers to meet their increased demand.

U.S. suppliers were cost effective in the high-tech aspects of the production process, but

overall were not competitive enough. As a result, firms turned to regional suppliers (see next section).

Several firms in the plastics industry pointed out that in terms of their exports to the United States and other countries with which Chile has FTAs, the preference levels are the only reason that they are competitive. As a result of their dependence on preference programs, firms in this sector are careful about fulfilling ROOs, and if they can source locally, the ROO essentially becomes fungible across agreements and is less constraining than the design might suggest. In addition, this sector supplies many of the natural resource industries, and this connection helped to educate firms about the measures they would need to take for the preference.

Choice 2: US or Chilean suppliers?

In this section, I separate out only the firms that chose to fulfill ROOs, to ask how they chose their suppliers. The impact of ROO on an industry or firm depends on the extent to which it can successfully encourage input switching.

First, I establish what intermediates are used in production of exports. Then I turn to survey data about where exporters are sourcing from and why. Next, I look at whether U.S.-based firms produce the inputs necessary and if Chile is importing more of these goods. Finally, I use interview data from supply firms to determine the causes of the increases or lack of increase in demand for their goods.

The chart below lists the main intermediate products that are used to produce the exports of the chemical and plastics industry. I gathered this data from a mix of interviews, industry publications and survey data. Each of these inputs is produced domestically, regionally and in the United States. According to exporters in both sectors, they source from domestic firms when they can, but often are limited by quality and the ability of domestic firms to produce in volumes sufficient for their needs.

FIGURE 4.8 MAJOR INTERMEDIATES USED IN CHEMICALS AND PLASTICS INDUSTRIES

Chemicals	Plastics	
Electricity	Polypropylene resin	
Sodium chloride	Polyethylene	
Natural gas	Acrylic resin	

Sources: Plastics from the ASIPLA Plastiguia 2005-2006 Chemicals from ASIQUIM interviews.

Chemicals exporters point out that most inputs that are not purchased domestically are not actually produced domestically. According to a major chemical supplier, the reason for the lack of intermediate production comes from Chile's small domestic market. It is simply not cost effective for most suppliers to produce only for the Chilean market. On Many are based in Argentina or Brazil and then sell to Chile. This small domestic market size means that there is little chance of clustering and increase of domestic input manufacturers.

The trade data match these contentions. In terms of the 3 inputs listed in figure 4.8, all are produced locally, but at low volumes. Chile produced all of its own natural gas until 2004, when it began importing small amounts from Peru. This suggests that the domestic industry is not able to meet demand for that input. Overall imports of sodium chloride have grown significantly, though imports of sodium chloride from the United States have fallen steadily since at least 2002. Electricity is produced and consumed domestically.

In contrast, most intermediates for plastics are not used for cost reasons. Exporters point out that Petrobraz in particular is very aggressive in their price for the quality. The trade data indicates that imports from the United States of all of these inputs have increased. However the increase is only significant in the case of Polypropylene where the volume of imports have increased more than 100 percent since 2002. This appears to indicate

²⁰ An example of this is the lack of a polystyrene plant. The input is important, but the market is too small to justify building a plant (ASIQUIM, 2006).

that some producers are switching to U.S. producers, since the lions share of these imports (66 percent in 2004) come from Argentina.

According to the major producers of intermediates in both industries, they have significantly increased their production in response to demand from exporters. However, in chemicals in particular, there are limits to the increase because of by-products. They are simply not able to increase fast enough to satisfy demand. They also mentioned that producers are often slow to adjust to new incentives. This is also cited in the literature, as Santos-Paulino and Thirlwall (2004) noted, it is easier for importers to import than it is for producers to readjust to produce for export markets.

Both the interviews and the trade data appear to indicate that the ROOs in the U.S.-Chile FTA have led to some growth in demand for locally-produced intermediate goods. However, the domestic industry is too small to meet existing demand, so there has also been an increase in imports both overall and, notably from the United States. There is very clearly room for growth in the intermediates sectors. Some producers are pursuing this growth themselves by grooming firms (that they intend to absorb later) to produce at the quantities and qualities that they require.

These 2 case studies suggest that in addition to expected variables, we also need to pay attention to the firm make up (e.g. vertically integrated firms will always buy locally), the type of competition in the industry (price or quality), and the willingness of the government to intervene through matching programs.

In the next section I turn to the policy implications of these findings to ask how ROOs can be designed to maximize their beneficial developmental outcomes.

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²¹ Sodium Chloride, for example, is a by-product of chlorine. While the demand for Sodium Chloride in Chile is high, there is a very limited market for chlorine, which cannot profitably be exported. As a result, only limited amounts of both are produced.

4.4 DESIGNING HIGH-ACHIEVING ROOS

In this section, I consolidate the potential outcomes that we gathered from the local content parallel with the firm-specific outcomes from the case study to make policy recommendation about how to design ROOs that yield the maximum outcomes in terms of both utilization and targeting potential.

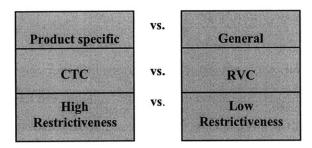
I begin by looking at the negotiation process where the developing country has the opportunity to design product-specific ROOs in such a way that they will be best suited to the needs of the individual sector. I use interviews with negotiators to describe the stages of the design process where the design of the rule can be specified in a way that promotes a particular outcome.

I then go on to look at the implementation process. This is particularly important for the outcomes of ROOs. While it is up to the firm how it will react to the incentive of market access through a ROO, there are plenty of opportunities for the government to intervene and affect the costs associated with fulfillment. Where rules have positive fulfillment costs, intervention can affect outcomes. Particularly this is important with ROOs, which are tagged by a general perception that they are always complicated and difficult to understand. This role has precedent in the case of the GSP. In that preference program, countries also have to fulfill ROOs. As I showed in the introduction section of this chapter, though these are much more general, the government remained an important component of the utilization process.

4.4.1 Negotiation

The design stage of a ROO offers negotiators 3 choices which contribute to its overall affect. The first choice is whether to use product-specific rules or one general rule for all imports. The second choice is the design of the rules - what should the minimum content be and how should processing requirements be calculated. The third choice is the level of restrictiveness that applies to each particular good. I discuss each below.

FIGURE 4.9 DESIGNING ROOS: 3 CHOICES



Product-specific rules

Nearly all North-South FTAs use preferential ROOs that are defined at the 6-digit tariff level, and all preferential ROOs are product-specific. Despite this, I include specificity as a "decision" because south-south FTAs and unilateral preferences are rarely specific at the product level.

Unilateral preferences such as GSP are the most widely cited examples of non-preferential ROOs. In GSP, the only ROO is that the product "must be the growth, product, or manufacture of the [beneficiary developing country] BDC and the sum of the cost or value of materials produced in the BDC plus the direct costs of processing must equal at least 35 percent of the appraised value of the article at the time of entry into the United States." Similarly, the South Asia FTA provides a typical example of what a non-preferential ROO in an FTA looks like. Substantial transformation is accomplished if:

- "(i) the final product is classified in a heading at the four-digit level of the Harmonized Commodity Description and Coding System differently from those in which all the non-originating materials used in its manufacture are classified and
- (ii) products worked on or processed as a result of which the total value of the materials, parts or produce originating from other countries of undetermined origin used does not exceed 60% of the FOB value of the products."

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²² U.S. GSP Guidebook, 2006.

This trend is starting to change as more south-south agreements are being made between countries that have existing product specific rules and so are more inclined to use them, despite the difficulty in negotiating such rules.

Despite the overwhelming agreement in the literature that non-specific ROO are optimal because they are less distortionary and easier to understand; the United States prefers product specific ROOs for 2 reasons.²³ The first is that they enable the agreement to be better suited to specific industries. In choosing to pull out a tariff line for product specific ROOs, the country can use the opportunity to specifically target a particular sector within their economy.

Another benefit of specificity is that there is a greater degree of flexibility over time. In terms of alteration, the change of a ROO involves a presidential proclamation and an exchange of letters (U.S. Department of Commerce interview, 2006). There is no formal legislative change. For example, in NAFTA, Mexican producers of televisions were having trouble meeting the content ROO, so it was amended to a less restrictive CTC. This would have been more difficult to affect directly had the ROO been general and not product-specific. In cases like these, all parties to the FTA must agree to change the rule. 25

Form of fulfillment

The second choice in the design of ROOs is whether a product should be subject to a change in tariff classification (CTC) or a regional value content (RVC) requirement. The aim of a ROO is to ensure that a product which receives preferential access has either been wholly produced in the territory or has been substantially transformed. There are 2

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²³ In most of the Middle Eastern FTAs, ROOs are the GSP-based 35 percent content for most goods. Certain items like sugar and textiles are pulled out for product specific rules, but the majority are non-specific.

²⁴ The ROO had been designed to accommodate old-style televisions that used CRTs which are not a component of LCDs.

²⁵ For the past 3 years, the parties have been amending NAFTA with the goal of increasing liberalization. In the agreement it specifies that while ROOs can be changed, they cannot be made more restrictive – all of the Western Hemisphere agreements have this same clause.

ways that preferential ROOs define substantial transformation - 1) a CTC which can be stand-alone or attached to additional requirements; or 2) a specified RVC.

Certain forms of ROOs are typically preferred by specific industries. Automobiles, textiles and footwear for example, always prefer RVC because there are a lot of complex parts that are used in the final product. Otherwise, the United States is trying to more towards CTC because they are simpler.

FIGURE 4.10 RULES OF ORIGIN IN SELECTED U.S. TRADE ARRANGEMENTS

	U.SChile	NAFTA	GSP
Change in tariff classification	2,4 or 6 digit	2, 4, 6	:#a
Minimum or regional value content	35-45% (RVC)	50-60% (RVC)	35%
Product-specific req'mt	Yes	Yes	no

Source: text of agreements

Changes in tariff classification are widely considered to be the easiest to understand and implement. CTC is advocated both by trade economists and U.S. producers that import intermediate goods. The reason is that it is both simple to understand and non-discretionary (Matthies, 1994). The change in tariff heading was first used in the U.S.-Canada FTA (Palmeter, 1994). CTC can be specified at the 2, 4 or 6 digit level. Changes at the chapter level (2-digit) are the most restrictive. Changes at the subheading level are small changes and are characterized by a trade negotiator as "essentially allowing pass-through." Depending on the way it is defined, a CTC requirement can either promote the use of domestic processing and content, or not have any affect at all.

Another method of substantial transformation is the regional value content (RVC). These are specific percentage content requirements. They are meant to promote the use of intra-agreement inputs. This method tends to require around 40 percent content and generally allows for a variety of calculation methods. This is the method that is most confusing to firms. In one particular meeting attended by the author in 2003 about the CAFTA-DR

ROOs, a U.S. producer pointed out that with different (RVC) methods in each of the agreements he was having trouble filling all of them since essentially, his products had to be made in such a way as to fulfill the most stringent.

Restrictiveness

A third design choice available to negotiators is the restrictiveness of the ROO. This depends on the extent to which it constrains the choices and actions of producers that want to export under the preference program. The measure of restrictiveness that is used in the literature comes from Estevadeordal (2000). His index ranges from 1 (least restrictive) to 7 (most restrictive).

The chart below shows that the ROOs of the U.S.-Chile FTA are on the high side in terms of restrictiveness overall. This means that the ROOs in that agreement include more product specific measures and go beyond changes in subheading requirements.

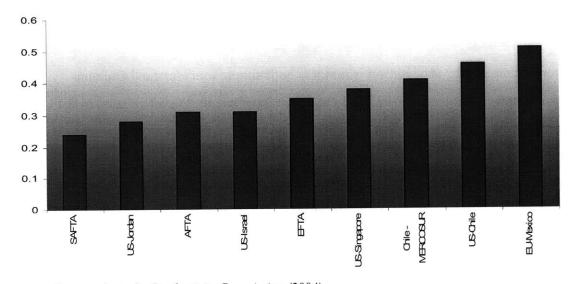


FIGURE 4.11 RESTRICTIVENESS INDEX OF RULES OF ORIGIN FOR SELECTED PTAS

Source: Australia Productivity Commission (2004)

The varying degrees of restrictiveness can reflect a number of different causes. In the NAFTA negotiations for example, Morici (1993) points out that U.S. negotiators were

"encouraged to err on the strict side," because of a concern that Mexico would be used as a transshipment point for third countries. We can also expect to see stricter ROO in countries with high pre-FTA tariffs. This would be because of a very real concern that the decrease in tariffs will result in a flood of cheap imports.

The above graph (figure 4.11) shows that Chile's ROOs are relatively restrictive. For Chilean exporters, this means that they must limit their regional imports in favor of U.S. or local producers. Since most exports to the United States are not final goods, if domestic capacity is low, this could push up the prices of Chilean goods if the preference level is low. So why would Chile agree to this?

The reason is that restrictiveness varies significantly by sector. Estevadeordal and Suominen's (2003) estimates (figure 4.12) show that the ROOs for non-textile manufacturing industries are on the low end in terms of restrictiveness. Chile's biggest exports to the United States – fresh fruit, pulp, wood and chemicals are not highly restrictive. Those industries with high restrictiveness ratings are those that compete against U.S. producers – textiles, vegetables, fats, and minerals.

FIGURE 4.12 RESTRICTIVENESS OF RULES OF ORIGIN IN SELECTED INDUSTRIES

	U.SChile	NAFTA	Chile-Korea
Textiles	6.9	5.9	5.5
Vegetable Products	6.0	6.0	6.1
Fats and Oils	6.0	6.0	7.0
Mineral Products	6.0	3.9	5.4
Chemicals	5.3	2.6	4.0
Plastics	4.8	3.7	4.1
Pulp and Paper	4.8	4.9	4.3
Transportation equipment	4.8	4.2	4.3
Food, Beverage and Tobacco	4.7	5.7	5.2
Wood Products	4.0	4.1	4.1
Optics	4.0	4.5	4.3
Machinery, electrical equipment	3.2	2.9	3.8

Source: Estevadeordal and Suominen (2003)

The above chart reveals U.S. industries' ROO preferences. They are fairly constant across agreements (supporting Suominen's endogeneity to the industrial partner claim) and change only slightly as industry conditions change (U.S. Department of Commerce interview, 2006). The third column also shows that the ROO preference is only specific to the industrial country, not to the industry as a world whole. This hysteresis enables me to use the U.S. case to suggest the results that ROOs are intended to gain. We learn that: 1) highly restrictive ROOs are meant to block imports or to force firms to purchase U.S. inputs. In textiles, for example, U.S. firms are losing market share and prohibiting imports is key to retaining what is left; 2) mid-level restrictiveness is desirable either where the U.S. is the provider of the intermediate food for the partner country, or where imports compete with NAFTA or other favored trading partners. This way, the incentive to buy U.S. inputs is maintained while NAFTA preferences are not overly eroded. This is the case for many of the industries that require high-tech inputs like chemicals, plastics and transportation equipment. Finally, we also learn that 3) low-level restrictiveness is intended to allow producers to use the cheapest inputs. Often this is the case where the United States does not produce the good, or imports the intermediate product, as in the case of wood products and metal-mechanics.

The extent to which restrictiveness will affect the activities of an industry in the developing country partner depends on a number of variables. First, the export orientation of the sector – is it composed of firms that currently export or intend to export to the partner market? Next the supply structure of those firms – are they buying from local, regional, or international suppliers. If the firms are already buying from local or U.S. suppliers, then even very strict ROOs will not change their supply structure.

There is evidence that some countries have used restrictive ROOs to maintain protection of target industries. In Asia for example there are restrictive electronics ROOs. However the United States negotiated a shorter compliance schedule in response (Department of Commerce interview, 2006).

The chart below is an illustrative list of ROOs for Chile's top manufactured exports to the United States. We can see that overall, the restrictiveness is low. In terms of the industries, all of them are export oriented, and with the exception of apple juice, sell little to the domestic market. Most of them involve inputs that are either produced in Chile, or are vertically integrated into individual firms. They are also, for the most part, not final goods, and so the United States has a stake in keeping the rules flexible so that U.S. producers have access to lower cost supplies. In the case of apple juice, Chilean goods directly compete with U.S. goods, and so the restriction is high.

FIGURE 4.13 RULES OF ORIGIN IN CHILE'S TOP MANUFACTURED EX TO UNITED STATES (2004)

Top 10 manufactured EX to US	FTA Origin Rule	Scale of Protectionism (1=least restrictive, 7=most restrictive)
740311 (cathodes, copper)	A change to heading 74.01 through 74.03 from any other heading , including another heading within that group.	4
2905.11 (methanol)	A change to [this subheading] from any other subheading , including another subheading within that group	2
4418.20 (doors and frames)	A change to heading 44.01 through 44.21 from any other heading , including another heading within that group.	4
2710.19 (petroleum oils)	A change to [this subheading] from any other heading ; or a change to [this subheading] from any other subheading , including any subheading within that group, provided that the good resulting from such change is the product of a chemical reaction.	4 or 3
2801.20 (iodine)	A change to [this subheading] from any other subheading , including another subheading within that group.	2
2009.79 (apple juice)	A change to [this subheading] from any other chapter.	6
2710.11 (light petroleum oils)	A change to [this subheading] from any other heading ; or a change to [this subheading] from any other subheading, including any subheading within that group, provided that the good resulting from such change is the product of a chemical reaction.	4 or 3
2834.21 (nitrates of potassium)	A change to [this subheading] from any other subheading , including another subheading within that group.	2
9403.50 (bedroom furniture)	A change to subheading 9403.10 through 9403.80 from ay other heading ; or A change to subheading 9403.10 through 9403.80 from any other subheading including another subheading within that group; provided there is a regional value content of not less than: (a) 35 percent when the build-up method is used, or (b) 45 percent when the build-down method is used.	3

Source: Comtrade, Chile FTA.

The literature largely supports the notion that less restrictive rules are more desirable. However, if we use the industrial country ROO model as a starting point, we can see that if the goal is to achieve backward linkages and encourage domestic suppliers, then product-specific rules are better able to target, and restrictive rules are more likely to

constrain producers. However, for those industries where the export to the United States is an intermediate good itself, and there is no existing production in the partner developing country, less restrictive rules can enable the industry to grow.

4.4.2 Implementation Stage

The other temporal point at which governments can affect the commercial outcomes of ROOs is in the implementation stage. Regardless of how carefully negotiators design this commercial incentive, it may simply be ignored, since unlike other features of FTAs, ROOs are optional. Exporters can choose to send goods to the partner market at MFN rates if the costs of compliance outweigh the preference (see Anson et al, 2005 for a discussion of this effect in the NAFTA case). Since the fulfillment of ROOs is discretionary, cultivation can help in the realization of expected benefits. In this section, I discuss the various reasons that exporters may ignore ROO, why the developing country government cares, and what can be done to increase compliance.

We saw that there are a number of variables that affect an exporter's choice to export under preferential rates include – the complexity of the process, the tariff differential between MFN and the preferential rate, availability of intermediates, and availability of alternative markets.

In addition, there are 2 reasons an exporter may choose to ignore a ROO that is well-designed. The first reason stems from an information asymmetry. The exporter may not be aware of the existence of the preference. This is not unusual in the case of unilateral preferences, but unlikely in the case of an FTA. In fact, the ROO officer at the U.S. Department of Commerce pointed out that U.S. exporters approach him regularly about the steps to fulfilling ROOs that do not apply to their products. Another dimension of this problem may stem from the lack of information about the availability of domestic suppliers. This is typical of FDI that is unfamiliar with the domestic market.

A second reason that fulfillment rates may appear to be low is technical. If there is a TRQ that is filled and producers continue to export, utilization rates will appear low.

TRQs are often in the most competitive products. In the U.S.-Chile FTA, for example, most dairy goods are subject to TRQs. According to the head of the dairy association, the TRQ is distributed evenly among members. However, not all dairy exporters are members of the association, so for those who are not, the preferential rate does not affect their production decision.

The way to measure whether or not exporters are following ROO is to look at fulfillment rates – the percentage of imports that are using the preference. For those goods where fulfillment rates are low, we can establish that there is a disconnect (or a low TRQ).

The role of the government cannot end with the implementation of the FTA. If a country intends to use the FTA as a tool for development, it needs to also be actively involved in implementation. This is particularly the case with ROOs which are not a strict constraint. There are 3 ways a government can promote fulfillment. While each addresses a specific issue, all 3 provide benefits to producers.

The first promotional activity the government can do is to promote awareness of the preference and ROO. This can be addressed using GSP-style information clearinghouse offices in government agencies. These offices were a important part of the reason that Singapore, South Korea, Taiwan and Hong Kong were able to reach such high GSP fulfillment rates in a program where, as we saw earlier, fulfillment is generally less than 10 percent. In 1988, 54 percent of total preferential imports into the United States came from these 4 countries (they were all graduated in 1989) (MacPhee and Oguledo, 1991).

According to a U.S. trade negotiator, very few firms are well-informed about ROOs and how to interpret them. He found that more experience is the only way to become better at fulfillment. Big firms in particular are good at fulfillment, small and medium sized exporters and new exporters are not. He illustrated the importance of experience with the fact that he receives frequent calls about NAFTA ROOs, but has not received a single one about Chile or CAFTA-DR. In addition he pointed out that publicity was important. There was a lot of publicity over CAFTA and so people are more familiar with that

agreement. This view was seconded by Mikuriya (2004) who pointed out that ROOs are not only confusing to laymen but also to customs officials and exporters.

A second activity is to promote matching between firms. Even exporters that are aware of the preference may not know where to locate a good domestic supplier. The element that many countries miss is that ROOs will have the greatest effects on foreign producers who, to a greater extent than domestically-owned final goods producers, face an information gap when they invest in the domestic market (UNCTAD, 2001). Foreign investors in particular may be more comfortable with their existing supply chains (Rodriguez-Clare, 1996; Javorcik et al, 2004), and in the absence of encouragement may be more willing to try a new supplier from the United States than from a developing country with which they are unfamiliar.

A final activity a government can do is domestic promotion. A rule of origin may have all of the characteristics that could persuade a producer to use domestic inputs, but if the domestic input sector is too small or cannot produce at high enough quality then the rule has no effect. If this is the case, the government can do several things either to encourage foreign investment in intermediate goods production or to build up local businesses. For example, tax breaks to foreign investors in these sectors, or government subsidies to SMEs.

A second alternative strategy is to enhance domestic supply capacity directly. This can include programs to promote technology upgrading or skills training to make local suppliers more attractive. Porter (1990) advocates this as an important role of governments. Specifically, he argues that governments should increase capacity in domestic industries to encourage the potential for linkages inherent in FDI. This is non-discriminatory, but also does not directly affect exporters who may have pre-existing supply networks and need more than the availability of suppliers to use them.

It is important to remember that these recommendations are specific to the middle technology countries since they are the ones that have at least limited domestic capacity

since they are at the "duplicative imitative stage" of technology. Hoekman et al's (2005) classification of 3 types of developing countries is useful here. According to them, the least developed countries do not have absorptive capacity and so national policies aimed at linkage would be counter-productive.

Interestingly, the fact that exporters in these 2 sectors reviewed here are buying their inputs from the region where local suppliers do not have the capacity and U.S. suppliers are too expensive also suggests that the FTA is not trade diverting in these sectors since exports to the partner expand at the same time as imports from the region.

Conclusion

ROOs have the potential to target specific industrial outcomes through their influence over a firm's sourcing and production decisions. They have been used by the industrial countries to this effect. Because they do not submit the initial negotiating document, the developing countries are put in the position of responding to suggested product specific rules. Thus their ability to be proactive and design ROOs that would best benefit their domestic industries is attenuated. It is further limited through low participation and understanding of the outcomes of various forms of ROOs.

The targeting potential of ROOs is unique in the current international regime. While there are a number of different ways to indirectly encourage backward linkages and domestic sourcing, ROOs are the only way to require it in a way that is WTO compliant. This returns some important policy space to developing country governments.²⁶

In this chapter, I used the case of ROOs to show how, for this policy feature, the U.S.-Chile FTA provided the developing country partner with a means of targeting production incentives to particular manufacturing sectors in the domestic market. However, this case also showed us that firms are not only affected by the structure of the ROO, but also by

(necessary to fulfill ROOs for socks) so these items that were exported now are not since they cannot compete without the preference (Central Bank of Chile interview, 2006).

However, if the sector is not well understood, the ROO can lead to problems. For example, in the U.S.-Chile FTA, Chile does not grow pineapples (necessary to fulfill ROOs for fruit cocktail) or produce elastic

the demands of the buyers of the final good, the availability (and knowledge about) domestic supply firms, and the involvement of the government in facilitating all of these exchanges.

If it is used in the ways that I suggested here, ROOs one of the only ways that a middle-technology developing countries can use to target production incentives at the domestic manufacturing industry in a way that is both largely discriminatory, and compliant with their WTO obligations.

CHAPTER 5

PREFERENTIAL MARKET ACCESS

In this chapter, I continue to test the thesis that FTAs can function as industrial tools by showing that the preferential market access feature of FTAs affects firm production decisions in a way that is unparalleled by other WTO-compliant forms of preferential market access.

Preferential market access is an established feature of most international programs targeted at promoting growth in developing countries. It is mentioned in the GATT through the principle of non-reciprocity and it is incorporated into most forms of bilateral assistance programs. However, despite their longevity, unilateral preference programs have uneven utilization rates and do not consistently promote trade or export diversification. ¹

In contrast, FTA-based access has both high utilization and appears to yield developmental results. There is evidence that this form of access results in higher export volumes (Solanga and Winters, 2001), increased foreign investment (Dee and Gali, 2003; Cuevas et al, 2005) and the diversification of production (Ayres, 1999). Most formal models attribute these outcomes to increased market size and lower tariff barriers. Yet, these variables cannot be the whole story. The traditional explanations subsume an important inconsistency – the increase in export volumes is not only in sectors with newly preferential access, but also in sectors where there was no change in preference levels.

The hypothesis I test in this chapter is that the unique outcomes of preferential market access are the result of dynamics particular to asymmetric FTAs. I begin by discussing

¹ The outcomes of unilateral preferences depend on the preference being examined. GSP is the oldest preference program and has extremely low utilization rates. More recent programs such as CBTPA (1983), ATPDEA (1991) and AGOA (2000) have fairly high utilization rates (Dean and Wainio, 2006), but also do not appear to yield much diversification of exports or increase in export volumes.

the target outcomes of preferential market access and then showing that, for the representative FTA case, exports increase and production diversifies as a consequence of that institution.

In sections 2 and 3, I explain why FTA-based preferential market access is able to yield these results when similar initiatives do not. I begin in section 2 by listing some structural features of FTAs that affect production choices and which do not exist in other preferences. Then, in section 3, I attempt to explain how these structural features affect the production process. I go through a case study of 3 sectors to highlight the reasons that each decided to increase export volumes and diversity in response to the FTA. This also leads me to discern 2 additional incentives that are specific to the negotiation process of the FTA.

This chapter makes 2 contributions. The first is that the negotiation and implementation process for FTA-based preferences is the reason that this institution is able to accomplish outcomes more consistently than other similar incentives.

The other contribution of this chapter is to offer a typology, specific to the case of the U.S.-Chile FTA, but applicable to other agreements as well, that brings in the importance of firm heterogeneity. While it is not unexpected that different features of industries affect how their firms are able to take advantage of preferences, this is the first time, to my knowledge, it has been integrated as an explanation for why the outcomes of PMA in one forum are considerably more successful than others.

In the conclusion to this chapter, I discuss how the findings can be used to improve utilization of unilateral preferences.

5.1 POTENTIAL OUTCOMES

In this section, I detail the 2 optimal outcomes that preferential market access is intended to generate in the general case. First, preferential market access should directly lead to

export growth as a result of lower tariffs and therefore lower prices. Second, the new opportunities associated with additional access to an established partner market are likely to contribute to export diversification.

For each of these potential outcomes, I highlight the reasons that they are desirable and the degree to which they resulted from the U.S.-Chile FTA. This enables me to show that while product diversification was at expected levels, exports increased far more than traditional channels would lead us to predict.

5.1.1 Expansion of Exports

The promotion of exports can have important industrialization outcomes (see e.g. Sachs and Warner, 1995). For the developing country, they can serve as an important source of foreign exchange and a source of demand when the domestic market is small. By increasing the country's integration into the international economy, exports generate efficiency and learning effects.

Export-driven growth is actively promoted by the international institutions of trade. Below is a schematic of how the international institutions and trade arrangements are intended to affect exports from the developing countries.

FIGURE 5.1 INSTITUTIONS TARGET INCREASED EXPORTS

GSP ²	AGOA ³	U.SChile FTA	WTO⁴
"the president shall have due regard for-(1) the effect such action will have on furthering the economic development of developing countries through the expansion of their exports,"	"offering the countries of sub- Saharan Africa enhanced trade preferences will encourage both higher levels of trade and direct investment in support of the positive economic and political developments under way throughout the region,"	Both parties resolve to "create an expanded and secure market for the goods and services produced in their territories;"	"their relations in the field of trade and economic endeavor should be conducted with a view toexpanding the production of and trade in goods and services"

³ Trade and Development Act of 2000 (Title I Section 102, paragraph (9))

⁴ Agreement Establishing the WTO

² 19 U.S. 2461 et seq.

Despite these proclamations, the actual outcomes of most of these institutions are disappointing. The WTO is a complex institution and separating out whether membership directly increases exports is difficult. While Rose (2004) produced a controversial paper that indicates that the WTO does not substantially increase trade, the debate is still pending.

Unilateral preferences have only modest effects on exports (for a review of the literature see MacPhee and Oguledo, 1991). Though utilization rates of preferences can be high, they generally fail in their aim to lead to development (Wainio et al, 2005; Topp, 2001). In a study of agriculture, Stoeckel and Borrell (2001) find that countries that have unilateral preferences liberalize agriculture less and more slowly. In addition, in the case of AGOA (which is typical of unilateral preferences that are offered to groups) it resulted in a situation where the countries with the greatest capacity benefited far more than those with less (Nigerian Embassy interview, 2002).

In contrast, it is a stylized fact that bilateral trade increases as a result of the implementation of a preferential agreement. Analysis of the market access outcomes of FTAs has traditionally taken the form of the gravity model in the economics literature (following Aitken, 1973).⁵ The gravity equation shows that bilateral trade between FTA partners increases over the amount they would trade in the absence of an FTA (Frankel, 1997; Solonga and Winters, 2001; Carrere, 2006).

Though the gravity model presents an excellent tool to show the overall increase, it misses some of the more nuanced reasons for trade outcomes. In particular, there are 2 features of the increase in exports that the gravity equation does not explain. The first is why exports increase in all categories. The second is why exports to the world increase over trend following an FTA with a single partner. I illustrate each of these below and attempt an explanation in subsequent sections.

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⁵ This model measures the trade flows between countries through their economic size, population, geographical distance and institutional characteristics.

The first FTA-specific outcome is the fact that exports increased in all categories, not just where firms faced newly preferential access. This suggests that tariffs are not the whole story.

FIGURE 5.2 COMPARISON OF PRE/POST-FTA TARIFF LEVELS OF TOP 10 EXPORTS (BY GROWTH)

product	Percent Growth (2004)	tariff level (pre-FTA)	tariff level (FTA)
39.2329.00	50,181	3 %	0
03.0420.30	9,200	0	0
62.0191.20	8,791	19.7 % + \$0.497	0
84.1899.40	7,423	0	0
44.1219.40	6,957	8 %	0
39.2410.30	6,335	5.3 %	0
44.2190.97	5,930	3.3 %	0
80.0111.00	5,322	0	0
68.1099.00	4,699	0	0
16.0416.40	4,385	5 %	0

Source: USITC Dataweb

Of the 10 exports detailed above, only 6 of them had newly preferential access under the FTA. The others had already been subject to duty-free access to the U.S. market. It is not immediately clear why their exports to the U.S. market would increase so dramatically.

The second FTA-specific outcome is the general nature of the export increase. Not only is there an upswing in trade with the partner country, but exports increased over-trend in third-party countries as well. In the case of Chile, the data indicate that the proportion of export growth to non-U.S. sources was higher than growth of exports to the United States. Specifically, while exports to the United States increased by 26 percent in 2003-2004, for the same period, exports to Japan increased 66 percent and exports to China increased 61 percent. Figure 5.3 shows the volume of export increase for 3 different U.S.-based FTAs from 1 year prior to 1 year post-FTA to illustrate that these results are typical.

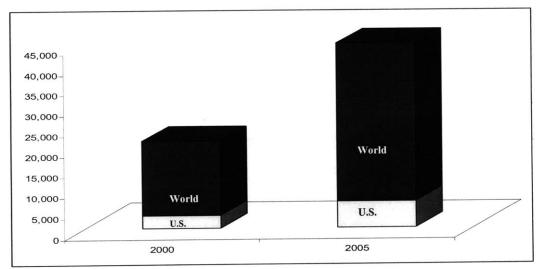
FIGURE 5.3 FTAS LEAD TO INCREASE IN EXPORTS NOT ONLY TO PARTNER, BUT TO ROW AS WELL

	Exports to US 1 year pre-FTA	Exports to US 1 year post-FTA	Exports to world 1 year pre-FTA	Exports to world 1 year post-FTA
Jordan (2001)	66,652,888	431,722,976 (553% increase)	1,292,814,720	2,770,019,072 (114% increase)
Mexico (1994)	\$42,935,365,632	66,338,807,808 (54% increase)	51,886,415,872	79,540,658,176 (53% increase)
Chile (2003)	22,924,580	91,199,089 (297% increase)	17,423,075,328	30,894,495,855 (77% increase)

Source: calculations from Comtrade

The chart above illustrates, for 3 different cases, that following the conclusion of asymmetric FTAs with the United States, the developing country partner increases trade not only with the United States, but also with the rest of the world. This is interesting because it is not clear how a bilateral trade preference would spur general exports. It is also a desirable result because it illustrates, at least for the aggregate case, that developing country firms are ramping up overall capacity rather than simply diverting production away from established sources. Below is a graphical illustration of this phenomenon.

FIGURE 5.4 EXPORTS TO U.S. SMALLER PROPORTION AFTER FTA



Source: World Trade Atlas

The chart above illustrates for the case of Chile that while the total volume of exports to the United States has increased year-on-year, the total proportion of exports going to the United States has fallen from 20 percent in 2002, to 17 percent in 2003, and year-to-date data for 2004 appears to continue the shrinking trend, despite the FTA. While the increase in world trade is not solely a result of the U.S.-FTA since Chile has many FTAs, but the focus of the graph is the U.S. proportion. The fact that, in the case of Chile, exports to the United States increased, but in a smaller proportion than exports to the rest of the world, indicates that there has not been wholesale diversion of production from existing sales points. This is an important feature since the literature on FTAs continues to question their trade diversion away from non-member countries.

The reason that there is no overall diversion of exports may be that an FTA is not an unexpected shock. It takes 2-3 years on average to negotiate an FTA. During that time, domestic producers adjust their expectations and market strategies. For producers that are already selling to the international market, they can increase their production before the FTA. If the FTA is delayed, they are able to simply release their product on the international market. For producers that have existing access, they can negotiate sales contracts in advance.

5.1.2 Diversification of Exports

Export diversification into non-traditional sectors is the other desirable industrial outcome associated with preferential market access. The reasons the countries often target diversification directly are because production costs are not known in advance and that there is uncertainty associated with sending goods to a new market (Hausmann and Rodrik, 2003; Klinger and Lederman, 2006), and often investors are risk averse and unwilling to move into new potentially productive sectors (Bleaney and Greenaway, 2001).

Diversification offers a number of beneficial externalities. First, it protects countries from sudden or unexpected changes in their terms of trade by reducing their reliance on one export (Ramcharon, 2005). This is particularly important for countries that may be

heavily dependent on commodity exports that are subject to declining terms of trade over time. Second it can broaden the scope for investment and savings as export-oriented sectors make gains from dynamic learning opportunities. And third there is evidence that it leads to economic growth (Herzer and Nowak, 2004)

The literature on unilateral preferences makes few references to their impact on export diversification. In fact, the literature on unilateral preferences defines success only in terms of increased export volumes. They attribute this outcomes to wider product coverage and the fact that these preferences include goods that developing countries are already exporting such as textiles and agriculture (Dean and Wainio, 2006; Cline, 2004; Brenton and Ikezuki, 2004). These variables suggest more specialization rather than more diversification. And of the few articles that treat diversification at all (e.g. Bonaglia and Fukasaku, 2003), they find little evidence of it.

The form and degree of diversification depends on the stage of development (Acemoglu et al, 2006), existing government policies (Bonaglia and Fukasaku, 2003), and the markets facing exporters. The diversification process is faster in early stages of development, and slows at higher levels of income when specialization takes over (Imbs and Wacziarg, 2003).

Diversification can be the result of either the invention of an entirely new product, or, more commonly for developing countries, the production of goods that are new for the exporting country, but not for the world. Using terminology developed by Klinger and Lederman (2006), asymmetric FTAs are most useful for inside-the-frontier diversification (discovery of new competencies) rather than on-the-frontier diversification (inventions). The reason is that the incentive to diversify exports comes from the increase in demand for existing products. Producers in the partner country can be encouraged to adjust to consumer demand or to sell products that were not previously exported.

In an FTA, there are 2 channels that promote export diversification. The first is through the introduction of products that are already sold in export markets, but had not yet been sent to the United States. The decrease in barriers opens immediate new opportunities for existing exporters. The decision not to sell those products to the United States may have been the result of either higher prices in other markets, or high existing U.S. tariffs. Now that the cost of selling to the partner market is lower, and the potential growth associated with the U.S. market is often high, so producers have incentive to diversify where their existing exports are sent.

Another channel through which an FTA can lead to diversification is through the adjustment to the tastes of new consumers. This occurs most quickly in firms that have the capacity to produce additional products, but need market impetus to develop them. Chilean dairy firms for example produce cheese, which is a very lucrative product in the United States. However they produce gouda, which is not popular with U.S. consumers. As firms gained market experience through their sales of products such as condensed milk, they gained the market experience to begin to diversify their cheese production into cheddar and mozzarella, which are most popular in the United States. A representative from Invertec, a diversified Chilean food processing firm, pointed out that they diversify their products in direct collaboration with their clients since they are most familiar with the needs of the market (Invertec interview, 2006).

The evidence of whether or not Chile is in need of greater export diversity is mixed. While some authors argue that diversity has advanced and is adequate (Alvarez and Crespi, 2000); others point out that dependence on agriculture and forestry remain too strong (Larrain, Sachs and Warner, 2000; Moreira and Blyde, 2006). Caballero (2002), for example, points out that Chile's copper dependence has resulted in a high correlation between terms of trade shocks and the business cycle.

Chile has plenty of space to diversify exports sent to the United States. According to the Government of Chile, in 2004, 2088 different products were exported to the United States. However, there were 5237 products exported to world markets. In addition,

almost 83 percent of the value of all exports was concentrated in the largest firms, ⁶ which leaves room for small and medium firms to move to export (Government of Chile, 2005).

FIGURE 5.5 EXPORTS TO UNITED STATES BY FIRM SIZE AND VALUE (2004)

	Small firms	Medium firms	Large firms
Value of export (million)	124.7	667.5	3771.1
Number of firms	794	518	223
Number of products	1097	945	836

Source: Direcon

The official estimates of FTA-based export diversification in Chile are very high. The Chilean Central Bank (2005) concludes that there has been an increase in product variety of 9 percent as a result of the U.S. FTA. Yet, their data was simply a year-on-year comparison. Here, I apply a more rigorous model developed by Klinger and Lederman (2006) to 4-digit tariff lines. I examine the emergence of new exports by first establishing that they were not produced in a previous period (1997-2002), then that they emerged and were exported for at least 2 years from 2003-2006. The number of new goods I find using this method is much smaller than the official government estimates using only year-on-year comparisons. However, it measures the extent to which the FTA generated new "established" exports.

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⁶ 40 percent of total exports is concentrated in the top 15 firms (ProChile).

FIGURE 5.6 LIST OF GOODS THAT WERE NOT EXPORTED TO THE UNITED STATES FROM (199-2003) AND WERE EXPORTED FOR AT LEAST 2 YEARS BETWEEN (2004-2006)

HTS number	Description
0203*	Pork products
1202	Peanuts
1205	Rape seeds
2402	Tobacco products
5107	Wool yarn
5108	Rabbit yarn
6004	Knitted fabric
6801	Stone setts
7105	Diamond powder
7208	Non-alloy steel
8805	Aircraft launching gear

Source: USITC Dataweb

These "new" exports are goods at the 4-digit level that were exported for at least 2 of the 3 years post-FTA, and which were not exported at all in 1999-2003. This early list indicates potentially new export industries to the United States. While this list is considerably more limited than Chilean estimates, it enables me to conclude that the FTA yielded a strong showing of new established exports.

Trade data on diversification also indicates that the U.S.-Chile FTA may have re-vitalized former exporters that had stopped sending goods to the partner market. Trade data shows that there were 974 products (at the 8-digit HTS level) that were not exported at all to the United States in 2003 and were exported following the FTA in 2004. This is not a direct measure of diversification since most had been exported sometime in the past. Rather it is meant to suggest that FTAs provide some demand pull for former exporters. A Chilean trade expert also pointed out the appeal of the FTA for former exporters using the example of apparel. Chile had a yarn and fabric sector in the past, but the 1982 crisis led

^{*0203} was only exported in 2006, but has a strong potential market.

to the failure of most factories. Now the impetus of the FTA has resulted in these firms attempting to redevelop their capacity (Direcon interview, 2006).

What the above results of increased market access show are that there are clear investor and exporter responses to the solidification and expansion of reduced-barrier trade with a country's major export market. This is a result of increased product demand from the expanded domestic market, increased investment that is attracted by decreased market risk and diversified production as the result of expanded market opportunities.

5.2 INSTITUTION-SPECIFIC INCENTIVES

The above discussion highlighted the fact that FTAs can yield unusually successful results in comparison to other forms of preferential market access. In this section, I point out 2 institutional features that offer some insight into why this particular form of market access has more significant results than other forms with similar structural content.

5.2.1 Permanent Price Change

The traditional reason that preferential market access leads to trade outcomes is through the decrease in the tariff rate. This is in keeping with the literature that assumes that externalities associated with trade intervention travel through world prices (Bagwell and Staiger, 1997b).

For unilateral preferences, the price change associated with the tariff change is not permanent. This makes it more difficult for exporters to write long-term contracts. Several times, existing unilateral preference programs have not been renewed in the U.S. Congress before they expired. In the 2001 episode, Peruvian reporters experienced particularly harsh commercial outcomes. In addition, unilateral preferences are subject to both product and country graduation, which is a highly politicized process. The threat of graduation means that exporters cannot depend on this preference. The permanence of

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other forms of unilateral preferences varies, though in all cases, products and countries can still be graduated.⁷

In contrast, the price change offered by the FTA is permanent. This offers additional certainty for exporters, producers and investors. This is an important factor in the improved risk environment that accompanies the completion of FTAs.

A related effect of the permanence of the price change is that it gives exporting companies more certainty about export conditions (firm-level surveys, 2006). Reliable access to export markets is important in an environment where GSP preferences can be graduated, and regional economic crisis is not unusual. As an example, several exporters pointed out that Argentina was a large market until it collapsed.

5.2.2 Standards Approval

Another FTA-specific source of increased demand comes from the fact that agreements also require and facilitate the approval of different quality testing regimes. This means that demand comes not only from the price of the goods or the recognition of the brand, but also perception of quality for agricultural goods. Though the approval of testing regimes may be specific to the partner countries standards, more often the improvement in quality serves as an additional source of export ability to third countries as well. In unilateral trade preferences, there is no incorporation of technical assistance for standards.

Standards approval and assistance is very important to developing countries. There are numerous cases where an industrial country has blocked imports from a developing country because of toxins that the developing country cannot detect or cannot resolve. An example of this is when the EU found a toxin in imports of Nigerian ground nuts. The EU blocked their imports, which the Nigerians were incapable of disputing since they did

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⁷ In addition, the Doha round is focused on bringing developing countries into the system. This includes reducing their dependence on exceptions such as Special and Differential treatment (Finger and Wilson, 2006).

not have the capacity to counter-test. This same problem occurred with Peruvian exports of oranges to the United States (Nigerian and Peruvian Embassy interviews, 2001).

In the case of Chile, the U.S. required and assisted in Chile's accession to several different quality regimes. Regime approval affects not only exports to the particular country, but also exports to other countries that require similar standards. The process of approval will increase the export potential of all firms that need to comply with those standards.

5.3 NEGOTION PROCESS-BASED INCENTIVES

In this section, I attempt to reveal the ways in which the export incentives discussed above are integrated into the production decision. The 3 sectors I chose to highlight are all "new" exporters to the United States since the conclusion of the FTA. I focus on them because the dynamics of their decision to export are different from established sectors.⁸

The reason that new exporters are so attractive in a study of development outcomes is because of the evidence that once a firm begins to export, it will tend to continue (Bernard and Jensen, 2004b). Not only that, but it will also influence the propensity of neighboring firms to export (Krugman, 1992).

I chose 3 sector types to see how each can be most successfully targeted. The pork sector is internationally competitive, the dairy sector is regionally competitive and olive oil is a new product.

I begin by describing each sector in terms of its production choices, export experience, form of competition and treatment by and reaction to the FTA. I then consolidate their experiences to offer as additional set of export incentives embedded in the FTA process.

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⁸ The existing literature on why firms choose to export suggests that they are influenced by variables like entry costs, presence of multinationals (Aitken, 1997), and firm-specific characteristics like size and ownership (Roberts and Tybout, 1997). Preferential market access in an FTA affects all of these variables.

5.3.1 Case Studies

Pork

Pork is the first of the sectoral case studies. Firms in this sector produce an internationally competitive product with very strong sales in Asia and Japan. It has never exported to the United States as a result of a combination of very high tariffs in the highest value-added products and also a lack of USDA approval for their testing regime.⁹

Firms in the pork industry are highly vertically integrated. There are about 140 total producers, but the 40 members of the industry association, ASPROCER, are responsible for 92 percent of total domestic production. The largest 5 firms (measured by the number of sows) produce 75 percent of the total.¹⁰

Pork production in Chile has been increasing rapidly over the past decade (see figure 5.7). Chilean pork producers expanded production by 10 percent in 2005 and expect to expand another 14 percent in 2006 (USDA, 2005). All firms are expanding their productive capacity in response to growing international and domestic demand. Firms are also ramping up their capacity in anticipation of their move on the U.S. market.

FIGURE 5.7 PORK PRODUCTION

	Production	Export	Import	Per capita consumption
1990	123,170	1,646	0	(not available)
1995	172,410	2,755	979	12.1
2000	261,477	12,994	1,854	16.5
2004	372,845	78,794	751	19.0

Source: Central Bank of Chile, Ministry of Agriculture

Producers in this sector prefer to export because prices are much higher abroad. About 28 percent of production was exported in 2005 (ASPROCER) and exports (to all

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⁹ The attraction of Chilean pork on the international market is based mainly on Chile's isolation which enables it to maintain a relatively disease-free breeding area. The vertical integration of the industry is also attractive because it is easier to trace production, which is an important component of most international standards.

¹⁰ Agrosuper is 65% of this total.

countries) have increased by about 40 percent per year over the past decade. As a result of their preference to export, there is unfulfilled domestic demand in the lower-value pork products. So those pork-related industries that are not vertically integrated, like pork sausage, are importing pork (USDA, 2005).¹¹

Sales to the U.S. market before the FTA were zero. This was because the United States had not yet recognized Chile as being free from Classical Swine Fever. The U.S. tariff system also maintained high tariffs on the most lucrative cuts of meat. The process to gain approval of a carcass testing regime is costly and long. The Chilean Agriculture and Livestock Service (SAG) first applied for access in 2000. The process was not approved until 2005 (ASPROCER interview, 2006; USDA, 2003b).

In the meantime, Chilean pork producers developed their export capacity with the Asian market where they are able to meet high quality standards. The Asian market also pays the highest prices for high quality cuts (ASPROCER) and has unsatisfied demand (in South Korea, pork makes up 44 percent of daily meat consumption).

The U.S. FTA was responsible for removing tariffs on all pork products. Prior to the FTA, Chile faced U.S. tariffs on processed and fresh pork (with duty free access for frozen pork products). More importantly, it moved the standards approval process along.

The post-FTA outcome that had the greatest affect on pork trade with the United States was the approval of their testing regime. Though producers could not sell in the U.S. market before December 2005, many of them established sales offices in the United States before the FTA was signed.

Since Chile received authorization for its testing regime in November, 2005, category 0203.19.20 exports went from 0 to \$79,800 in the first 3 months of 2006. Agrosuper, the

¹¹ The Chilean domestic market bought imports mainly from Canada, apparently as a result of limited contact with U.S. producers (Global Meat Processing Magazine Article Nov. 9 2005).

largest supplier in this industry, estimates that exports to the United States from their firm alone will reach \$80 million in 2010, with an overall industry estimate of \$750 million.

According to an industry association representative, one of the biggest benefits of the FTA, aside from the tariff change, was that it changed the vision of Chilean farmers.

Now that they have accessed the U.S. market, Chilean producers are adjusting their production to expand their presence. Producers expect to begin exporting new cuts of meat as well as processed chilled cuts.

This sector is representative of others which compete on quality and are also already initially competitive. For these firms, tariff preferences may not be the most important consideration. It will take effort to redirect their exports or increase their capacity.

Dairy

The Chilean dairy sector is representative of those sectors with strong and growing regional presence but little access to the FTA partner market. Demand for dairy products is elastic and competition is based on price.

This sector has grown rapidly over the past decades, however, it remains small (Chile only accounts for 2 percent of world dairy exports), and Chile was a net dairy importer until recently. This sector began to produce for the export market soon after Chile negotiated a FTA with Mexico in 1999 that decreased barriers to that country. In the few years that Chile has been a net exporter of these products, they have sent most of their exports to Mexico. The reason that trade agreements are important is because in order to increase production, this sector requires a long-term program, which is impossible if market access is unstable (ASILAC interview, 2006).

There are very few firms in this sector. There is only one wholly-owned foreign firm.

The others are either joint ventures or Chilean owned. In 2005, there were 15 firms that

were exporting to the U.S. market (AmCham, 2005). ¹² Dairy is the one sector where there is evidence that foreign companies are investing in Chile with the specific purpose of accessing the U.S. market (food industry firm interview, 2006).

Prior to the FTA, Chile was subject to the tariff rate quotas (TRQ) that the United States favors for diary imports. For example, in 2001 Chile had a quota of 220 tons of cheddar cheese. All imports within that quota were subject to a tariff of \$0.35 per kg, the out of quota rate was \$1.23 per kg (USDA fact sheet). Most dairy products are highly protected with MFN tariffs, and few are covered by GSP.

Despite barriers to entry, Chilean dairy producers targeted the U.S. dairy market. The reason that the United States is such an attractive market is because it is the world's largest (and most highly protected) dairy market. In 2003, the price of butter in the United States was 80 percent higher than the world price of butter, and U.S. cheese prices were 42 percent higher than the world price (USDA, 2003a).

Under the FTA, all dairy products remain subject to a TRQ. The difference is that within-quota duties are zero, and out-of-quota rates are equal to or lower than MFN. Under the FTA there is also a 5-7 percent annual increase in the quota amounts (depending on the good) until the total elimination of quotas in 12 years. The reduction of out-of quota rates begins in 2011. The fulfillment of dairy quotas is growing quickly for most items (in 2004, rates were between 31-93 percent).

The FTA had expected outcomes on this sector. The industry association, ExporLac, credits preferential access with the competitiveness of this industry. They point out that without preferential access there are other countries in the region which produce dairy products more cheaply. Preferential access gives Chilean exporters not only access to new markets but also the incentive to quickly ramp up production and efficiency to be

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¹² These include Nestle, Penquehue, Coop Agricola, Watts, El Tronco, Comercializadora G.P., Las Rosas, Jorge y Mario Meyer, Buschmann, Memo, MGEE, Carlos Hugo Villavicencio, Santa Fe, Valleverde, Claudio Mejias.

able to maintain their advantage once the preference is removed. They are given the incentive and opportunity to become more productive.

Dairy producers have increased their overall productive capacity as a result of the FTA, because they continue to sell to the regional market and supply the domestic market while moving into the United States. The first year that the FTA was in place, dairy exports to the United States grew by 212 percent over 2003. Butter exports in particular experienced significant growth (AmCham, 2005). This ramping up is evident in terms of quota fulfillment rates (see chart below). In 2004, Chile filled only 32 percent of their available quota, by 2005 this increased to 70 percent.

FIGURE 5.8 FULFILLMENT RATES OF TRQS (2004)

	FTA quota	2004 fulfillment	FTA (In quota)	FTA (out-of-quota)
All cheeses	1432 metric tons (7% growth)	15%	0	1.055-2.269 per kg
Butter and Butterfat	300 metric tons (7% growth)	47%	0	1.541-1.996 per kg
Condensed and evaporated milk	489 metric tons	84%	0	
Other milks	452 metric tons (7% growth)	93%	0	0.70-1.865 per kg +8.5%
Milk powders	828 metric tons (7% growth)	50%	0	0.865 per kg

Source: Ochoa (2005), AmCham (2005), USITC Dataweb.

Despite the ramping up of production and increasing exports to the United States, Chilean dairy producers still face barriers because of the types of goods that they produce. The increase in exports to the U.S. market is mainly in condensed milk and butter. But the cheeses produced by Chile (mainly Gouda) are not popular in the U.S. market and so exports continue to be limited as those firms adjust to U.S. demand.

This sector is representative of other sectors that have experienced recent regional growth but compete on prices and so rely on market access to increase production and direct sales.

Olive Oil

This final sector case study showcases how the FTA affected export choices of a sector with extremely limited export sales and no experience in the highly competitive U.S. market for their product.

Olive Oil production was established many years ago in Chile (for the domestic market only). But it was completely wiped out in the 1960s as the result of a blight on the olive plants. This sector has only recently revived and has grown by selling only to the domestic market.

Since this product was first produced in 1999, growth has increased so much that this industry broke away from the industry association for processed foods. The growth of this sector was not self-initiated. In 1995, the Chilean Ministry of Agriculture gave \$550,000 to olive oil initiatives (bringing consultants and experts about growing methods and technology). The industry is not trying to create a commodity, but rather a premium product. It is highly supported by the government.

In 1999, there were only 2 firms involved in olive oil production, by 2004, this had risen to 20 firms and according to the industry association, ChileOliva, by 2005 the number of oil producing firms consisted of 29 companies. Most of these are small firms with small plantations. All of the firms in this sector are Chilean-owned.

According to the industry association, all firms are focused on the export market for future growth (though exports remain very low). ¹³ This focus is typical of a small developing country where the potential for domestic growth is particularly limited. The attraction of Chilean olive oil on the international market comes from the growing number of international awards it has won. ¹⁴ This sector is also working to exploit niche

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¹³ Of 2500 tons produced in 2005, only 210 were exported and these were mainly to Central America and Spain.

¹⁴ the Tercer Concorso Internazionale Oli da Oliva (Gradara, Italy), Sol d'Oro 2002, Salone Internazionale dell'Olio Extravergine di Oliva (Verona, Italy), Orciolo d'Oro 2002 & 2003 (Gradara, Italy), Cibus Med 2003, Salone dell'alimentazione mediterranea (Bari, Italy), Leone d'Oro dei Mastri Oleari 2003 (Italy),

markets, such as organics in the United States. According to a recent article, Agricola Valle Grande was the only Chilean producer of organic extra virgin olive oil to be certified by the USDA for sales in the United States. In order to gain this certification, there is a 3 year process of chemical analysis and site visits from inspectors.

The main constraint to continued or increased export to the Unites States comes from the fact that this sector is made up of small growers, and U.S. importers require large minimum shipments that they are not able to fulfill (industry interviews). The FTA has been part of a greater overall drive for increasing capacity. This is a small sector where producers are expanding as fast as they can. Not only because of the FTA with the United States, but also because of regional demand.

Export growth following the FTA was exponential. Exports in 2004 grew 1100 percent over 2003. Increased exports to the United States involved some diversion of production that was previously sent to Argentina (industry interview). The reason for this is that there is a 3- year lag before a planted grove yields olive oil and firms wanted to take advantage right away.

The outcomes of the FTA include both increased exports to the partner country and also an increase in product diversity. The new goods exported in the olive oil sector were 1509.10.20 and 1509.10.40. Most of 1509.10.40 was imported under MFN rather than the FTA rates. 1509.90.20 was exported in 2004 but not in 2005 or 2006. Exports of 1509.10.20 in the first 3 months of 2006 were 50 percent more than all exports of this product in 2005.

5.3.2 Additional Incentives

These 3 sector case studies suggest that in addition to traditional market access outcomes and institution-specific features, there are also incentives that are specific to the

2003 olive oil of the Americas Competition (California, USA), Sol d'Oro 2003, and Premio BIOL Internazionale 2003 (Andria, Italy).

negotiation process that promote exports and diversity in a way that non-negotiated preferences will not.

Re-orientation of Established Exporters

One reason for diversification is that the FTA can re-orient producers to the partner market. This was an intangible but explicit goals of the Chilean negotiators. The head negotiator pointed out that the export orientation is necessary to maintain growth. According to him, "duty free treatment is not as important as changing the minds of producers," (Cepal interview, 2006).

Especially where exports had been prohibited artificially, re-orientation can lead producers to reconsider sales regardless of their existing buyers. Pork, for example, had not historically considered the U.S. market because of the existing barriers. The finalization of the FTA led them to reconsider it as a source of growth. This is in contrast to Olive Oil which has focused on the U.S. market since the beginning.

This effect does not exist in unilateral preferences because they do not involve any industry input and their impermanence generally fails to attract established producers.

Re-orientation is a combination of publicity about the agreement and the negotiation process where industry associations ask for members' input in order to lobby. It also comes as related sectors begin to export in earnest, thus bringing along others (e.g. food and plastics from Chapter 4).

Information Flow

A second way that an FTA affects exports is through an outcome I call "brand recognition" and it is the result of public relations. When a FTA is signed, the developing country gains recognition in the industrial country through the mention of the agreement in the popular news. The FTA acts as a signal to importers and consumers that goods from that country are desirable (U.S. Department of Commerce interview, 2006). According to a U.S. trade negotiator, this was extremely important in the CAFTA

case, where the political debate in the United States served as essentially free promotion for those countries (U.S. Department of Commerce interview, 2006). According to a negotiator on the U.S. side, this was also true for NAFTA where there were plenty of firms that were seeking NAFTA treatment even where they were not qualified, since they had heard all the hype.

This was an important source of incentive for the dairy sector. This sector has almost no brand recognition in the United States. However, buyers were willing to try their products because they had heard of Chile.

Because unilateral preferences are so much less controversial than FTAs, there is generally very little press surrounding their re-approval. In addition, the fact that countries have unilateral preferences is a signal that they are among the least developed. This is important because as Chinen et al (2000) point out, there is a positive relationship between consumer's willingness to buy and the level of development in that country. Underdevelopment is associated with poor quality products. The salmon producers association pointed out that the biggest gain of the FTA was that consumers now see Chile as a high quality producer of that good (SalmonChile interview, 2006).

5.3.3 Typology and Conclusion

There is no question that this feature of FTAs can be manipulated to attain target outcomes, since that is the nature of preferential market access.

In this chapter, I offered case studies of 3 Chilean sectors that are new exporters to the United States following the implementation of the FTA. I chose these 3 cases based on the goals of market access which target the development of new exporters and the diversification of exported products.

The innovation of this study was not to detail the outcomes of preferential market access

– they are already understood – but rather to produce an industry-based typology to

predict the short term outcomes of market preferences based on existing export

conditions. Often in the literature on market access governments and scholars alike assume that lower tariffs will automatically promote exports. Here I showed that in the case of Chile, the majority of the explanatory power resided with sector-specific characteristics, not the degree of access.

The typology that this analysis suggests is one which ties the export experience and product diversity.

Export experience

In terms of export experience, the typology suggested here indicates that the more extensive export experience a firm has (e.g. pork, which is internationally competitive) the slower they will be to re-orient themselves to the partner market. These firms will require more than just preferential rates to access a given market.

Smaller exporters which are sending mainly to the region, or who have not yet gained established buyers are likely to target the market as soon as the preference is typed into the customs computer. This is particularly the case when the partner is the United States. In addition, it is the new exporters that incorporate the highest benefits from the increased certainty and decreased risk associated with an FTA-based access program.

Learning the market

In addition to rapidity of response, the other outcome that was important is export diversity. I showed here that diversity that results from free trade agreements is generally around existing products. For the firms here, this was the result of a learning function and existing connections to the U.S. market. There has been some treatment in the economics literature about the importance of group ties for international trade outcomes (see e.g. Casella and Rauch, 2002). The typology here appears to support this.

All of the firms diversified the products that they were sending to the U.S. market fairly rapidly. Those firms that were able to diversify most quickly (from zero exports) were those which had some connection to the market, either through relatives or pre-FTA sales

offices. In the case of olive oil the first firm to export there was able to do it because he knew a distributor in New York that was willing to sell his products.

This chapter was meant to provide a suggestion of the features of the FTA process that enabled it to yield export and production diversification outcomes where similar preferences did not. The unique outcomes are not only the result of structural aspects of the FTA itself, such as the permanence of the preferences, but they also stem from the way that different firms incorporate the incentives offered by the FTA. The typology offered above was meant to capture some of these channels. New exporters that are uncertain about their competitiveness in the international market will tend to take advantage of preferential access as soon as it is available to them. Firms that are already competitive require more convincing.

In the next chapter I turn to look at a feature that offers to support some of the firms that are least able to compete in the partner market. Though it is very difficult to nurture infant industries in the current environment, the following feature suggests a way.

CHAPTER 6 TRADE CAPACITY BUILDING

This chapter is the final component of the case study of the U.S.-Chile FTA. Trade Capacity Building (TCB) is the most intentionally developmental feature of the 3 described in this dissertation. It is explicitly intended to both improve the governance capabilities of the implementing authority and also enable that authority to target production incentives to specific sectors. Because TCB is, by nature, a targeted incentive, rather than look at its potential outcomes and incorporation into the production process, I instead use this chapter to examine the extent to which the developing country is able to independently define the targets of the assistance.

TCB programs are not unique to FTAs. Rather they are a particular class of technical assistance programs that are intended to improve the ability of governments, firms and civil society in developing countries to design a trade strategy, participate in international negotiations, and increase exports in line with targets (OECD, 2003).

What makes TCB in U.S.-based FTAs unique is the negotiated nature of the project design process. By enabling the developing country to dictate the direction of aid, it facilitates its use as a development tool. Most other technical assistance programs are designed and administered by the granting authority and so cannot be manipulated to fit the goals of the beneficiary country

Before 2003, the process of attaining TCB assistance through a U.S. FTA was opaque. The informality of the process made it impossible to accurately evaluate the ability of the developing country partner to direct assistance to target sectors. This evaluation problem has been addressed in recent FTAs with a formalization of the funding process. Since 2003, TCB has been included as a discrete chapter with its own negotiating structure.¹

¹ This is only for the U.S. case where the TCB negotiating structure was subject to significant centralization and transparency adjustments beginning in 2001.

The formalization of this procedure enables me to evaluate, for the first time, the extent to which it can serve as a tool as opposed to simply a form of assistance.

I test the hypothesis that the negotiation process transforms FTA-based TCB from aid into a strategic tool for development. I do this by matching outcomes to national strategy goals. I do this in 2 stages as a result of recent changes in the negotiation process.

Section 1 begins by describing a selected set of established technical assistance programs. Established programs are generally successful in attaining their targeted goals. However, often these goals are often politically motivated, and do not improve utilization rates of preferences or participation rates in the international institutions.

To contrast, I turn in Sections 2 and 3 to highlight how FTA-based TCB differs from existing programs. I do this in 2 stages that exploit the discontinuity in the formality. First, I continue with the U.S.-Chile case study to show that in that case, TCB was in line with Chile's existing development goals. This agreement was negotiated using the obsolete informal process and so while it provides an example of the outcomes from TCB, it reveals nothing about the negotiation process. Because of this, I cannot make conclusions about the ability of the developing country to influence funding based on their own development targets. I simply show that given Chile's articulated goals, the projects are complementary.²

To show that the negotiating process enables ownership, I turn in section 3 to look at several countries which negotiated their FTAs using the formal TCB process. In these cases, the agreements are too new for the projects to have been enacted, but the availability of documented national development strategies enables me to match the government's targeted goals with those which are scheduled to be funded. This shows

² Causality is particularly problematic in the Chilean case since the majority of post-TCB funding was in projects that are politically popular with the U.S. government such as labor and environment. These are also largely in line with Chile's own goals, but it makes isolation of the cause impossible in the absence of documentation.

both the scope of the types of projects that are available through this channel and the malleability of the funding process.

The main finding in this chapter is that the higher degree of participation the post-CAFTA process requires endows the developing country with space to determine support for target projects.

6.1 INTRODUCTION TO TCB

The reason for technical assistance in general, and TCB in particular, is that developing countries often lack the capacity to design and maintain a policy environment that will enable them to reap the benefits from trade (OECD, 2001). While technical assistance programs have existed for many years, for most of the post-WWII period they focused on poverty alleviation.

Since 2001, programs have begun to more regularly include recipient participation, and moved to a focus on social capital (Shaffer, 2005). This was the result of recognition by the international institutions that countries cannot absorb the benefits of free trade without proper planning and capacity. In particular TCB in the current international regime provides assistance to both governments and firms. Technical assistance to governments is intended to help them to implement their existing international obligations, while firm-based TCB is intended as adjustment assistance.

Following, I highlight 3 prominent sources of TCB – the U.S. Government, the World Bank, and the WTO to show that they have reflected this paradigm change.

USAID

Of these 3 programs, the U.S. government program (USAID) is the oldest. The U.S. Agency for International Development was originally created in 1961 through a reorganization of U.S. foreign assistance programs by the Foreign Assistance Act. It was the first organization to focus primarily on long range economic development and social

assistance plans. Though its various channels, the United States is the largest country-based technical assistance funder in the world (USTR, 2005 press release)

Though USAID funding is not specifically for TCB, it is involved in a number of trade projects such as recent participation in a multilateral project to link poverty reduction strategies to aid through the Integrated Framework (USAID interview, 2006). In addition, USAID has begun funding programs aimed at export diversification, giving governments the skills to meeting international standards, and improving the capacity to take down trade barriers (Natsios, 2005).

The programs funded by USAID are tied to foreign policy objectives. When former President G.H.W. Bush announced that poverty alleviation was a foreign policy priority, funding for these programs increased. The explicit political ties of USAID funding attenuate its influence among developing countries. An official pointed out that though USAID has offered its assistance to developing countries in the design of their national strategies, the entire Andean group declined.³ The agency itself has also noted the struggle involved in integrating USAID development goals with the needs of international trade negotiations, since they are, in essence, training the "opposing team" (USAID interview, 2006).

World Bank

The major focus of the World Bank since 1995 has been on poverty reduction. The World Bank's expansion into trade-related policy and programming has been recent (InterAction, 2005). This institution is increasingly implementing programs designed to "help developing countries adjust to trade liberalization and enhance their capacity to take advantage of more open markets," (World Bank, 2005b). For example, it has increasingly devoted resources to its role in the Integrated Framework for Trade Related Technical Assistance to Least Developed Countries (IF).

³ Though assistance was accepted in the case of some of the CAFTA countries.

WTO

Individual WTO agreements arrange for technical assistance to be provided in response to a request by the developing country (Michaloplous, 2000). However, the WTO itself offers little direct technical assistance. Capacity building is intended to be used to increase countries' participation in negotiations, facilitate the implementation of WTO rules, and enable them to adjust and diversify their economies (General Council Decision, July 2004). Rather, the idea is that international institutions will provide the assistance functions. Technical assistance is mainly intended to help countries to offset the substantial costs of implementing the WTO agreements (Finger and Schuler, 1999).

The 1996 Singapore Ministerial introduced the Integrated Framework for Trade-Related Technical Assistance to Least Developed Countries. This program is meant to assist the least developed countries adapt to free trade and involves the collaboration of international agencies and bilateral donors. However, according to the WTO itself, early results were disappointing (WTO, 2001).

Despite its lack of internal TCB, the WTO has significantly changed the nature of international aid. Participating countries in the Doha Development Agenda noted the "urgent necessity for the effective coordinated delivery of technical assistance." There were 4 elements of the Development Dimension – Fair Trade, Capacity Building, Balanced Rules and Good Governance. The Doha Declaration pointed out that technical co-operation and capacity building are "core elements of the development dimension of the multilateral trading system," (Doha mandate, Para. 12). The Doha mandate has had important international repercussions for TCB in all of the international institutions. Since the beginning of the Doha Round, assistance for trade capacity building has increased by 50 percent (OECD, 2005b).

Despite these changes, there is no evidence that WTO-based TCB actually leads to developmental outcomes. In fact, Shaffer (2005) points out that some of the WTO TCB programs may actually hurt the developing countries if they cause them to more rapidly

⁴ Doha Ministerial Declaration (2001), Paragraph 39, under Technical Cooperation and Capacity Building.

implement WTO agreements that are not beneficial to them like TRIPS.⁵ Hoekman (2005) specifically questions the importance of Cambodia's rigorous implementation of TRIPS in relation to the other uses for its human resources.

In the next sections, I turn to TCB as it exists in FTAs to show that this has a different dynamic than the programs described here.

6.2 TCB PROJECTS ADVANCE DEVELOPMENT

TCB in U.S.-based FTAs works slightly differently from other programs that share similar incentive structures. The difference comes from the design process. As we saw in the previous discussion, in most technical assistance programs, the project is defined by the goals of the funding entity. This is generally because the goal of capacity building is to help the target to comply with different features of institutions or take advantage of different preferences programs. This is changing but only very slowly.

In FTAs, however, the set of partner countries is very small, and often a singleton. This makes it easier to define the problems facing the particular economy of that country. In addition to this fact, the nature of technical assistance in FTAs is inherently demand-driven.

Though the amount of funding to FTA-based TCB is not necessarily significantly different from pre-FTA funding levels, it exhibits a change in the nature of the projects. The reason that there may not be a discrete jump in aid following an FTA is because FTA-based funding often begins before the agreement is completed (e.g. to train negotiators).⁶

⁶ In Colombia, there was a large increase in TCB directly because of the FTA (U.S. Department of Commerce interview, 2006).

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⁵ Relatedly however, a representative of AOL-Time Warner pointed out that for them to invest in a country, TRIPs is the absolute minimum standard they will accept (AOL-TW interview, 2002). They charge in particular that the WTO-based standards do not meet their needs to digital treaties.

In this section, I use the TCB outcomes of the U.S.-Chile FTA to show that, in that case, the funding channeled through the FTA supported the overall goals of the country in a way that promoted trade with all countries, not just the United States.

6.2.1 History of TCB in FTAs

For most of its history, TCB was an informal component of U.S. FTAs. There was no separate chapter in the FTA, there was no negotiator assigned to that topic, and there was no formal discussion about it. Informally, however, technical assistance resulted from the TCB negotiation process.

During negotiations, U.S. negotiators often understood, or were told by their counterparts, that the partner country was incapable of implementing certain elements of the FTA to which they had agreed. In this situation, information was presented to individual negotiators who were then responsible for determining how to fulfill the aid request using their own network of contacts.

The informal nature of this TCB process was inefficient for both negotiating partners. The developing country negotiators were often not sufficiently coordinated to know what was being done in each sector of the economy. As a result, it was common for TCB to be requested in an area where it was already occurring (USAID interviews, 2006). This led to inefficiency on the U.S. side where different donor agencies had to cross reference each other to figure out what projects were being funded and by whom.

The U.S.-Chile FTA was negotiated in this informal environment. There was no interagency TCB committee and no TCB chapter in the trade agreement. However, Chilean negotiators suggested a number of TCB projects in the context of various chapters of the trade agreement. According to Chilean negotiators, projects on agriculture and the environment were intentionally designed in a way that both met U.S. priorities and accomplished Chilean economic goals (Chilean Government interview, 2006).

⁷ A U.S. negotiator confirmed that there were an initial 8 projects all of which were suggested by the Chilean side (U.S. Department of Commerce interview, 2006)

6.2.2 Evidence from Chile

The TCB that came out of the U.S. Chile-FTA included training and capacity building measures cement their advantages in processed natural resources. More than 85 percent of Chile's exports are based on natural resources. The Chilean state has determined that its comparative advantage is in natural resources, so by strengthening their advantage in this sector, they move their development goals forward. The chart below lists the value of various aid projects in Chile from 1999-2005. The bold vertical line separates pre and post FTA periods.

FIGURE 6.1 TCB FUNDING TO CHILE

	1999	2000	2001	2002	2003	2004	2005
Trade Facilitation	250,000				19,801		112,838
Environment					47,801	288,136	2,300
Labor Standards				150,000	1,200,000		
Infrastructure	106,000	214,000				76,160	792,583

Source: USAID TCB database

In terms of the amount of funding, there is a noticeable increase in the FTA period. Though the chart is for general funding, it is possible to separate out which was FTA targeted. In 2003, half of TCB projects are related to the FTA. All of the projects in 2004, except for 1 are part of the FTA. By 2005, only 1/3 of the projects were related to the FTA. This indicates that FTA-associated TCB in the old system was limited to the years surrounding the FTA.

The following chart details all of the TCB projects that were specifically tagged as being in support of the FTA. They are all either environmentally or agriculturally related and benefit 2 of Chile's main export industries – wood products and agricultural products.

⁸ The Bachelet government has noted that it wants to make Chile a leading world food producer (Bradley, 2006).

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FIGURE 6.2 PROJECTS IN SUPPORT OF FTA 2003-2005

	Title	description
2003	Environmental Enforcement Case Development Training	Training Chilean officials to enforce environmental laws
2003	Environmental projects	Cooperation to define TCB in environment.
2004	Agricultural Best Practice	Workshops on agricultural best practices
2004	Chile FTA	Conduct an environmental enforcement seminar
2004	Improving environmental enforcement and compliance assurance	Enhance Chile's enforcement of its environmental laws and regulations
2004	Improving environmental enforcement and compliance assurance	Focus on administrative actions to recover compensation for environmental damage
2005	Agricultural best practices	Training and software to reduce pollution
2005	Environmental enforcement workshop	Recovering damages from problems in natural resources

Source: USAID TCB database

To put this in context, Chile's efforts to promote environmental standards have been recognized throughout the world. Chile is a signatory of more than 20 international agreements which focus on environmental protection and sustainability. In 2005, an OECD study praised Chile's work on these standards and noted that it has made significant progress in the past decade in particular. And while the government has signed onto a number of environmental agreements, management continues to be a problem. This is where the FTA is particularly helpful.

Its adherence to environmental standards is a component of its competitiveness in its U.S.-bound exports. According to both negotiators and wood industry officials, in several sectors, U.S. consumers choose products, at least in part, based on how they affect the environment.

The aid that fell into the category of environment included a number of diverse grants, assistance, training and projects. In 2003, this consisted of defining technical assistance needs, assistance in assembling a pollutant release and transfer registry, and training on how to deal with prosecution of environmental cases. In 2004, projects included

environmental assessment, a capacity building workshop on enforcement and compliance, workshops on environmental best practices, emissions control studies, and an exchange program for officials involved in environmental compliance. In 2005, projects included an information exchange about environmental damage recovery, and promotion of sustainable agricultural practices.

There are also a number of other sources of aid that specifically transfer technology to the agricultural sectors such as training in grading bovine carcasses. These training programs have also been a key means of building up the export ability and skill of firms in these industries (see figure 6.3)

FIGURE 6.3 SPECIFIC PROJECTS UNDER THE ENVIRONMENTAL CHAPTER

Project	Description	Status
Pollutant Release and Transfer Register	financial and technical support for a catalogue or register of releases and transfers of potentially harmful chemicals.	done
Environmental Enforcement and Compliance Assurance Improving Agricultural Practices:	Workshop explaining the difference between US and Chilean systems of environmental enforcement 2 workshops on best practices	done
Reducing Methyl Bromide Emission	Study tour of Chilean officials to US to observe agricultural sites in the U.S. that have transitioned to alternatives to the agricultural fumigant methyl bromide, which both countries must phase out under the Montreal Protocol on Substances that Deplete the Ozone Layer	done
Reducing Mining Pollution study tour of Chilean government, mining industry and academic representatives, and a workshop in Chile, focusing on approaches to establish financial mechanisms for environmental remediation of mines.		initiated
Sharing Private Sector Expertise improve their environmental performance. The project will target the forestry and pulp and paper industry		initiated
Improving Wildlife Protection and Management	Scholarships for students and funding for the establishment of a graduate program at a Chilean university on environmental management.	

Source: USAID, 2005

The U.S.-Chile FTA has also facilitated export growth in wood and pulp products to the United States, and has facilitated the ability of extractive industries and financial sector

private corporations to move investment and goods (Hughes, 2005). Compliance with environmental standards also enables the Chilean industry to differentiate itself in the U.S. market, which is heavily covered by Canadian imports.

This section illustrated that TCB can be used to cement the existing comparative advantage of the partner country. Chile used TCB to address concerns about enforcement and sustainability. TCB enabled the government to shift costs to donors for projects that the government would have ultimately had to undertake unilaterally.

6.3 DEFINING THE TARGETS

TCB in FTAs became more explicit and centralized in the years following the launch of the Doha Round in 2001. Not only did the United States need to be able to account for all of the TCB it was funding, but it also began to negotiate with progressively less developed countries that required additional assistance and guidance. Some changes in the structure of the TCB process included the establishment of a database under the auspices of USAID to make it easier to track programs and funding. There was also centralization with the appointment of an Assistant USTR for TCB in 2002 whose office is responsible for all TCB negotiations.

In this section, I begin by explaining the background of the changes to technical assistance that were initiated in the CAFTA process. This history is largely taken from interviews with U.S. government officials. I then offer the experience of Colombia in the U.S.-Colombia FTA that was negotiated in 2005 as a contrast to the informal methods used in the U.S.-Chile FTA in 2003. Finally I discuss exactly how this change can be used to the advantage of the developing country partner.

6.3.1 Changes

Before the CAFTA negotiations even began, the U.S. side realized that the countries simply did not have the capacity to implement many of the components of the upcoming FTA (USAID interview, 2006). They were also aware of the problems associated with

the existing approach which made sequencing (i.e. the fact that some projects need to be completed before others can begin) difficult. As a result, the summer before the negotiations, the Trade Capacity Building Working Group was created. This group is an interagency committee consisting of both U.S. government officials, NGOs and representatives of donor agencies.⁹

The strategy though which TCB was requested was formalized. Each partner country designs what is referred to as a "national strategy," which is a single document prepared with input from all of their domestic ministries which defines government priorities clearly. These strategies are designed by the developing country partner, and consist of all of the projects they would like to receive aid for. ¹⁰ The U.S. government and other donors then evaluate these lists and decides on which elements can be funded.

The purpose of a national strategy is to focus aid on projects that assist the country to implement the FTA obligations and make the transition to free trade. Some countries interpret this more broadly than others. In the case of CAFTA, each country was paired with a donor to help them write their national strategy, since the countries were not sure they had the ability to do so.

In the opinion of the Director of Trade Capacity Building at USAID, it is very possible to use this opportunity in a strategic way. The director offered the example of El Salvador which submitted a very strategic and comprehensive national strategy. On the other hand, Honduras was basically a laundry list (see chart below for an excerpt of exactly how the strategies are written and appear). Though each strategy follows a 3-part format, according to USAID, most of the funding is in the third element of the strategy.¹¹

⁹ For the CAFTA, the working group included groups such as USTR, USDA, USAID, USTDA, U.S. Department of Commerce, IDB, OAS, ECLAC and the Central American Bank for Economic Integration

⁽USAID, 2004).

The developing country ministries that design these plans depend on the country. In Thailand, it was the SME promotion office, while for most of the Central American countries it was their individual Ministry of Industry (U.S. Department of Commerce interview, 2006).

After a general overview of the institutions and trade policy strategy of the country, the strategy itself consists of: 1) projects to aid in the preparation for the negotiation process, 2) identification of where donors can help them to implement the trade agreement, and 3) how donors can help the economy adjust to and take advantage of free trade.

FIGURE 6.4 COMPARISON OF NATIONAL STRATEGY FOR SPS

El Salvador (exemplary)

The [Salvadoran] SPS regulation came into force in 1999....

The Central American Regulation on SPS goes more in depth in some issues than does the WTO SPS Agreement...

The SPS regime is administered by... Various areas of improvement were identified in the SPS area:

- Enhanced knowledge of SPS requirements in the main trading partners
- Survey of technical guides/Risk Assessment Procedures/regulations/processes of quality control for fruits/vegetables/fishery and agricultural products
- Capacity building for firms that process agricultural products for export to enable them to fulfill the technical requirements established by the importing country, with particular attention to those in the United States
- Strengthening the national SPS enquiry point
- Enhanced awareness of the disciplines and framework in the WTO Agreement on the Application of SPS

Honduras (checklist)

There is a need to improve means of communicating relevant information on foreign SPS measures to domestic exporters through the Internet as well as communicating such information on Honduran measures to international trading partners. The accredited laboratories testing animal and vegetable health as well as food heath safety for human consumption need to be modernized. There is a need to increase the number of accredited laboratories, improve the level of technology utilized in these labs, and increase the training of lab workers. There also needs to be a more focused strategy to work on the eligibility requirements for entrance to the US market.

Capacity building issues	Priority
Computerized System for Information Dissemination to the	1
Public	
Increased Cooperation from Comparable International	2
Bodies	
Modernization of Existing Laboratories	1
Installation of New Accredited Laboratories	1
Improved Skill Levels of Existing Personnel	2
Hiring and training Qualified Technical Personnel	1
Create and implement focused eligibility requirements	1
process for entrance to the U.S. market	

Source: USTR

The experience of writing this strategy itself has numerous positive externalities for the developing country. All of the literature on trade capacity building suggests one of the first things that should be done is an assessment of the existing institutional and policy structures in place. This basic information is necessary for a country to efficiently channel other types of TCB that exist.

The gains that we see from using National Strategies are parallel to those suggested by Finger and Wilson (2006) in their paper on trade capacity building in the WTO. Specifically, they advocate for more extensive use of the Trade Policy Review Mechanism as a way to both bring ownership of the technical assistance targets to the developing countries and also to assess where it would be most productive.

6.3.2 Colombia's National Strategy

Colombia began negotiating the U.S.-Andean FTA in 2005. Because of problems with other regional members, in February of 2006 the United States signed interim agreements with both Colombia and Peru. These are, for all intents and purposes, simply bilateral FTAs. The fact that Colombia began negotiations under the new model of TCB means that it provides a clearer picture of the model that is relevant for developing countries today. In this section, I will detail the process through which countries design their national strategies, and are presented with TCB assistance. At each of the 3 steps I will explain how it can be used strategically.

The first step of the TCB negotiations is the drafting of a National Strategy. Since the national strategy is the blueprint used by the donors, this document is extremely important to the submitting country. Colombia's *Estrategia Nacional Para el Fortalecimiento de las Capacidades Comerciales* is 67 pages long. It includes 4 chapters – General Economic Situation, Participation in Negotiations, Implementation Issues, and Adapting to Integration (short term and long term). ¹³ Each chapter then consists of a

¹³ N.B. this document is in Spanish, all titles are translations.

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¹² The USTR has, for public relations reasons having to do with negative public reaction to NAFTA and CAFTA, begun calling new FTAs "trade promotion agreements." There is no substantial difference between trade promotion agreements and FTAs, so I do not adopt their convention here.

number of subsections which describe both the current operating situation (including current assistance received), and where capacity is needed.

Overall, the document identifies 4 strategic areas where assistance is requested – ensuring all segments of the population benefit, preparing the government to administer the agreement, enabling the private sector to respond to international markets, and improving exports. The expansion and diversification of exports as well as the consolidation of new sectors are mentioned as goals of the strategy. This level of specificity is an important feature. According to U.S. government officials, Colombia received funding for the majority of projects it requested. One official specifically targeted the national strategy as one of the reasons for this.

The second step of TCB negotiations occurs when the donors group meets to discuss how they can fill the requests in the national strategy. In the case of Colombia, they have a well-intentioned legal structure, but implementation and enforcement is problematic. As a result, donors were most interested in funding these types of issues.

The Colombia FTA includes less market opening than most. They were able to maintain barriers on sensitive sectors such as sugar, poultry, and rice because they argued that they could not open these markets since farmers would turn to growing illicit crops. However, these are also the same markets that are regularly targeted for growth. Because the Colombians were not opening these markets, they were also not able to ask for support to target them.

The third step is the actual implementation of projects. Because the U.S.-Colombia FTA was completed in 2006, few projects have been implemented. ¹⁴ According to the USAID TCB database, of the 4 target areas where funding has been requested, assistance has been forthcoming in all of them. This suggests that at least initially, funding meets the goals set forth in the national strategy.

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¹⁴ And according to a 2005 GAO report, U.S. agencies are not systematically tracking the implementation or effectiveness of their TCB projects, so a project evaluation study is not yet feasible.

The Chile example showed us that TCB can match national goals. The Colombia example was meant to show that the process of TCB enables countries to channel TCB where they feel it will be most useful. In practice this has meant not only that they request funding to implement the agreement, but also that they use the funding to target assistance to sectors that are not yet able to take full advantage of free trade.

In the following sections, I will show some examples of how both Colombia and other countries have successfully used TCB to target particular industries and national goals. These projects advance industrialization in ways that might not be feasible independently from the FTA.

6.3.3 Outcomes

In this last section, I return to the projects that countries are requesting in the TCB chapter of their FTAs to illustrate how they fit into the developmental context. The targets that the developing countries are pursuing are largely intended to support existing comparative advantage and to enhance government capacity. Below, I look at these 2 goals of TCB and highlight the ways that the developing countries are using TCB to further industrialization.

Government Capacity

Government skills building is an important component of industrial policy. In the World Bank's East Asian Miracle Report (1993), it warned against other countries trying to follow the policies of the Asian Tigers because other countries lack administrative capacity to do so. This element of FTAs directly addresses this concern.

Training for government and customs officials on how to gather and analyze trade data enables governments to better understand their industries and what kinds of help they need to become more competitive. This is key because the building of administrative competence and information is one of the pillars of a successful industrial strategy in today's regime (Lall, 2004). This transfer of knowledge to the government gives

countries ownership of their development plans which, as Gupta et al (2006) noted, is a key determinant of the effectiveness of the assistance.

FIGURE 6.5 EXAMPLES OF PROGRAMS FOR EVALUATION

	Title	Goal
	Training to tax authorities to improve audit and collections	
Honduras	Trade, Investment and Competitiveness Policy Support	to strengthen the national capacity for trade, investment and competitiveness.
	Develop internal control systems to enable audits by Colombia authorities	
Colombia	Colombia enterprise development	Identifies potential export markets
	Thailand competitiveness initiative	to promote competitiveness and international trade capacity
Thailand	e-customs modernization	

Source: USAID TCB database

The above chart provides some examples of TCB programs in various U.S.-FTAs that are meant to improve the governance ability. Not only do they strengthen national capacity, but also evaluation skills which contribute to long term growth.

Targeting Firms

The second channel through which the TCB process can contribute to industrialization is that it gives governments a way to support targeted industries in a way that is WTO-compliant. This degree of "picking winners" is uncommon in other capacity building measures. It works by absorbing some costs associated with the need to evaluate the potential of sectors in the economy when allocating resources, and by absorbing some of the costs associated with the need for firms to build technical capacity in their efforts to become more productive and learn to produce for the international market.

According to a U.S. Government official, there is a disagreement between different departments of the U.S. Government about the utility of picking winners. Some departments think it is important to focus on particular industries and sectors, while others, like USAID, will only support non-discriminatory aid. In the cases where winners are picked, sectors are selected in consultations with U.S. Embassy staff on the ground in the country. An example of TCB that emphasized specific sectors is in figure 6.6 and also the Dominican Republic where TCB emphasizes the "top 10 industries with growth potential."

There are several ways that TCB enables governments to promote certain industries. The first is that some projects promote production specifically directed towards export markets. The second is that some projects undertake market analysis and infrastructure development targeted at certain sectors. The third is that TCB almost always includes projects meant to help firms meet international quality standards. This in particular has large externalities for firms that can access export markets

FIGURE 6.6 EXAMPLES OF PICKING WINNERS IN TCB FUNDED PROGRAMS

	Title	Goal
Honduras	More competitive market oriented private enterprises	Improve the exporting capacity of rural SMEs through diversification, productivity and quality.
Thailand	Thailand competitiveness initiative	Works to promote international competitiveness in a variety of economic sectors – agriculture for export, tourism, gems for export etc.
Colombia	Establishment of SME risks capital fund	The fund will concentrate on SMEs that export or have the potential to compete in the international arena.

Source: USAID TCB database

The above chart provides some examples of TCB programs that directly support particular sectors. We saw in the national strategies that often aid is requested for specific sectors. The ability to direct TCB to certain sectors or industries has 2 implications. First, if the government is strategic, it can gain TCB assistance for infant industries to help them learn to export and gain better technology. Second, it can be used

to transfer technology to established sectors to secure their competitiveness (e.g. through meeting higher standards or becoming more efficient)

The other industrial contribution that TCB can have comes from sector or industry based programs that transfer technology directly to the picked winners. This is the case where assistance is given to help firms fulfill international quality standards. These standards may be necessary to help the firm to fulfill its obligations to the partner country, but will also have positive externalities by enabling the firm to use these standards to export more on the international market.

Technical assistance for trade capacity is an established form of special and differential treatment that is available to developing countries. Unlike the other features if FTAs that I have examined in this dissertation, this feature is difficult not to use strategically. The design and negotiation process are such that the government learns where its weaknesses lie and receives funding directly aimed at those areas. This feature also allows FTAs to be used to target individual sectors in a way that is generally discouraged in other venues. The current form using the national strategy approach helps address the coordination problems that often exist.

CHAPTER 7 SYNTHESIS AND CONCLUSIONS

This dissertation set out to establish that asymmetric FTAs enable the developing country partner to operationalize strategic development incentives that yield similar outcomes to many now-prohibited industrial policies. In order to examine this contention, I completed 3 inter-related analyses. First, I had to show that FTAs *could* have the outcomes I was suggesting. Next I had to show that they *did* have these outcomes, at least in the case of Chile. And finally I had to be able to show *why* firms reacted to the FTA-based incentives differently than they did to similar alternative incentives.

To accomplish these steps, I used a specific case study of several selected features of the U.S.-Chile FTA. By studying the incentives and outcomes of a single FTA, I was able to look closely at how specific features of that agreement interacted with existing international parameters and the domestic commercial environment to produce trade and development outcomes.

The conclusion I reached was that, in the case of Chile, the FTA served as a tool to generate targeted development outcomes. I also showed that the incentives that were built into the FTA are not fully self-executing, and so this FTA might have yielded even larger commercial outcomes if the government had enacted complementary policies. This insight has important policy implications that I discuss here.

Below, I go through the conclusions of each chapter and how they contribute to both the overall theory and each individual hypothesis. I then embed the conclusion in the context of the 3 themes of this dissertation to show how they expand the literature in each case. Finally, I discuss policy implications.

7.1 CONCLUSIONS

The analysis in this dissertation attempted to answer the question of why developing countries, which have exhibited a distaste for regulation, have been forming FTAs in so enthusiastic a manner. The majority of the political economy literature on FTAs points to their function as a regulatory institution that is used by industrial countries as a tool to accomplish their economic and political goals. Authors who have attempted to explain why FTAs are popular with developing countries tend to highlight states' desire not to be left out and their interest in achieving preferential access to the partner market. These explanations account for the frequency of FTAs, but do not address the question of regulation.

I took a slightly less commercial perspective and argued that the increase in regulation required in a FTA is accompanied by features that return some policy making independence to the developing country partner. The developing country can use this to generate commercial outcomes that it was not able to realize through its WTO commitments. I attempted to define this policy space by discussing how 3 particular FTA features provided incentives that were unique both in their presentation and in their incorporation into firms' commercial decisions.

In the chapter on rules of origin, I showed that they are an unbinding constraint that can be used to strategically promote production. In order to highlight how it did this, I worked backwards to ask why firms in 2 sectors did not interpret their incentives in the expected way. This enabled me to underscore the importance of government intervention to address the various information asymmetries that exist. This section reminds us that design is not the whole story.

In the chapter on preferential market access, I showed FTAs are able to generate trade and production outcomes that similar preference programs are not. In a comparative analysis I show that there are 2 major differences. The first is that the permanence of the FTA preferences gives exporters the ability to make long term contracts and reduce risk

in a way which is impossible under unilateral programs. And in addition, for new exporters, the ability of the FTA negotiation process to change their commercial perspective (and the perception of the partner market) further encouraged positive commercial outcomes.

In the final case study chapter, I discussed the unique process through which TCB augments both the ability of governments to target certain sectors and the capacity of governments to identify them. I exploited the recent formalization of the process to show that in addition to direct assistance to fulfilling the necessary standards for bilateral exports, these chapters offer assistance in the form of technology transfer, market education, and government capacity.

7.2 REVISITING THE 3 THEMES

In order to put these outcomes in a developmental context, I return to the three themes around which the analytical focus of this thesis centered. This enables me to classify and build on the conclusions reached in the preceding chapters. Each of the next three subsections explains how the results of this analysis contribute to a particular question in each of these areas. Specifically, I am interested in showing how this dissertation extends the parameters of existing studies of industrialization, multilateral liberalization and regionalism. Since my case study was only a single country, the explanatory power is limited. However, it enables me to suggest a direction the literature might take.

7.2.1 Is industrial policy obsolete?

The active implementation of industrial policies was key to the success of the latecomer countries in the GATT era. Their policies addressed existing market failures in a manner that was highly discriminatory. Today not only are the policies they used prohibited, but the notion that industrial policy is necessary is being questioned. However, the market failures that were addressed by those industrial policies still exist in developing countries.

Does the limitation of policies that had been used to address market failures to mean that industrialization is now a function of free trade and no longer requires government intervention? Though the appropriate role of government intervention is a variable that is difficult to determine *ex ante* (Jackson, 1997), even the staunchest of anti-interventionists concede that there are some areas where intervention is needed (Krueger, 1990). As Jiang (2001) points out, "when market forces alone are not sufficient to translate potential into actual trade, they should be complemented by technical assistance which can also make a big difference and is much needed in developing countries." These all remind us that bureaucratic oversight is not completely unnecessary.

For the latecomers, liberalization was a tool of industrial policy. Today, liberalization has become a goal. It has also acquired a more expansive definition. In the past, market liberalization meant simply taking down tariff barriers. Liberalization today has come to require the withdrawal of the government from shaping the domestic economic structure beyond maintaining stable economic fundamentals (Krueger, 1990). This new enthusiasm for a more generalized liberalization comes not only from poor economic performance in protected economies in the 1990s, but also a more general anti-statism (Dornbusch, 1992). In the words of a Brazilian trade official, industrial policy has become something that "we shouldn't do because of the Washington Consensus, and we can't do because of the WTO." But can liberalization have the same developmental results as government intervention?

A simple comparison suggests that the answer is no. The government has 2 main roles in the overall development process. First, it designs parameters for foreign investors to encourage them to act in developmental rather than simply extractive ways. Second, it assists in providing the incentives for domestic producers to ramp up their ability to export and compete in international markets.² Below I ask if the outcomes of these roles can be achieved through channels built by liberalization.

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¹ Embassy of Brazil interview, 2002.

² Both of these activities can be used to explore a country's dynamic comparative advantage.

In terms of the governments role in investment regulation, the literature on FDI acknowledges that while foreign investment can promote existing growth (e.g. Borzenstein et al, 1998), liberalization leads to firm responses that magnify existing comparative advantage (Bernard, Redding and Schott, 2004). It also suggests that foreign investment generally follows, but does not lead the movement into new sectors because of the uncertainty that exists in non-traditional sectors (Pindyck, 1991). These suggest that government intervention in the investment decision is not replaced. The literature on institutions agrees that government decisions affect the parameters under which domestic actors operate and therefore have a profound impact on economic development (North, 1990).

Second, in terms of domestic incentivization, liberalization expressly does not do this since it eschews discrimination.

The analysis in this dissertation provides additional evidence that government intervention is still an important component of industrialization. I showed that in terms of the FTA process, governments need to play an active role in both design and implementation in order to maximize outcomes of these elements.³ I showed both that features are most beneficial when governments enact complementary industrial policies, and also that without government action, FTAs will not reflect the requirements of the domestic economy.

My field research in Chile revealed another interesting aspect of the industrial policy argument. Chile, overall, is a country with a very strong commitment to liberalization and free trade. Yet, their biggest export successes were rooted in government promotion.⁴ The role of government in the development of Chile's comparative advantage has been significant. In terms of current export industries, the government was at least partially responsible for the establishment of eucalyptus and radiata pine forests in the wood

³ Surprisingly in the Chile case, a government official pointed out to me that despite the variety of FTAs that country maintains, there was no dedicated program within the government to exploit the benefits of these FTAs until 2004 (DIRECON interview, 2006).

⁴ A representative of the exporters association also pointed out that the exploration of new sectors was important, but will not happen spontaneously – it must be managed (ASEXMA interview, 2006).

products sector, the revival of the olive oil industry, and the development of the salmon industry. According to a Chilean economist, "what we realized is that the free market is like a car. There is no doubt that it is the best way for you to get from point A to point B, but you have to steer" (quoted in Jeter, 2004).

This type of intervention is not unique. Singapore also maintained a similar program of government-based support for new industries. There, the firms were called Government Linked Companies, and were owned by the government holding company Temasek (Singapore, 2004).

So on the question of whether government intervention is still necessary in the current environment, my analysis of FTAs indicates that, at least for that category of intervention they are. Governments determine the parameters under which firms in the domestic economy operate. They are also the entity that is best able to understand the needs of the economy in general and interpret individual firm needs. Since FTAs are a form of parameter that directly incentivizes firms, it is up to the government to develop its abilities to design parameters that are most helpful to the domestic economy.

7.2.2 Do FTAs expand the policy space available to developing countries?

I argued in this dissertation that there are elements of FTAs that expand policy space by increasing the number of options governments have to choose from to implement domestic economic policy. I suggested that the space that they expand is used to accommodate them in ways that the WTO was not able.

However, there are also other features of FTAs that limit the number of choices in other areas. The difficulty in balancing the 2 comes from the lack of research on how individual elements of FTAs determine the activities of firms and governments. In general, FTAs are simply treated as a proxy variable for counties' desire for regionalism. They are, at most, categorized by partner choice, which assumes away differences in coverage that have important effects on outcomes. In the economics literature, the selection of partner for a FTA is treated as a strategic economic choice. It evaluates the

potential benefits of FTA partners by comparing export patterns (James and Movshuk, 2003); or by suggesting the conditions under which a country can benefit from an FTA.

Only now is the literature beginning to explore the effects of those features that go beyond the WTO commitments. While Estevadeordal has done work on ROOs, Shadlen (2005b) and Mascus (2000) have analyzed intellectual property chapters, and Polaski (2004) has looked at labor provisions; overall, FTAs are still treated as a static concept and the literature does not focus on how the FTA in general will affect industrialization. There is limited understanding of the effects various features will have on different types of firms. The figure below illustrates exactly how far the literature has to go.

FIGURE 7.1 CHAPTERS IN ASYMMETRIC FTAS

	WTO (1994)	EC- Egypt (2001)	US-Chile (2003)	Japan- Mexico (2004)
goods	x	x	x	x
agriculture	x		X	
services	x	x	X	x
financial services		x	x	x
SPS	x	x	x	x
government procurement	x	ľ	X	x
investment	x	x	X	x
rules of origin	x		x	x
telecom		x	x	
e-commerce			x	
competition		x	x	x
IPR	x		x	
labor			x	
environment		x	x	
transparency			x	x
dispute settlement	x		X	x
energy		x		
terrorism		x		
social/cultural		x		
illegal immigration		x		
standards (TBT)	x	x		x
safeguards				x

The chart above is a simple chapter list of 3 different asymmetric FTAs matched to whether these disciplines are treated in the WTO. It is clear that asymmetric FTAs include disciplines on a greater variety of activities than does the WTO. But simply making rules about a topic does not necessarily limit space. Some of the chapters, such as dispute settlement do not actually go beyond the WTO, they simply open up an

additional choice of forum. Others, such as IPR, regularly include rules that limit the choice available to member countries beyond the limits imposed by the WTO.

The literature still has a long way to go to examine each of these features. In every case the rules embodied in the feature need to be measured next to the WTO disciplines. Then the extent to which the developing country partner has input during the negotiation process needs to be understood. With TCB for example, the developing country defined the rule completely. But in ROOs for EU FTAs, they had no role at all, since they were basically fixed among the different agreements.

The analysis in this dissertation suggests that while a balance of the entire FTA is not yet possible, the space inherent in various rules is augmented by the negotiation and implementation processes. This was particularly clear in the case of ROOs where they offered the potential to expand space by reducing choices available to producers. This space was expanded if the developing country was savvy in the negotiation process and further expanded if complementary policies were formed in the implementation process.

The contribution I have to the literature is that FTAs do expand space in ways that go beyond the rules themselves. A rules-based analysis is not appropriate in this case because it assumes the rule automatically generates the intended outcome. I showed that the negotiation process and the implementation process in addition to structural features of the FTA institution itself all serve to open up policy space. Ultimately a balance needs to take all of these elements into account.

7.2.3 Were developing countries better off under the GATT?

The third debate that this dissertation can contribute to is the perennial discussion about whether developing countries were better off under the previous regime. This is a value judgment that I treat here using the policy space framework I developed throughout this dissertation.

The debate tends to focus on the limitations imposed by the new WTO disciplines. In a rules-based analysis, the WTO-based regime does constrain governments to a greater degree than did the GATT. If the only measure is the number of policy restrictions, then they have increased and countries were better off under the GATT.

There are 2 reasons that this argument is not sufficient. The first is that my study of the U.S.-Chile FTA illustrated that countries can still achieve the outcomes of the latecomers using what amounts to proxies for their discriminatory policies. ROOs can approximate the outcomes of local content requirements; preferential market access incentivises firms in ways that will general outcomes similar to production and export subsidies; and finally, TCB offers governments a way to directly transfer technology without incurring costs. This suggests that at least some policy space has been shifted rather than precluded.

The second reason that the limitation of the exact policies used by the latecomers is not enough to conclude that today's developing countries would have been better off under the GATT regime is that that conclusion assumes that governance quality is fixed. However, many of the successful tools that were used by the latecomers depended on the quality of technocratic regimes and their ability to impose and enforce performance requirements. For a country that has a corrupt or weakly popular regime, less policy choice may be beneficial.

This point is particularly important in today's international environment where democracy is more popular than ever. The policies of the latecomers were enacted by technocratic, but also largely non-representative regimes. Representative regimes will have a much greater problem favoring particular industries to the same extent as the latecomers did (Kohli, 2005).

And there is no end in sight for the trend towards more representative regimes. All of the major international financial institutions continue to promote democracy through aid. The United Nations continues to support democracy in the developing countries as it

illustrated with UNTAC in Cambodia in 1993 where it exogenously planted democracy in that country. And the United States, for example, will only negotiate FTAs with representative regimes. When the Egyptian government was not able to move democracy forward in a meaningful way, the United States abandoned their FTA talks.

The GATT system was one that was beneficial for developmental states that had a clear idea of the targets of industrialization and a number of tools to try to hit them. My analysis here was largely based on the fact that FTAs offer developing countries the ability to test out where their comparative advantage might lie. In any regime there needs to be a channel for countries to test for this, and while the WTO makes it more difficult, it does not make it impossible. In addition the WTO offers rules for countries that are just now integrating into the international system. This suggests that it has a broader appeal in terms of setting the stage for future development.

In the next section I go on to look at the policy implications of this dissertation. Specifically I am interested in the bag of tools that it offers for developing countries. In each of the chapters I attempted to present an idea of what it meant for policy. Here I state it explicitly.

7.3 POLICY IMPLICATIONS

The impetus for this dissertation was my desire to show that FTAs could serve as a industrialization tool for developing countries. In this final section, I offer some policy suggestions for developing countries and the least developed countries as well.

7.3.1 Developing Countries

The analysis in this dissertation targeted outcomes that were specific to the middle-technology developing countries, which are a group that has strong domestic industries already and governments that are at least willing to try to direct the industrial evolution of their domestic markets. However the results provide some broader suggestions.

The most direct is that there are economies of scale in the FTA negotiating process. If a developing country has decided it is in its best interest to pursue an FTA with an industrial partner, it should begin on a smaller scale first. Many countries understand this. A Panamanian negotiator once told me that once they decided to target the United States, they immediately approached Mexico. Economies of scale are important, particularly when the partner is at such a different level of development.

A second recommendation comes from the chapter on TCB. Countries need to be able to evaluate their domestic economies. This is key to being able to negotiate the "right" forms of ROOs and preferential tariff rates. If the government does not have the internal capacity to do this, the country should design an effective business-to-government channel, similar to the industry groups in the United States. They are established to the point where they are mentioned in legislation as a required consulting body.

A third recommendation is that if a country is targeting the United States, they are better off liberalizing their economies after the completion of the FTA. If a country already has low tariffs, then the U.S. negotiators will tend to pursue more extensive changes in non-tariff regimes (author's observations from negotiators). In the case of one particular U.S. FTA, negotiators were specifically trying to figure out what else they could make the partner do, while using preferential access as one of the only offer points.

7.3.2 Least Developed Countries

The recommendations that this analysis yields to the least developed countries are more limited because of their existing capacity.

The first recommendation is that FTAs should be considered as a policy option. For the least developed countries (LDC) and country associations, an FTA can be used as a tool to learn how to approach the international economy. Many African countries, like Nigeria and Kenya for example, have a history of manufacturing ability that can be revived and exploited with the right policies. Anecdotal evidence for Chile suggested that the right export opportunities were the cause of the revival of export industries that

had thrived in the past but ceased for various reasons such as agricultural blight or regional economic crisis.

A second related point is that while FTAs can benefit LDCs, the importance of economies of scale in the negotiation process is magnified for them. LDCs should not attempt to negotiate FTAs with a major industrial country. Because LDCs have not yet explored many manufacturing industries, it is unclear where their comparative advantage may lie. This means that they will be locking in policies that may not affect them in their current stage of development, but may prove to be constraining later. In the example of the Chile-Korea FTA cited earlier, Chile realized that it was unwise to lock in disciplines in sectors it may potentially prefer different parameters on in the future. LDCs may not be able to evaluate where a discipline is overly restrictive. Southern symmetric FTAs have a greater tendency to stay within WTO disciplines and to encourage consultation and negotiation. This is the best first step for an LDC.

The third point is also related to the choice of partner. Even once an LDC has negotiation experience; it may not want to approach an asymmetric FTA as part of a regional group, such as SACU. The reason is that the benefits of an FTA may not be evenly distributed among members. So in a case where a regional group moves to form an FTA with an industrial country, the commercial outcome may very well look like the case of GSP insofar as in that program the most developed LDC countries in the group absorbs most of the benefits. So, in this example, South Africa would capture significant commercial gains, while Lesotho might only benefit marginally.

Overall this research indicates that asymmetric FTAs should be seen as a conditional development tool. For countries with the capacity and scale necessary to take on negotiations with their major industrial export markets, asymmetric FTAs present an excellent opportunity to transfer the costs of development and target sectors for outside learning and development effects. However, because of the nature of FTAs, the parameters that are established in negotiations will have long term effects that continue to affect the decisions of firms into the future. For this reason, it is imperative for

developing countries to follow the model of Mexico, Chile and Panama and work their way up to asymmetric FTAs once they have the capacity to negotiate them properly and absorb the benefits in such a way that the rules of the FTA serve to promote growth rather than constrain it.

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