Free Trade Agreement between Chile and the United States

An Economic Analysis of the Potential Impact upon Chile

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Cambridge, MA, September 2001 Carmen Zechner

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Abbreviations

ALADI	Asociación Latinoamericana de Integración (Latin American Integration Association)
APEC	Asia Pacific Economic Cooperation
ATPA	Andean Trade Preference Act
CACM	Central American Common Market
CUSFTA	Canada-U.S. Free Trade Agreement
CBI	Caribbean Basin Initiative
CET	common external tariff
CGE	computable general equilibrium
CIF	cost, insurance, and freight
CONAF	Corporación Nacional Forestal (National Organization for the Forestry Sector)
CONAMA	Comisión Nacional del Medio Ambiente (National Environmental Commission)
COREMA	Comisión Regional del Medio Ambiente (Regional Environmental Commission)
CU	customs union
Direcon	Dirección General de Relaciones Económicas Internacionales (International Economic Division of the Ministry of Foreign Affairs)
DL 600	Decreto Ley 600 (Decree Law 600)
EC	European Community
ECLAC	Economic Commission for Latin America (UN Organization)
EFTA	European Free Trade Association
EU	European Union
FDI	foreign direct investment
FTA	free trade agreement, free trade area, or free trade arrangement
FTAA	Free Trade Area of the Americas
GATS	General Agreement on Trade in Services
GATT	General Agreement on Tariffs and Trade
GDP	gross domestic product
GNI	gross national income

GNP	gross national product
GSP	U.S. Generalized System of Preferences
HS	Harmonized Tariff Schedule of the United States
IADB	Inter-American Development Bank
IMF	International Monetary Fund
INTAL	Instituto para la Integración de America Latina y el Caribe (Institute for the Integration of Latin America and the Caribbean of the IADB)
ITA	International Trade Administration of U.S. Department of Commerce
Mercosur	Mercado Común del Sur (Southern Common Market)
MFA	Multi-Fiber Arrangement
MFN	most-favored nation
NAAEC	North American Agreement on Environmental Cooperation
NAALC	North American Agreement on Labor Cooperation
NAFTA	North American Free Trade Agreement
OECD	Organization of Economic Cooperation and Development
Prochile	Chilean Trade Commission (Agency within the Ministry of Foreign Affairs)
PTA	preferential trade agreement, preferential trade area, or preferential trade arrangement
R&D	research and development
TRIPS	Agreement on Trade-Related Aspects of Intellectual Property Rights
UNCTAD	United Nations Conference on Trade and Development
U.S.	United States of America
US$	United States dollars
USITC	United States International Trade Commission
USTR	Office of the United States Trade Representative
WTO	World Trade Organization

Introduction

The last decade has seen a dramatic change in trade policies in Latin America. Most countries have agreed to set in motion less protectionist trade strategies and have implemented more liberal policies. Today the discussion focuses on how best to open up the economy to international markets. Several strategies exist: multilateral or unilateral trade liberalization, preferential trade agreements (PTAs),[1] free trade agreements (FTAs), or liberalization within the framework of a customs union (CU).

The uncertainty of future trade negotiation rounds under the umbrella of the World Trade Organization (WTO) raises questions about whether multilateral trade negotiations are the most suitable mechanism for solving current problems affecting international trade. Bilateral and intraregional negotiations have been reducing the number of sources of dissension and as a consequence, are becoming more efficient alternatives for solving commercial controversies. Some see this new regionalism as a step towards multilateral free trade, others as a hindrance. Regardless of which opinion one holds, the proliferation of regional trade arrangements is changing the rules of international trade.

The 1990s witnessed a sudden increase in regional trade agreements. Most industrial and developing countries are members of regional integration arrangements, and many belong to more than one. They include South-South PTAs such as Mercosur (Southern Common Market) and the Free Trade Agreement of ASEAN (Association of South East Asian Nations) and North-South PTAs such as NAFTA (North American Free Trade Agreement) and the FTAs between the EU (European Union) and Eastern European countries. North-South PTAs involve countries with substantially different income per capita levels. They pose different challenges to both the northern and the southern country than traditional South-South or North-North FTAs.

The recent increase in PTAs all over the world has drawn attention to their economic impact. A PTA affects both member and non-member countries' welfare. It not only

[1] The term PTA is used for any type of reciprocally preferential or discriminatory arrangement between two or more countries.

influences the size, direction, and composition of member countries' trade and investment, but also the patterns of world trade and investment. This provides compelling reasons for studying a PTA's effects. The European integration process stimulated much of the early analysis of PTAs.[2] The formation of North-South PTAs, in particular NAFTA, has led to a new debate on their welfare impact. The potential FTA between Chile and the United States provides an opportunity to study these welfare effects in the context of North-South PTAs.

Chile and Preferential Trade Agreements

Chile is the most attractive integration partner for the United States in Latin America. Its solid economy and high economic growth rates during the 1990s place it at the forefront of developing nations. Key to Chile's sustained economic growth has been the export industries outstanding performance. Two decades ago Chile was best known internationally for its copper mines. Today the country exports a greater variety of products, including fresh fruits, fish, forestry products, and wine.

In addition to unilateral trade liberalization, Chile has actively promoted an economic integration policy during the last decade to support the development of its export-oriented economy. The country has signed bilateral trade agreements allowing duty-free trade in most goods with Bolivia, Colombia, Ecuador, Venezuela, Mercosur, and Peru, as well as NAFTA-type FTAs with Canada, Mexico, and the countries of the CACM (Central American Common Market). Chile is a member of APEC (Asia Pacific Economic Cooperation) and an active participant in the negotiations for the FTAA (Free Trade Area of the Americas).

For Chile, the lowering of tariff and non-tariff barriers in its export markets is important, but stability, transparency, and fairness in the rules governing trade with its main trading partners are equally important. The United States has been both Chile's most important trading partner and its main source of foreign investment for the last several decades. A trade agreement with the United States would help Chile improve its international competitiveness and achieve its economic and social objectives. After

[2] Economists have increasingly adopted the term PTA to refer to an FTA in a theoretical analysis. The term PTA is broader than FTA and can be used to describe CUs, FTAs, and arrangements involving partial trade preferences.

years of discussions about a trade agreement, negotiations for a comprehensive bilateral NAFTA-type FTA with the United States began in December 2000.

Chile was formally invited to join NAFTA in the mid-1990s but its accession was delayed. Its trade volume with the United States is much larger than its trade volume with the other two NAFTA partners, Canada and Mexico. Moreover, Chile has signed NAFTA-type FTAs with these two countries in the meantime. Therefore, free trade already exists with Canada and Mexico as it would within the NAFTA accord. Only an FTA with the United States, patterned according to NAFTA, is missing.

Research Questions and Objectives

This thesis provides a framework for analyzing the potential economic gains and losses for a small open developing country resulting from the creation of a bilateral FTA with a developed economy. The case specifically analyzed is that of an FTA between Chile – a small open developing economy – and the United States – the world's largest and most powerful economy. This study focuses on the welfare implications for Chile rather than for the United States or the world as a whole.

Economic theory provides at best some general predictions regarding the impact of an FTA on the economies of the countries involved. The benefits and costs obtained from preferential trade liberalization must be examined case by case. This thesis analyzes the Chilean case within the following research question:

What are the potential benefits and costs for Chile's economy resulting from an FTA with the United States?

In addition to its primary focus on the specific Chilean case, the study also explores the following more general research question:

What analytical framework can be used to examine the benefits and costs of an FTA between a developing and a developed country?

This thesis is a contribution to the research on preferential trade liberalization between a developing and a developed country. Its objective is twofold. First, the study employs existing trade theory to develop an analytical framework to examine North-South trade liberalization. This framework explicitly permits the study of both static and dynamic effects of an FTA. Second, it analyzes the potential economic effects on the developing country and applies this analysis to the Chilean case.

The analysis in this thesis widens the spectrum of earlier approaches to assessing the benefits and costs of FTAs. First, it goes beyond the concepts of trade creation and trade diversion, which so far have been the prevailing concepts in the analysis of economic integration. This study discusses and identifies other factors that are critical to a welfare evaluation of an FTA, such as the effects on exports, dynamic effects, issues specific to North-South integration, and the new environmental and labor provisions in recent agreements.

Second, this thesis specifically analyzes a case of economic integration between a developed and a developing country and considers the welfare effects on the developing country. The analysis shows that the benefits and challenges facing the southern country differ from those found in the more common South-South FTAs. Very little research has been done on the impact of a North-South agreement on the developing country. For example, in the case of NAFTA, most studies focus on the welfare implications for the United States, but not on those for Mexico.

Third, previous research on free trade between Chile and the United States fails to cover some of the most important effects, focuses in most cases on a scenario of NAFTA accession instead of an FTA, and dates back to the mid-1990s, when Chile was invited to join NAFTA. This thesis analyzes the impact of the FTA upon Chile considering its current economic structure but also its economic objectives for the future and attempts to include all the important effects of an FTA with the United States.

The objective of this study is to analyze, in addition to the static trade effects, dynamic and more intangible effects, and to determine their possible economic impact upon Chile. Understanding these effects can contribute to the formulation and imple-

mentation of trade policy in Chile, while also providing a background and basis for discussion at the international level. The framework of this study can be applied to the economic analysis of an FTA between the United States and other Latin American countries or of North-South PTAs in general.

As mentioned, earlier research on economic integration between a developing and a developed economy has focused mostly on the concept of trade creation and trade diversion (Viner 1950). Because Chile has already adopted many free trade policies over the last few decades, its economy has experienced much of the efficiency gains arising from operating more openly in the world economy. Therefore, trade creation will not be very high. Nor will there be significant trade diversion because of Chile's relatively low unilateral external tariff. It follows that these gains for Chile as a result of an FTA with the United States will be small, as empirical models on Chile's accession to NAFTA have shown (Harrison, Rutherford and Tarr 1997; Hinojosa-Ojeda, Lewis and Robinson 1997; and Brown, Deardorff and Stern 1998). In this context, it becomes necessary to explain Chile's great interest in free trade with the United States. Several reasons exist and the most important ones are analyzed in this study.

Trade creation and trade diversion are only one part of the assessment, and the traditional trade creation and trade diversion analysis is no longer the only criterion for the evaluation of an FTA. While still relevant, its results have become secondary in the analysis of new FTAs, particularly in Chile's case, since the country has already reaped most of the benefits of improved resource allocation due to an open economy. This study focuses on the effects of improved market access to the United States for Chilean exports and the potential terms of trade improvement as a result of preferential access to the large U.S. economy. The empirical models assessing Chile's NAFTA accession do not consider the full extent of the benefits of improved market access for Chilean exports.[3] This has been partly a result of the lack of up-to-date complete data

[3] Trade creation means the substitution of domestic production with imports from a more efficient supplier in the partner country of the FTA. The meaning of the term should not be confused with export expansion, which is the result of improved market access. Trade diversion means that the FTA displaces imports from a more efficient supplier outside the FTA with imports from a less efficient supplier within the FTA.

on Chile's export structure. The older data used for these modeling exercises fail to reflect the changes in Chile's export structure during the last decade. To examine Chile's gain from improved market access, the following analysis looks not only at the current export structure, but also at how it is expected to evolve through time. The gains from reducing a partner's tariffs are an important factor in an FTA evaluation (Wonnacott and Wonnacott 1981; Kowalczyk 2000).

Moreover, existing research on free trade between Chile and the United States does not capture the importance that dynamic effects from economic integration have on the participating countries' economic growth rates over the medium to longer term. Although the research on dynamic effects is still evolving, economic studies have identified a variety of mutually reinforcing channels through which they may occur (Grossman and Helpman 1990, 1991; Krugman 1990). Furthermore, these dynamic effects are economically very important. Research on economic integration cites dynamic effects as the main benefits from pursuing PTAs (Winters 1997; Devlin and Ffrench-Davis 1998). This thesis examines the applicability and economic importance of these effects in the case of Chile's FTA with the United States. The dynamic effects of a market enlargement on the rate of economic growth, the rate of capital investment, and the rate of technological innovation are projected to be positive and to exceed the benefits from static effects, especially because of their cumulative nature.

Economic integration in this study occurs between countries of different relative economic sizes and economic development levels. Therefore, the analysis also focuses on issues that are particularly relevant to North-South economic integration and takes into account resulting potential benefits. They are also referred to as non-traditional gains and are mainly a result of reduced uncertainty in trade relations. Such uncertainty is of particular concern in trade between a developing and a developed economy as well as between a small and a large trading partner, both factors that characterize trade between Chile and the United States. Since they are more intangible and difficult to measure, these benefits have received less focus in research (Whalley 1996; Fernandez 1997). However, these gains are as important for export performance as a simple tariff reduction. They are key to understanding Chile's interest in entering into an FTA with the United States.

Methodology and Structure of This Study

Studies of economic integration arrangements that have sought to assess the benefits and costs of FTAs and other forms of trade liberalization have not adhered to the norms of any specific theoretical model or framework. In most studies one finds a wide variety of economic variables and relationships deemed fundamental to evaluating the impact of the FTA under consideration.

Although this thesis relies on certain quantitative indicators, it is a qualitative analysis which provides an ex ante judgment of the benefits and costs that Chile's economy would face in an FTA with the United States by exploring the various sources of those gains and losses. The study does not attempt to quantitatively approximate expected welfare changes. Nor does it attempt to project the effect of the agreement on magnitudes such as trade flows, rates of economic growth, or other performance variables.

Due to the objective and the nature of the research question, the study's design combines both a theoretical and an empirical analysis. The research design includes a literature review of preferential trade theory, an analysis of statistical trade data, and interviews with experts. First, the study examines the literature on relevant trade theories and economic integration and uses this literature to derive hypotheses on the economic impact of an FTA.

This earlier research is extended by testing it for its applicability to Chile's case by analyzing data on Chile's trade and investment pattern, identifying its economic structure and objectives, and examining thoroughly U.S. market access barriers, specifically the escalating U.S. tariff schedule. In addition, empirical studies on the impact of FTAs, in particular of NAFTA on Mexico, are discussed. This research is expanded by doing a comparative analysis of their findings and the benefits and costs for Chile's economy of an FTA with the United States.

Moreover, several interviews were conducted with academics, government officials, environmental, labor and business associations, and trade experts in Chile, the United

States, and at the WTO. These interviews uncover additional information on the objectives, benefits and costs of Chile's FTA with the United States.

In this study Chile is treated as a small open developing economy. The term "small" refers to the fact that in relation to total world availability of any traded good or asset, the country provides only a miniscule fraction and cannot affect terms of trade. It treats the price of any internationally traded commodity or asset as exogenously determined.[4] The term "open", on the other hand, implies that the tradable sector plays an important role in the structure of the economy (Prachowny 1975).

The term "developing" economy refers to low- and middle-income economies, whereas "developed" economy denotes high-income or industrial countries. The World Bank classifies economies according to gross national income (GNI) per capita. Low-income countries have a GNI per capita of US$755 or less, middle-income countries of up to US$9,265, and high-income countries of US$9,266 or above (World Bank 2000a). By this definition, Chile is considered a middle-income developing country.

This study is divided into three parts. Part I offers the reader a bigger picture of the potential FTA between Chile and the United States and puts it in relation to the other integration movements occurring in the Western Hemisphere. Chapter 1 begins with a discussion of the new regionalism in Latin America during the 1990s. The following chapter discusses the NAFTA treaty on which the FTA between Chile and the United States will be based. In order to provide a broader context for the analysis that follows, this chapter also examines the U.S. interest in an agreement with Chile. The discussion then moves on to the most important steps in the FTA negotiations between Chile and the United States.

Part II familiarizes the reader with the Chilean economy and its external sector and provides an important basis for the further analysis in Part III. It begins with a discussion of Chile's foreign trade strategy of unilateral liberalization combined with signing bilateral trade agreements. Chapter 2 explores Chile's foreign trade and

[4] This definition may not always hold and has to be qualified. A country that is small in general may have significant market power in particular commodities or differentiated products (Dixit 1987).

investment patterns. It examines Chile's current export structure and the origin and composition of foreign investment inflows. The final chapter focuses on Chile's trade and investment relationship with the United States.

Building on the analyses in the previous parts, Part III outlines the impact upon Chile's economy of an FTA with the United States. It begins by discussing the traditional concept of trade creation and trade diversion and applying it to the Chilean case. Data on Chile's trade flows with the United States and its main trading partners and an analysis of current tariff structures are used to evaluate the potential importance of these static welfare gains. The second chapter discusses potential adjustment and other costs resulting from Chile's import liberalization, with a focus on the traditional agricultural sector.

Chapter 3 analyzes the impact of improved market access to the United States and the potential for export expansion. To determine the possible extent of export expansion, the U.S. tariff schedule is analyzed in detail and compared to the current Chilean export profile and to that Chile is trying to achieve in the future. Those Chilean sectors are identified that are most harmed by the current tariff structure and will benefit from tariff-free market access. The analysis considers the growing diversification of Chilean exports and argues that barriers that are of no concern today could limit the growth of exports in the near future. Furthermore, this study compares Chile's market access to that of its main competitors, NAFTA members Mexico and Canada.

Dynamic effects and the main channels through which they are generated are discussed in the fourth chapter. Trade liberalization with the United States creates dynamic effects that produce a sustained increase in economic growth through an increase in foreign direct investment, enhanced market competition, economies of scale, technological spillovers, and knowledge transfers.

Chapter 5 follows with an evaluation of the effects on Chile's economy of reduced uncertainty in trade relations with the United States. An FTA offers Chile stable and guaranteed market access to the United States, some protection from anti-dumping and countervailing duties, a reliable dispute settlement mechanism, improved credibility of domestic reforms, and institutional development. The final chapter explores environ-

mental and labor issues arising in the FTA negotiations, and examines the impact of the FTA on Chile's environment and labor as well as its standards in these areas. This thesis concludes with final remarks on the principal benefits and costs arising from an FTA with the United States, an evaluation of the importance of such an agreement to Chile's economy, and suggestions for future research.

PART I: CHILE AND THE NORTH AMERICAN FREE TRADE AGREEMENT

This part begins with a discussion on how the movement of preferential trade liberalization in Latin America since the 1990s differs from integration movements in the past. The following chapter discusses NAFTA and the use of the NAFTA treaty as a model for a potential FTA between Chile and the United States. The reasons for the U.S. interest in a NAFTA-type-accord with Chile are explored. The final section summarizes the FTA discussions between Chile and the United States over the last decade.

1 Preferential Trade Liberalization in the 1990s

Economic and political relations within the Western Hemisphere have undergone a profound transformation.[5] For their part, Latin American countries are shifting towards a new development strategy based on an explicit opening to regional and global competition. Having encountered increased competition in a multi-polar world economy, the United States is expressing a new willingness to engage in regional trade arrangements as it seeks to redefine its long-run interests in a post Cold War global system. An intensification of trade and investment links throughout the hemisphere, both across North-to-South and South-to-South, has recently occurred.

Not only was NAFTA successfully negotiated by Canada, Mexico, and the United States, but also a rebirth of economic integration initiatives has swept over the Western Hemisphere. Latin American countries have pushed forward with their own reforms and integration efforts, creating, for example, Mercosur. Long-standing arrangements have been reinvigorated such as the CACM and the Andean Pact, and fresh bilateral deals have flourished all over the region. Several overlapping FTAs have been negotiated among Latin American countries. The new groupings are generally outward looking and view intra- and interregional trade as an engine of growth. Appendix 1 contains an overview of the integration movements in the Western Hemisphere.

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[5] The Western Hemisphere includes North and South America and the Caribbean.

Only twenty years ago, economic integration and PTAs were fully discredited in both Latin America and the United States. The collapse of intraregional trade flows and the establishment of almost unprecedented trade barriers following the Latin American debt crisis dealt the final blow to the region's integration attempts from the 1960s and 1970s. In the United States, the characteristic postwar emphasis upon multilateralism and unconditional MFN (most-favored nation) principles continued to dominate the practice of trade policy (Bouzas and Ros 1994).

The 1980s have been labeled the lost decade for Latin America. The term "lost decade" refers to the stagnation and decline of real GDP (gross domestic product) and per capita income recorded in Latin America during the 1980s. Enormous debt burdens, shrinking investment, and poor economic performance were typical of the region. At the same time, U.S. economic relations with Latin American slipped off the policy radar screen as the United States focused on integration with its neighbors and on East Asia's fast-growing markets. In this context, the idea of comprehensive and reciprocal liberalization arrangements between the United States and selected Latin American partners seemed remote. More generally, the notion of hemispheric free trade would have been regarded as too eccentric even to merit consideration (Hufbauer and Schott 1994).

Two features characterize Latin America’s trade regimes today. First, most Latin American countries have implemented a unilateral trade liberalization process, i.e., each Latin American country has decided to reduce its tariff and non-tariff barriers independently of what the rest of the world has done. This unilateral liberalization strategy has had the benefit of creating trade and raising competition through imports and lowering input costs. But it also has had immediate fiscal and adjustment costs and real resource costs of creating obsolete capital and redundant labor.

The second notable feature of Latin American trade regimes has been the surprising proliferation of FTAs during the 1990s. Governments can use regional integration as a window of opportunity for continued liberalization within the more predictable and controlled environment of a reciprocal agreement of circumscribed scope. In fact, regional integration adds a compensatory ingredient to import liberalization by fostering reciprocal exports in tandem with reciprocal imports.

Due to this different economic and political context, the new regionalism differs substantially from that of a few decades ago. From the 1950s to the 1970s, the newly independent Latin American countries were anti-colonial and thus sought independence from the North through South-South cooperation. Regional groupings were considered means of promoting such cooperation. In their early stages of development and with small domestic markets, member countries believed regionalism would provide economies of scale, which, in conjunction with import substitution strategies, would promote rapid industrialization. In contrast, the newer groupings have emerged within the paradigm of economic liberalization and market deregulation (Bhagwati 1993).

The recently formed PTAs in the Western Hemisphere display a number of distinctive characteristics as those of the 1960s and 1970s. For the first time, either in talk or actual negotiations, these new PTAs link countries from the North and South along the lines of reciprocal arrangements. NAFTA is the most prominent example. Latin America's shift from import substitution to export-oriented trade and industrial policies facilitates potential agreements with the United States.

For many years, the United States and Latin America had a very limited trade relationship which held little promise for the future due to Latin America's inward-looking economic and trade policies. Now this has changed because of a market-based economic policy transformation coupled with a renewed commitment to democracy. Latin America's more than 400 million consumers and an estimated GDP of US$1.6 trillion in 2000 offer enormous opportunities for U.S. exports of goods and services (World Bank 2000a). The ability to create jobs and foster economic growth depends on expanding trade with dynamic economic regions around the globe. With a mature economy and a decreasing population growth rate, future opportunities for U.S. economic growth will come from the other 96% of the world's population. For the last decade, Latin America and the Caribbean have had the second highest economic growth rates of any region in the world.

The new trade agreements in the Western Hemisphere differ not only in terms of their set-up such as between the North and the South, but also in scope or depth of integration pursued by their members. Largely as a result of U.S. interest, more issues

have been included in the negotiating agenda, extending the latter well beyond tariff rates and trade in goods (Hufbauer and Schott 1994). In an increasingly globalized world economy, trade flows among countries are affected not only by border measures but also by domestic policies. The new issues in the expanded agendas of recently signed FTAs reveal a shift to so-called deeper integration. These broader agendas include areas such as trade in services, foreign investment, intellectual property rights, and dispute settlement mechanisms. Contentious topics in trade negotiations lie ahead in other areas of possible harmonization efforts such as competition policy and environmental and labor standards.

The new wave of regional integration is undertaken less in terms of gains from trade creation and trade diversion and more in terms of scale economies, product differentiation, efficiency gains, and policy coordination (Bouzas and Ros 1994). Imperfect and incomplete markets at home and abroad handicap both the spread of efficiency gains and the development of new production patterns with progressively higher degrees of value-added. For many non-traditional products, access to markets is limited and unstable, making economies of scale and specialization more difficult to achieve (Puga and Venables 1997a). For these types of products, regional integration becomes a potential platform from which to diversify export growth and to improve the contribution of trade to development. In the face of distortions in world markets, guaranteed access to regional foreign markets can be a catalyst for exploiting potential externalities. Indeed, this is a leading objective of policy-makers and a major force encouraging regional integration.

Whalley (1996) argues that as the world divides into trading blocs, those unaligned countries, sufficiently small that they cannot individually affect their terms of trade, have the most to lose. Spilimbergo and Stein (1998) find that poor countries will always be worse off when entirely excluded from a trading bloc and will always be better off integrating with a rich country. These findings help explain the calls by Latin American leaders for regional trade arrangements and specifically, Chile's continuing effort to obtain preferential accession to the U.S. market.

Another explanation is given by Baldwin's (1993) domino theory, which argues that the domino effect gives outside countries an incentive to become insiders as an FTA

expands. The creation of an FTA generates political forces in non-member countries to join because of concern about losing their export market share to member countries. The FTA implies a loss of cost competitiveness by non-member firms. Their profits in the FTA markets decline because of trade barriers not faced by member country firms. Firms in the non-member countries then lobby their governments for entry. As non-members join an FTA, they expand the trading bloc and increase the cost of non-membership, further pressuring other countries to join (Bhagwati, Greenaway and Panagariya 1998).

Regionalism has emerged as a force potentially rivaling multilateralism, but with as yet uncertain implications for the world trading system and the process of globalization itself. During the last half century, multilateralism has been pursued through multilateral trade negotiations based on the MFN principle underlying GATT (General Agreement on Tariffs and Trade) and its successor WTO. Multilateral trade liberalization has been widely regarded as the most appropriate path for achieving world economic integration (Bhagwati 1991; WTO 1995).

However, it lost some momentum because of frustrations growing out of the protracted length of the Uruguay Round, finally concluded in April 1994 after years of negotiation, and difficulties in opening a new WTO negotiation round, together with anti-globalization sentiments and rising nationalism. This in turn has led many to view multilateral liberalization as a "stumbling block" and regionalism as a "building block" and "stepping stone" for achieving world economic integration.[6]

The MFN clause in Article I of GATT forbids member countries from pursuing discriminatory trade policies against one another. PTAs have, nevertheless, been accommodated through Article XXIV of GATT, which permits departures from the MFN obligation provided that the PTA meets certain criteria. The substantive qualifications can be briefly summarized as follows (WTO 2000):

- Duties and other regulations affecting third parties shall not be on the whole higher or more restrictive than those prior to the formation of the PTA.

[6] Bhagwati (1991) first suggested this language.

- Restrictions are eliminated with respect to substantially all trade between the partner countries in products originating in these countries.
- Creation of the PTA can come in stages, if an interim agreement concludes a plan and schedule for formation within a reasonable length of time.

Article V of GATS (General Agreement on Trade in Services) introduces provisions for PTAs in services that parallel those in Article XXIV of GATT for goods. The Enabling Clause, introduced by the 1979 decision of GATT members on differential and more favorable treatment of developing countries, excludes PTAs involving only developing countries from the requirement to meet the formal criteria of Article XXIV. Two or more developing countries have the right to exchange two-way partial trade preferences as long as they facilitate trade, do not create undue difficulties for the trade of other countries, and do not impede the reduction or elimination of trade barriers on an MFN basis. It is important to emphasize that the presence of a single developed country in a PTA imposes a constraint on the nature of the arrangement. To be WTO-consistent, the PTA must satisfy the requirements of Article XXIV, which are far more demanding than those of the Enabling Clause (WTO 1995).

The regional integration in the Western Hemisphere has provided a means for Latin America to move ahead with liberalization while the region awaits consensus on development of a new round of reciprocal multilateral negotiations. The enhanced international competitiveness brought about by regional integration has built confidence and has helped Latin American countries prepare for globalization and further advancements in multilateral trade liberalization.

2 Free Trade Agreement Between Chile and the United States

2.1 NAFTA-Type Free Trade Agreement

On January 1, 1994, NAFTA took effect, creating an FTA encompassing the United States, Canada, and Mexico. NAFTA established the world's largest market consisting of more than 400 million consumers with a combined GDP of about US$9.4 trillion in 1999 (World Bank 2000b).

The NAFTA Treaty consists of a main agreement and two side agreements dealing with labor and environmental provisions. As the first reciprocal free trade pact between a developing country and industrial countries, NAFTA represents a significant change in Western Hemisphere trade arrangements. NAFTA not only reduces tariff and non-tariff barriers to goods trade, but also addresses areas such as investment, services, government procurement, intellectual property, sanitary and phytosanitary measures, standards, competition policy, and dispute resolution mechanisms.

In August 1993, nearly one year after the conclusion of the NAFTA negotiations, the three parties agreed upon two NAFTA side agreements covering environmental and labor concerns. The NAFTA side accords establish new North American institutions to monitor environmental and labor market conditions in the region, promote compliance with national laws and regulations in each of the three countries, and administer new dispute settlement procedures (Hufbauer and Schott 1993).

As economic integration theory was formulated over the last half century, environmental issues did not figure in the equation until NAFTA. GATT has some general references to environmental matters but little of consequence.[7] NAFTA's side

[7] The environment was not, as such, a subject of negotiations during the Uruguay Round. At the beginning of the 1980s, the need to protect the environment was not as high on the political agenda of governments and no attempt was made to put this subject on the agenda. Environmental considerations were, nevertheless, not totally absent from the preoccupations of negotiators and are reflected in various WTO instruments (WTO 1999c).

agreements have for the first time connected trade and environmental issues. Although NAFTA and its side agreements do not satisfy all demands of environmental groups, it is the "greenest" trade agreement yet signed in the Western Hemisphere (Bergsten and Schott 1997).

The primary objectives of the North American Agreement on Environmental Co-operation (NAAEC) and North American Agreement on Labor Cooperation (NAALC) are to promote compliance with national environmental and labor laws and to settle related disputes between partners. It is each country's right to define and set its own standards for environmental and labor protection, but each government is responsible for monitoring and enforcing its own laws. A country can denounce another member country that persistently fails to comply with its own domestic standards. In case of a dispute, a dispute settlement mechanism can be invoked (NAFTA Secretariat 1993).

The North American approach to integration through NAFTA has influenced the conceptual thinking and approaches used for a number of trade issues in the Uruguay Round, including services, intellectual property, and investment. In addition, the NAFTA model has been exported within the hemisphere and used as a basis for the Canada-Chile and Mexico-Chile FTAs, among others. Canada and Chile also signed agreements on environmental and labor issues as part of the FTA. These are similar to the NAFTA side agreements, although they impose only monetary fines rather than trade sanctions in case of non-enforcement of domestic laws.

Chile's FTA with Canada, which took effect in July 1997, is its most profound and far-reaching bilateral agreement to date and its first with an industrial country. The treaty immediately liberalized 80% of reciprocal trade. The remaining barriers are phased out over periods ranging from five to eighteen years for the most sensitive products. The agreement incorporates rights and duties regarding goods, services, investment, and dispute settlement mechanisms, but it does not incorporate any regarding intellectual property rights, technical standards, sanitary and phytosanitary measures, or government procurement. When negotiating the agreement both countries assumed that the WTO rules, together with their own respective legislation, already addressed these matters satisfactorily. In 2001, Chile initiated new negotiations with Canada to

incorporate sanitary and phytosanitary measures as well as government procurement in the treaty.[8]

Chile's bilateral pact with Canada has been regarded as an important step forward in Chile's strategy for NAFTA membership. The FTA goes further than NAFTA in one important aspect. Canada and Chile negotiated a mutual exemption from the application of anti-dumping duties. Canadian exports are protected against future Chilean anti-dumping actions and vice versa, a guarantee currently unavailable to other exporters in these markets. This exemption is consistent with the Canadian government's long-standing public commitment to minimizing and eventually eliminating the use of anti-dumping duties within NAFTA.[9]

NAFTA provisions have also served as a model for Chile's bilateral agreement with Mexico. In 1998, Chile re-negotiated its 1992 trade agreement with Mexico to be compatible with NAFTA. The revised treaty, which took effect in August 1999, includes the liberalization of trade in goods and services and investment, and establishes an efficient dispute settlement system. The agreement eliminated the tariffs on 80% of bilateral trade from the moment the treaty came into effect. In contrast to Chile's accord with Canada, it incorporates intellectual property rights, technical standards, and sanitary and phytosanitary measures. The FTA contains a commitment to negotiate new issues, such as financial services, the elimination of anti-dumping duties, and government procurement, in the future (INTAL 1999).

The potential FTA between Chile and the United States will also be closely patterned on NAFTA because it is intended to provide a bridge between Chile and NAFTA. While an FTA with the United States does not give Chile formal NAFTA membership, it will have a comparable economic impact upon Chile since it will then have NAFTA-based FTAs in place with Canada, Mexico, and the United States.[10]

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[8] Interview with Juan Gabriel Valdés (Chilean Ambassador to the United Nations and former Foreign Minister), February 2001.
[9] Interview with Sebastian Saez (former member of NAFTA negotiation team), October 2000.
[10] Interview with Mario Matus (Direcon), October 2000.

The model used for the FTA between Chile and the United States is also referred to as "NAFTA Plus". It will include new topics, such as electronic commerce, that are not part of NAFTA and have not been the topic of many trade negotiations so far. Still, many of the issues surrounding the negotiations of the FTA between Chile and the United States will be similar to those of Mexico's NAFTA negotiations, including that supplemental agreements for labor and environmental issues will be considered in addition to purely economic and trade concerns.[11] Some nuances will vary because Chile is a much smaller trading partner and not a contiguous neighbor of the United States.

2.2 U.S. Reasons for Free Trade with Chile

All three Chilean democratic presidents who succeeded General Pinochet, as well as the opposition parties, have been committed to the pursuit of an FTA with the United States.[12] No other Latin American country has a better record of economic accomplishment in the last fifteen years. If the United States seeks to encourage stable, growth-sustaining policies and adherence to open markets, Chile is the best country in the region with which to set an example. However, with a GDP of only US$70.2 billion in 2000 and a population of barely more than 15 million people, the claim that an FTA with Chile is vital to U.S. national interests might strike many Americans as an exaggeration (Banco Central de Chile 2001). But it would be a mistake to downplay the importance of an FTA with Chile. The key reasons are summarized as follows.

As a small economy, Chile might not open a huge foreign market for U.S. exports, but the trade-related significance of Chile should not be underestimated. U.S. exporters are at a disadvantage in Chile due to Chile's existing FTAs with other countries, especially Canada and Mexico. While Chilean imports from Canada increased by 165% from 1996 to 2000 and those from Mexico rose by 64.5%, imports from the United States

[11] Interviews with Brian Blood and James Rigassio (both U.S. Embassy in Chile), September 2000.

[12] With the overthrow of the Allende government in 1973 General Pinochet took control and ruled the country for seventeen years. He relinquished control of the government when Aylwin became president in March 1990. President Frei followed in 1994 and President Lagos in 2000. All three successive democratically elected presidents came from the Concertación, which is formed by the Christian Democratic Party (PDC) and three social democratic parties (PPD, PS, and PRSD).

increased by only 19.6%. For example, U.S. wheat and potato farmers have been losing Chilean market share to Canadian exporters (Direcon 2000a). Delays in the FTA with Chile mean missed business opportunities for U.S. firms, which are less competitive than their counterparts of countries that enjoy preferential Chilean market access. The United States also forgoes the opportunity of using Chile as a gateway to other South American markets such as Argentina and Brazil.

The signing of an FTA with Chile is important for the future U.S. access to the promising Latin American market. Trade with Latin America has become very important to the U.S. economy. Brazil is the 12th largest U.S. export destination accounting for US$14 billion worth of goods exports. The United States exports more to Venezuela, Argentina, or Chile than to Russia. In 2000, it exported goods worth US$5.3 billion to Venezuela, US$4.3 billion to Argentina, and US$3.3 billion to Chile, while only US$2.2 billion worth of goods were exported to Russia (USITC 2001). The Western Hemisphere is the largest and fastest growing market in the world for U.S. exports, and the U.S. economy benefits more from economic growth in the Americas than from growth in any other region. In 1998, the Americas accounted for 43.5% of U.S. merchandise exports, while Asia accounted for 26.2%, Europe for 25.1%, and the rest of the world for 5.2% of total U.S. exports (USITC 2000).

Chile has not been waiting for the United States inactively to make up its mind to sign a trade agreement but has proceeded with an ambitious trade agenda. Since President Clinton had announced NAFTA accession negotiations in 1994, Chile has been pursuing an aggressive policy of preferential trade liberalization. Meanwhile, Chile is an associate member of Mercosur, and it has strengthened its trade relations with Canada, Mexico, Peru, and the Central American countries through bilateral FTAs. Chile is expanding its trade and diplomatic linkages with the APEC countries.[13] It is also working on a trade agreement with Japan, Korea, and the EU. An FTA with Chile will be a proactive response by the United States.

[13] APEC consists of twenty-one members from both developed and developing countries from Asia, the Pacific, and the Western Hemisphere. It is an institutional arrangement with an agenda for economic cooperation and trade liberalization.

U.S. competitors in the Latin American market, especially the EU, have noticed the trade potential of the Chilean and Latin American market. The increased presence of the EU in Chile's foreign trade is an indicator of a decreased U.S. market share in Chile and the whole region. The EU is acting to protect and promote its substantial economic and political interests. Toward this end, the EU and Mercosur, with its associate member Chile, agreed at the 1999 Rio Summit to launch negotiations towards gradual and reciprocal trade liberalization. Discussions on tariff reductions began in mid-2001. The Rio Summit between the EU and Latin American and Caribbean countries was a clear manifestation of growing interest on both sides of the Atlantic in expanding existing bi-regional links. In March 2000, Mexico and the EU signed an FTA that became effective on July 1, 2000 and reduces tariffs over the next decade. The agreement represents Europe's response to NAFTA and sets the foundation for future arrangements.

Building a comprehensive trade relationship with Chile has broad strategic trade policy implications for the United States. The hemisphere contains subregional FTAs and trading blocs such as the CACM, the Andean Pact, and Mercosur, reflecting a diversity of objectives and traditions largely uninfluenced by the United States. With a GDP of US$1.1 trillion in 1999, Mercosur constitutes the largest single market in the region besides NAFTA (World Bank 2000b). In recent years, countries in the region have accelerated their efforts to reach bilateral FTAs, some of which have become very comprehensive. Moving forward with Chile may balance and help shape the free trade agenda in the Americas. It would build momentum for an U.S.-led trade agenda for the hemisphere.

By signing an FTA with Chile, the United States would strengthen U.S. leadership and negotiating power in the process of the FTAA, especially vis-à-vis Brazil and Mercosur. Historically, relations between Brazil and the United States have been rather cool. It is no coincidence that Brazil pushes hard for Chile's full member accession to Mercosur. Brazil knows that if Chile joins Mercosur as a full member, Mercosur's negotiating power in the FTAA process will be strengthened. If Chile signs a NAFTA-type agreement with the United States, the idea that NAFTA must be the cornerstone of an FTAA would be reaffirmed. Appendix 2 discusses the negotiations and developments with respect to the FTAA.

The United States is losing some of its credibility of supporting free trade in the hemisphere. For over a decade successive U.S. administrations – both Republicans and Democrats – have pledged officially that Chile would be next in line for membership in NAFTA or a bilateral trade agreement. The United States has once been leading a hemispheric push to open up Latin America's economies, liberalize trade policies throughout the region, and encourage democratic reforms. The Generalized System of Preferences (GSP)[14], the Caribbean Basin Initiative (CBI)[15], the Andean Trade Preference Act (ATPA)[16], and NAFTA, all form part of a long-standing, consistent U.S. policy. The nations of the Western Hemisphere expect the U.S. administration to live up its commitments to the hemisphere's democracies. An FTA with Chile will send the message to the other Latin American countries that the United States is not backing away from its hemispheric responsibilities and willing to create a hemisphere in which goods, services, and investment flow without impediments.

It is clearly in U.S. interests to expand trade liberalization and to sign an FTA with Chile. The roots of the U.S. failure to sign a trade deal with Chile can be traced back to its domestic political economy. However, the new Bush administration aims to change path and to put more focus on the region. Signing an FTA with Chile will support the hemisphere's liberal trade policies at a critical time when international investors are undecided in their commitment to Latin America, where popular support for free market policies remains shallow, and democracies are still weak.

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[14] In general, the GSP permits developed countries to grant a one-way tariff preference to exports from developing countries through exemption from the MFN clause in GATT Article I. The objective is to integrate developing countries, especially least developed countries, into the international trade system. GSP became effective in the United States in January 1976 and was a major breakthrough in international trade policy (UNCTAD 2000). The U.S. GSP program provides for non-reciprocal duty-free entry into U.S. customs territory for designated articles shipped directly from beneficiary countries. Chile is one of 130 countries and territories awarded this designation (USITC 2001).

[15] The CBI was enacted by the Caribbean Basin Economic Recovery Act in January 1984 and the United States began extending unilateral duty-free preferences to the Caribbean countries (USITC 2001).

[16] The Andean Trade Preference Act is a program providing for the duty-free entry of merchandise from designated beneficiary countries, which are Colombia, Bolivia, Ecuador, and Peru. The ATPA was enacted into law by the United States on December 4, 1991 and is scheduled to expire on December 4, 2001. In mid-2001, Congress had begun preparing the renewal of the Andean Trade Preference Act (USITC 2001).

2.3 Free Trade Negotiations between Chile and the United States

During his 1990 visit to Chile, President George Bush suggested a bilateral FTA between Chile and the United States as part of the Enterprise for the Americas Initiative. As a new framework for relations between Latin America and the United States, the Enterprise for the Americas Initiative made economic reform the cornerstone of the relationship. The two countries agreed to inaugurate free trade negotiations once the United States had completed NAFTA negotiations with Canada and Mexico. At the beginning of his term, President Clinton affirmed his support for an FTA with Chile and later in his term for Chile's accession to NAFTA. Chile was very optimistic about NAFTA admission and the positive effects that this would create for its economy.

Since NAFTA was launched in January 1994, it has been acknowledged within the member countries that, if NAFTA were to be expanded, Chile would be the first Latin American nation to be granted access. It would serve as a model for subsequent accession negotiations with other Latin American countries. At the first Summit of the Americas in Miami in December 1994, all three NAFTA countries agreed to extend NAFTA to Chile and formally invited Chile to join. At the summit, the heads of state of the Western Hemisphere also agreed on the creation of a Free Trade Area of the Americas (FTAA) by the year 2005. Adding Chile to NAFTA would insure that the FTAA be based on the highest possible standards.

The United States officially launched accession negotiations at the end of 1994 and Chile hoped to become NAFTA's fourth member within a year. The summit raised high expectations that clear steps for Chile’s NAFTA accession and Western Hemisphere free trade would be central issues in the U.S. agenda. However, less than two weeks after the NAFTA invitation was extended the Mexican peso was subject to a speculative attack, causing an economic crisis in Mexico, also called the Tequila crisis, and sharply reducing support within the United States for NAFTA expansion.

Moreover, the U.S. president's fast-track authority had expired without congressional renewal in early 1994.[17] If the president were to negotiate a pact with Chile without fast-track authority, Congress could demand changes in the agreement. This would force the president to reopen negotiations with Chile and then resubmit the new deal to Congress. The cycle could repeat forever. Both sides of the congressional aisle had motives for denying Clinton's request for fast-track renewal in November 1997.[18]

Chile expressed dismay about the constant delays of fast-track authority in the U.S. legislative agenda. Until fast-track renewal was completed, it could not move on to key issues in negotiations without inviting the criticism of domestic NAFTA opponents who feared adverse consequences from free trade with the United States. In the meantime, Chile signed FTAs modeled on NAFTA rules with Canada and Mexico. Chile hoped these agreements would pave the way to NAFTA admission or at least to an FTA with the United States.[19]

The U.S. political climate towards free trade in the last few years, marked by President Clinton's inability to obtain fast-track authority, has made Chile's accession to NAFTA unlikely. NAFTA expansion has been considered as politically not feasible in the United States due to U.S. domestic political economy dynamics and the political imagery that NAFTA has produced in the U.S. Congress. President Clinton therefore favored a bilateral trade deal with Chile and subsequently with other Latin American countries.

In the late 1990s, the United States was preoccupied with granting China normal trade relations, but towards the end of his term President Clinton reactivated talks for an FTA between Chile and the United States. In November 2000, the two countries

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[17] Fast-track authority allows the administration to negotiate a trade agreement subject to Congressional vote but without Congressional amendment. When presented with a trade agreement negotiated under fast-track rules, Congress must approve or disapprove it without amendments in a simple yes or no vote.

[18] The Democrats remained deeply ambivalent over free trade. Organized labor, which had contributed greatly to the Democratic campaigns of 1996, remained protectionist, and Vice President Al Gore was already looking for the unions' support in the 2000 presidential election. Republicans, who had provided the bulk of pro-NAFTA votes in 1993, were also abandoning the party's free trade principles and relished any victory over Clinton.

[19] Interview with Juan Gabriel Valdés, February 2001.

agreed to launch immediate negotiations for a bilateral FTA. Chile dropped its traditional demand that the U.S. President must first obtain fast-track authority from Congress. Negotiations aiming at a comprehensive bilateral FTA formally began in December 2000. They can build on the progress that has been made by the seven working groups of the U.S.-Chile Joint Commission on Trade and Investment established during President Clinton's 1998 visit to Chile.

The Chilean government is optimistic about this new attempt to negotiate an FTA with the United States. Having prepared for years to compete in the U.S. market, Chile is more prepared now than Mexico was at the time it joined NAFTA. Chilean President Lagos, who took office in March 2000, stated that the progress of negotiations for a bilateral agreement with the United States complements the process of hemispheric integration. The U.S. administration is also committed to the FTA and President George W. Bush will ask Congress to reinstate trade promotion authority.[20]

The negotiations will be easier than those with Mexico. The disparity in the size of the U.S. and Chilean markets and the physical separation of the two countries remove some of the negative pressure that Congress experienced during implementation of the agreement with Mexico. Chile's distance from the United States counters arguments that U.S. companies will relocate manufacturing facilities to Chile or that jobs will stream across the border. Nor is illegal immigration from Chile a major issue. Because Chile's growing season is opposite to that of the United States, Chilean agricultural exports complement U.S. production. The Mexican growing season, on the other hand, is quite similar to those of many regions in the United States. Moreover, Chile, one of the most advanced and open economies in Latin America, has implemented a series of economic reforms to fulfill its WTO commitments, and has signed NAFTA-type FTAs with Canada and Mexico. Nevertheless, the United States will demand from Chile some regulatory changes. These issues are bound to complicate negotiations and are discussed in Appendix 3.

[20] Fast-track authority was renamed trade promotion authority (TPA) by the new Bush administration in 2001.

PART II: CHILE'S FOREIGN TRADE AND INVESTMENT STRATEGY, PATTERN, AND RELATIONSHIP WITH THE UNITED STATES

This part concentrates on Chile's external sector. It begins with a discussion of Chile's foreign trade strategy of combining unilateral liberalization with bilateral and regional trade agreements. The second chapter analyzes Chile's foreign trade and investment pattern. It first outlines Chile's composition and direction of foreign trade. Next, this chapter examines differences in the structure of Chilean exports destined for industrial and developing countries. The second chapter explores the origin and composition of foreign investment inflows. The final chapter analyzes Chile's trade and investment relationship with the United States.

1 Foreign Trade Strategy

Trade has taken on a growing role in the Chilean economy since the beginning of its unilateral trade liberalization strategy in 1974. The greater weight trade has acquired in the Chilean economy is mirrored in its relative share of GDP. Export and import flows of goods and services, expressed as a percentage of GDP, have risen noticeably. In real terms, export and import flows together moved from 20.9% of GDP in the 1975-1979 period to 48.4% in the 1985-1990 period and to 59.1% in 1991-2000 (Foreign Investment Committee 2001).

Since 1974, Chile has applied a uniform tariff system to imports, excluding automobiles and a few agricultural products. In 1991, the tariff rate was unilaterally reduced from 15% to a uniform 11%. Since 1998 Chile has reduced this tariff rate further by one percentage point every year. In 2001, the Chilean simple average uniform tariff rate was 8%, which will be reduced to 7% in 2002 and finally 6% in 2003 (Banco Central de Chile 2001). In practice, the average tariff is both much lower and variable because Chile has signed several FTAs with countries both within and beyond Latin America. Chile's trade-weighted average import tariff rate fell to 5.3% at

the beginning of 2001, down from 6.4% at the end of 2000.[21] It will continue to decline at an annual rate of about 1.15% to approximately 3% when the nominal tariff reduction process is completed in 2003 (Foreign Investment Committee 2001).

A member of the GATT since its creation in 1947 and of its successor, the WTO, Chile was the first developing country to bind its tariffs across the board in the 1979 Tokyo Round of multilateral trade negotiations. All tariffs were GATT-bound at 35%. Under the Uruguay Round Agreement, to which Chile was an active contributor, Chile bound tariffs at 25% for all products, with the exception of tariffs for wheat, flour, edible oil, and sugar. These products are subject to a price-band regime and bound at 31.5% (WTO 1997).[22]

Open borders, participation in multilateral trade negotiations, and an active policy of bilateral and regional trade agreements have steadily increased foreign trade and contributed to Chile's high economic growth rates. Chile's performance with regards to real GDP growth measures (both absolute and per capita rates) clearly outpaces other Latin American countries and puts it on par with the most dynamic economies of East Asia. The Chilean economy grew at an annual average real rate of 7.6% between 1988 and 1998, by far the highest in Latin America and among the topmost in the world (Banco Central de Chile 2001). Appendix 4 discusses Chile's current economic situation and principal policies that have contributed to Chile's high economic growth rates.

From November 1998 to October 1999, Chile's economy suffered from a sharp recession and contracted by 1.1% in real terms as a result of restrictive monetary and fiscal measures taken in the face of the East Asian crisis and the sharp drop in the price of copper, Chile's main export product. Although growth bounced back to 5.4% in 2000, Chile has yet to fully recover from the 1999 recession. The worldwide

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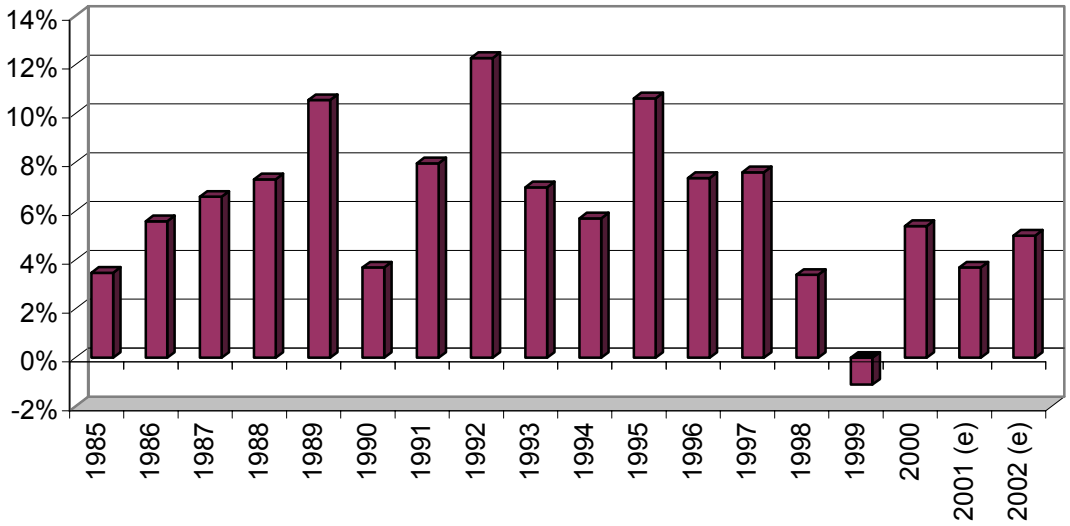
[21] In January 2000, Mexico, which signed the first bilateral FTA with Chile in 1991, faced the lowest weighted average import tariff in Chile (0.3%), followed by Colombia (0.9%), Canada (1%), Bolivia (2.3%), Argentina (2.4%), and Peru (2.5%) (EIU 2001a).

[22] The price-band regime is basically an import barrier that protects traditional agricultural goods such as wheat, flour, edible oil, and sugar from transitory fluctuations in international prices. This system uses an import surtax to keep domestic prices for these goods within a predetermined price range. When import prices of these agricultural products are below a set threshold, surtaxes are levied on top of the across-the-board 8% tariff to bring import prices up to an average of prices over previous years.

slowdown, flagging consumer confidence, and an unemployment level close to 10%, coupled with low copper and forestry prices, have held growth to about 3.7% in 2001. Growth is expected to rebound to 5% in 2002 (Banco Central de Chile 2001). Figure 1 exhibits Chile's high economic growth rates.

Figure 1: Real Annual Growth Rates of Chile's Gross Domestic Product (1985-2002)



Source: Based on data from Banco Central de Chile (2001).

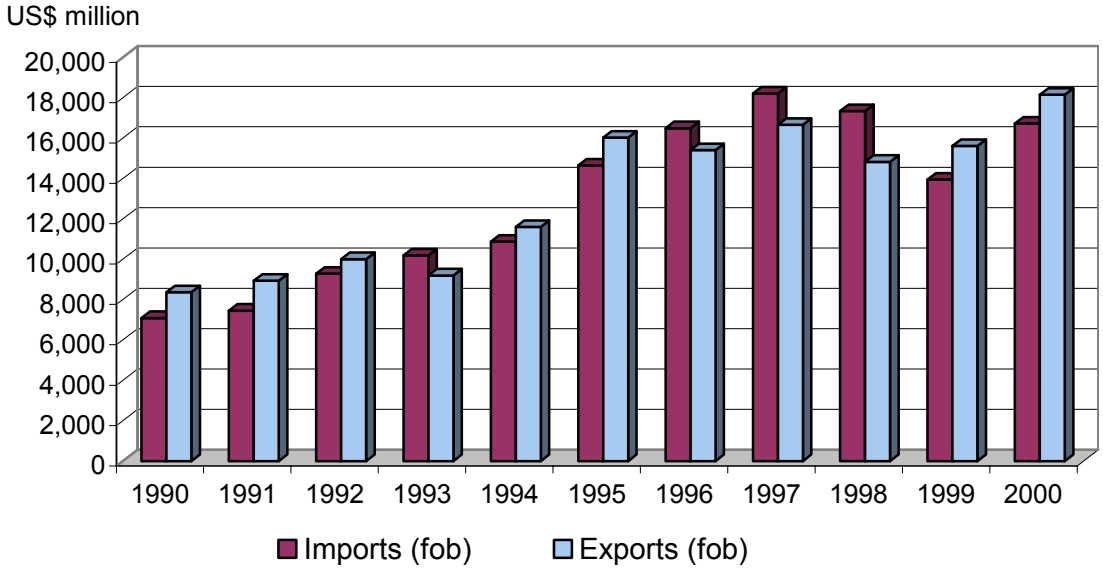
The role of trade in the Chilean economy has undergone a fundamental change as a result of the structural reforms which have been implemented since 1974. Chile's far-reaching trade liberalization process, based essentially on unilateral tariff reductions along with the removal of non-tariff barriers, eliminated the anti-export bias of Chile's previous import substitution-based industrialization strategy. Free-market price incentives, private sector entrepreneurship resulting from privatizations, deregulation, and reduction of bureaucracy enhanced the economy's overall efficiency and played a leading role in opening the Chilean economy. In the early 1980s, a sharp devaluation was carried out in response to the debt crisis and accompanying economic collapse.

In addition to the broad reforms, in the 1970s and 1980s targeted measures were introduced, which stimulated specific export sectors. Chile set up a program of state investment in research and human capital for the fruit and fishing sectors. Decree Law 701 promoted forestry development and subsidized forestation by returning 75% of the tree planting expenses to investors. However, these subsidies were abolished in 1994

(Wisecarver 1993). The cumulative result of these specific measures was to promote a broad expansion of the export sector. These clear and consistent incentives to the export sector aided the successful expansion of Chilean exports.

Chile's export performance through the 1990s has been remarkable. Exports have expanded at an annual average growth rate of 8.5%, while imports have increased at a rate of 9.3% (Banco Central de Chile 2001). The following figure shows the evolution of Chile's foreign trade in goods in absolute terms over the last decade.

Figure 2: Chilean Foreign Trade in Goods (1990-2000)



Source: Based on data from Banco Central de Chile (2001).

The figure above illustrates the success of the Chilean trade strategy in achieving export growth. A fundamental element of the democratically elected governments' economic programs has been the maintenance of Pinochet's economic policies including foreign trade policy. Chile has continued to liberalize trade unilaterally and pushed for further reforms of its macroeconomic, trade, and industrial policies. It is advantageous for a given country to carry out a unilateral tariff reduction even if there is no reciprocity from its trading partners because lower cost imports will displace inefficient domestic production, thereby increasing consumer welfare and the efficiency of domestic resource allocation. In other words, even when the rest of the

world imposes tariff and non-tariff barriers, a country can increase its level of well-being and domestic efficiency with unilateral tariff reduction.

The democratic governments began to supplement Chile's small-country go-it-alone trade strategy of unilateral liberalization by actively promoting an economic and trade integration policy designed to support the development of its export-oriented economy. Since the beginning of the 1990s, Chile has entered into numerous bilateral FTAs and economic complementation agreements. The question that arises is why Chile now is actively pursuing the establishment of FTAs in addition to continued unilateral liberalization.

Answering this question requires the examination of a pivotal assumption underlying the unilateral tariff reduction strategy – namely, that the tariff and non-tariff barriers facing the exports of the country in question are fixed (Wonnacott and Wonnacott 1981). The usual economic analysis of the unilateral tariff reduction process bases the source of efficiency and welfare gains only on the replacement of inefficient domestic production by lower cost imports. It ignores the possibility of increasing exports. In a world of FTAs, if an excluded country wants to increase its exports to a given FTA, how useful would it be to follow a unilateral tariff reduction strategy?

If lowering domestic tariffs increases the competitiveness of domestic exports beyond the level of tariff preferences prevailing among the members of the FTA, then the unilateral tariff reduction strategy is a useful one. However, if an excluded country cannot compete with the members of the FTA due to the tariffs it faces, unilateral tariff reduction does not improve market access. According to Wonnacott and Wonnacott (1981), if an excluded country wants to become a member of an FTA, in general, it would not be very helpful to reduce tariffs before beginning the negotiation process unless the domestic tariff rate is extremely high. Indeed, if the excluded country eliminates its tariffs and non-tariff barriers, the members of the FTA would have no incentive to bring that country into the tariff-free club.

Exports have become the engine of growth in the Chilean economy, and Chile would like them to continue to do so. From 1991 to 2000, exports of goods on average accounted for 23% of GDP (IADB 2001). Given the widespread proliferation of FTAs,

the best strategy for improving market access is for Chile to join existing FTAs or to conclude its own agreements. For Chile, the advantages of bilateral trade agreements are a function of the uncertainty of a new WTO negotiation round, the possibility of trade diversion with the formation of trading blocs in the region, and the pattern of tariff escalation facing many of Chile's high-growth exports in their principal markets.

Chile has one of the most aggressive FTA agendas in Latin America. Before the 1996 trade accord with Canada, Chile's trade agreements had been based on the ALADI (Latin American Integration Association) model.[23] The most prominent type of ALADI trade accord is the economic complementation agreement.[24] Under this type of agreement trade in goods is only partially liberalized, and recently some of these accords have also included provisions on services and investment and other issues that were added to the Uruguay Round agenda.

Chile has signed economic complementation agreements with Mexico (January 1992) Venezuela (July 1993), Colombia (January 1994), Ecuador (January 1995), Peru (July 1998), and a less comprehensive agreement with Bolivia (July 1993). In November 1993, Chile was accepted as a member of APEC, helping Chile to position itself as a Latin American and Pacific nerve center. Owing to its large membership, including the world's leading economic powers, the United States and Japan as well as the newly industrializing economies of East Asia, APEC is considered to have an important influence in shaping the future of multilateral trade and globalization.[25] APEC's main objective is to achieve free trade in the Asian-Pacific region through an active program of WTO-consistent, regional trade liberalization (World Bank 2000c).[26] Membership

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[23] ALADI stands for Asociación Latinoamericana de Integración and was established in 1980. It includes the following Latin American countries: Argentina, Bolivia, Brazil, Chile, Colombia, Ecuador, Mexico, Paraguay, Peru, Uruguay, and Venezuela. Its aim is to promote and stimulate economic interaction among member countries by signing trade agreements.

[24] Also called acuerdos de complementación económica (ACE).

[25] APEC member countries are Australia, Canada, Japan, New Zealand, Russia and the United States (developed countries) as well as Brunei, Chile, China, Hong Kong, Indonesia, Korea, Malaysia, Mexico, Papua New Guinea, Peru, Philippines, Singapore, Taiwan, Thailand, and Vietnam (developing countries).

[26] Initially, APEC was conceived as a loose consultative body working through ministerial meetings and senior officials' meetings. It also worked closely with private cooperative initiatives in the region as the Pacific Trade and Development Conference, the Pacific Basin Economic Council, and the Pacific Economic Cooperation Council. It was not until the Seattle Summit in November 1993 that APEC developed a concrete agenda for economic cooperation and trade liberalization.

in APEC allows the Asian countries to better understand the Chilean economy, thereby making Chile an attractive trading partner and investment target for their operations in Latin America. It provides a suitable framework for regulating Chile's trade with the members in a WTO-consistent way.

In June 1996, Chile and the EU signed the Framework Agreement on Economic Association, Political Dialogue and Cooperation with the goal of gradual reciprocal trade liberalization beginning in 2000. The framework agreement should lay the foundations for a long-term political, economic, and commercial association between Chile and the EU (IADB 1999).

Since October 1996, Chile has been an associate member of Mercosur and has enjoyed preferential access to the market without the adoption of the CET (common external tariff). The economic complementation agreement with Mercosur allows Chile to maintain its independence vis-à-vis its trade policy. Appendix 5 discusses arguments for and against full membership in Mercosur versus an FTA.

Until the FTA with Canada, Chile generally adopted the ALADI model when negotiating a trade agreement. A new generation of trade agreements based on NAFTA was created with the FTA between Chile and Canada, which entered into force in July 1997. The NAFTA model is closely patterned after its namesake and characterized by its distinct approach to many issues. It necessitates tariff elimination rather than modest cuts as in the ALADI trade agreement model. The NAFTA model's rules of origin are highly detailed, and its dispute settlement provisions establish a very formal process for such matters. The model also contains sophisticated and distinctive provisions on services and investment.

The use of the NAFTA model in the Canada-Chile FTA led Chile to use the NAFTA approach for its future trade agreements. The 1992 economic complementation agreement with Mexico has been revised and upgraded to a new NAFTA-type agreement, in force since August 1999. Chile also signed an FTA based on NAFTA with the countries of the CACM, which is scheduled to become effective by the end of 2001. Appendix 6 contains an overview of all the trade agreements signed by Chile over the last decade.

Chile is currently involved in FTA negotiations with the EU, Korea, Japan, and the United States. In 2000, Chile began initial trade liberalization talks with the EU. Negotiations with the EU and its fifteen member states are more difficult to conclude than those with a single country and thus take much more time. In addition, the EU is currently more focused on its Eastern European neighbors and busy integrating them into the union.

Negotiations with Korea began in September 1999 but have proved to be difficult due to differences on agricultural issues. Chile is currently also exploring a potential trade agreement with Japan. For ten years now, Chile has been trying to finalize an agreement with the United States. Considering the difficulties with its other negotiations, Chile should concentrate its forces on an agreement with the United States for fastest access to an industrial country market. The new U.S. administration's focus on Latin America should help Chile to conclude an FTA with the United States.

The Chilean foreign trade strategy is to combine unilateral trade liberalization with the negotiation of bilateral FTAs with many countries, especially its significant and willing trading partners. The following are Chile's principal foreign trade strategy objectives.[27]

- *Improved market access*: Because Chilean tariffs are relatively low, at a flat 8% rate in 2001, and will be lowered further over the next years, not much can be gained in terms of a reallocation of resources by further reducing the tariff. The objective is to gain improved access to foreign markets in exchange for additional reductions. Through trade agreements it is possible to achieve preferential and predictable openness that facilitates export development.

- *Stability in access*: Chilean exporters are beginning to see the negative consequences of their success. As exports increase, the threat of further limitations in market access grows. Chile has recently become the victim of several antidumping and countervailing duty actions. Even if trade barriers remain un-

[27] Interviews with Manuel Agosin (Professor at Universidad de Chile), Andrea Butelmann (Ministry of the Economy), Ricardo Ffrench-Davis (ECLAC), and Patricio Meller (Professor at Universidad de Chile), October 2000.

touched, the trend for other countries to form trade and economic blocs threatens to displace Chilean exports from some markets. Chile is now trying to enter into FTAs with those countries to secure the markets it has already conquered.

– *Diversification of goods and markets*: Macroeconomic and sector-specific stability are enhanced by higher degrees of diversification. Export product diversification is necessary for Chile to be less vulnerable to demand or price fluctuations of key products such as copper. A diversified export market structure allows Chile greater independence from specific trading partner relationships and autonomy in its commercial policy.

– *Second export stage*: Diversification alone does not seem to be sufficient. Chile's exports have been based mainly on natural resources. Its aim is to bring higher value-added content to current natural resource exports through processing. This goal is also referred to as Chile's second export stage.[28] Since tariffs applied to manufactured exports are in general higher than those applied to raw materials, Chile must attempt to eliminate external barriers to industrial exports through its trade policy.

The Chilean government's strategy of negotiating bilateral FTAs with many countries has not delayed further unilateral trade liberalization. Thus the fear that some bilateral arrangements could restrict broader opening up has not come true (Donoso and Hachette 1996). Chile's commitment to lowering its uniform tariff rate to 6% by 2003 provides a clear signal to the international business and financial community that despite a recent focus on regional and bilateral trade agreements, the government remains committed to unilateral trade liberalization. The Chilean government sees the two strategies as complementary towards achieving the country's integration in the world economy, thereby fostering productivity by allowing local producers greater access to export markets, capital goods, and technology.

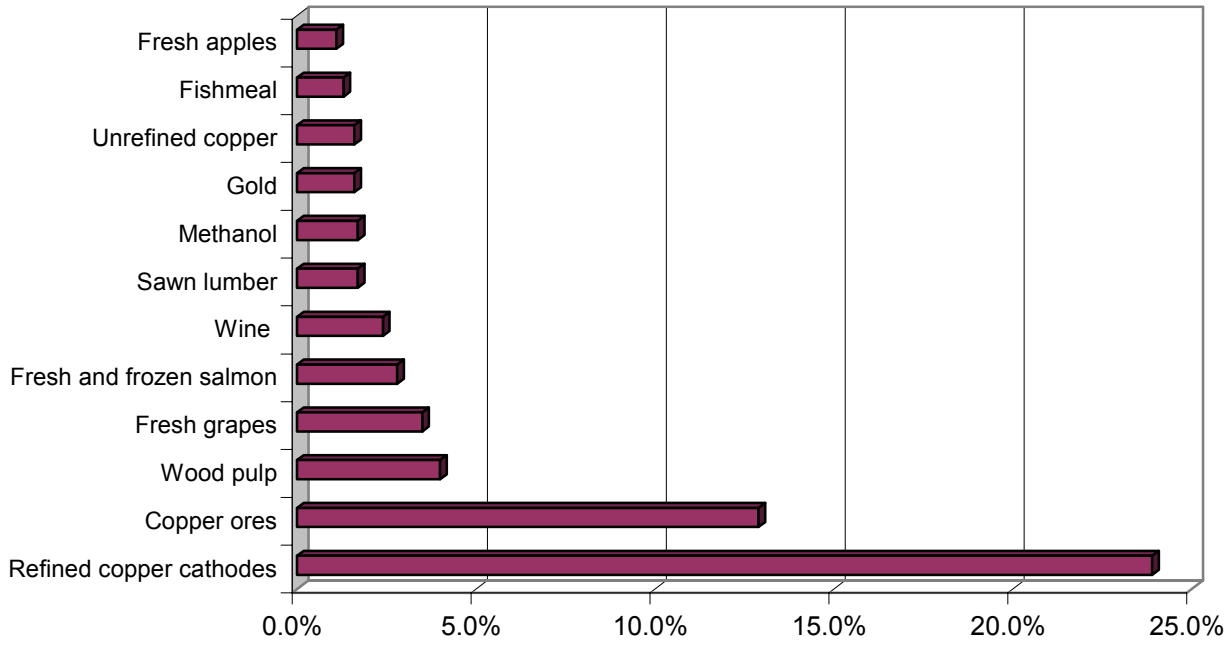
[28] The importance of Chile's second export stage for its further development is discussed in Part III, Chapter 3.2.

2 Foreign Trade and Investment Pattern

2.1 Analysis of Export Structure

Through global positioning, Chile has continuously expanded its foreign trade. The number of items exported exploded from 200 in 1975 to almost 3,790 in 1999, while the number of exporters rose from 200 to over 6,020 over the same period. Similarly, the number of destination countries for Chilean exports rose from 50 to 174. As trade has contributed more to the Chilean economy, the mix of goods exported has changed and shown an increasing degree of diversification, but closely linked to natural resources. However, nearly 60% of exports are still concentrated in twelve products, five markets, and twenty-five companies (ProChile 2001). The figure below shows Chile's twelve largest export products and their share in total exports.

Figure 3: Chile's Principal Export Products (2000)



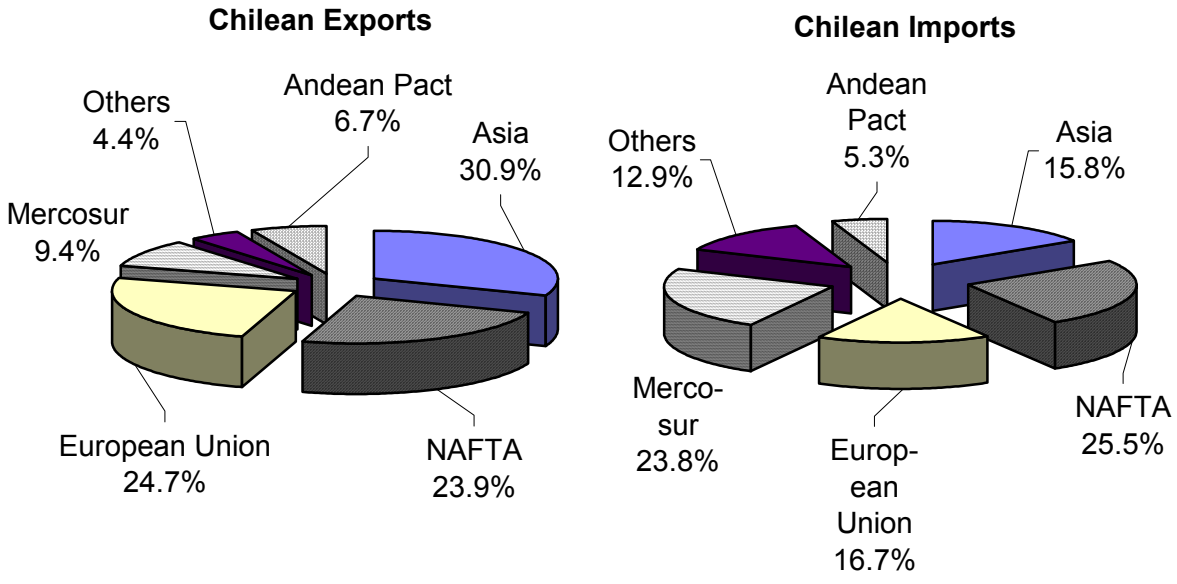
Source: Based on data from Direcon (2000a).

The main export sectors are mining, agriculture and agroindustry, fishing, and forestry. In 1999, mining was still the dominant export sector and accounted for one-third of

total exports with copper as the principal export product. Over the last decade, Chile has become the main Latin American fruit exporting country. Given its relatively small share of world exports, and the advantage of the inverse season with respect to developed countries, there is still possibility for Chilean fruit exports to expand further. When Chile opted for an economic policy of unilateral liberalization, the fishing and forestry sector were among the big beneficiaries registering a strong increase in exports. Its economic policy induced the import of new technology and encouraged the inflow of capital through direct investment in those sectors. Appendix 7 discusses in more detail Chile's export composition.

In the past two decades, Chile has been able to diversify its international trade not only in terms of products but also markets. Chile's export and import markets are split between Europe, Asia, and the Western Hemisphere, with the last being the most important. The bilateral agreements with several Latin American countries, association with Mercosur, and FTAs with Canada and Mexico have multiplied the size of Chile's export market in the Americas. In 2000, the Western Hemisphere, including NAFTA, Mercosur, and the Andean Pact, accounted for 40% of exports and 54.6% of imports (Banco Central de Chile 2001). The two pie charts in Figure 4 compare Chile's principal export destinations with the origin of its imports in 2000.

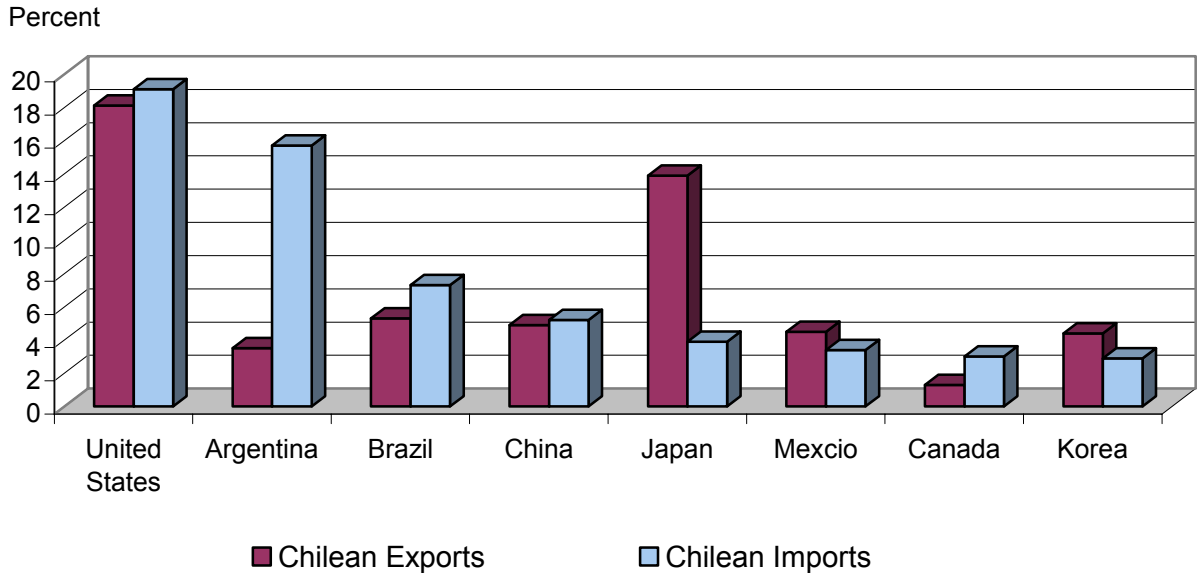
Figure 4: Chile's Direction of Trade (2000)



Source: Based on data from Banco Central de Chile (2001).

The North American market is a fundamental pillar in Chile's trade strategy. Bilateral trade with NAFTA countries represents a quarter of Chile's overall trade. The United States is by far Chile's largest trading partner, accounting for nearly one-fifth of both Chile's total exports and imports in 2000. Trade with Canada and Mexico is increasing as a result of the signed FTAs (United Nations 1999). Canada is more important as an import than export market, whereas in the case of Mexico, it is the opposite, as shown by the figure below (Banco Central de Chile 2001).

Figure 5: Chile's Principal Trading Partners (2000)



Source: Based on data from Banco Central de Chile (2001).

Countries in Latin America have advanced in terms of integration. Chile's association with Mercosur has been important, given that this group forms the center of Latin America's economy and nearly all shipments of manufactured products not based on natural resources go to Latin America. In 2000, Mercosur accounted for slightly less than a quarter of Chile's imports and for about a tenth of total exports. Interestingly, Brazil's and Argentina's shares in Chile's total exports remained more or less constant and were less than 5%, respectively, between 1991 and 2000. The lack of export expansion to these markets indicates the little impact the association with Mercosur has had on Chilean exports so far. However, the share of imports from Argentina has more than doubled and reached about 15% in the same time period, while the share of

imports from Brazil slightly decreased to 7%. Argentina is now the second largest import market after the United States (United Nations 1999; Banco Central de Chile 2001).

Besides the Americas, Asia and EU are important trading partners. Relations between Chile and the EU have deepened with the signing of the 1996 cooperation framework agreement. Asia represents a growing market with large opportunities for future Chilean exports, especially if Chile is able to conclude its FTA negotiations with Japan and Korea.

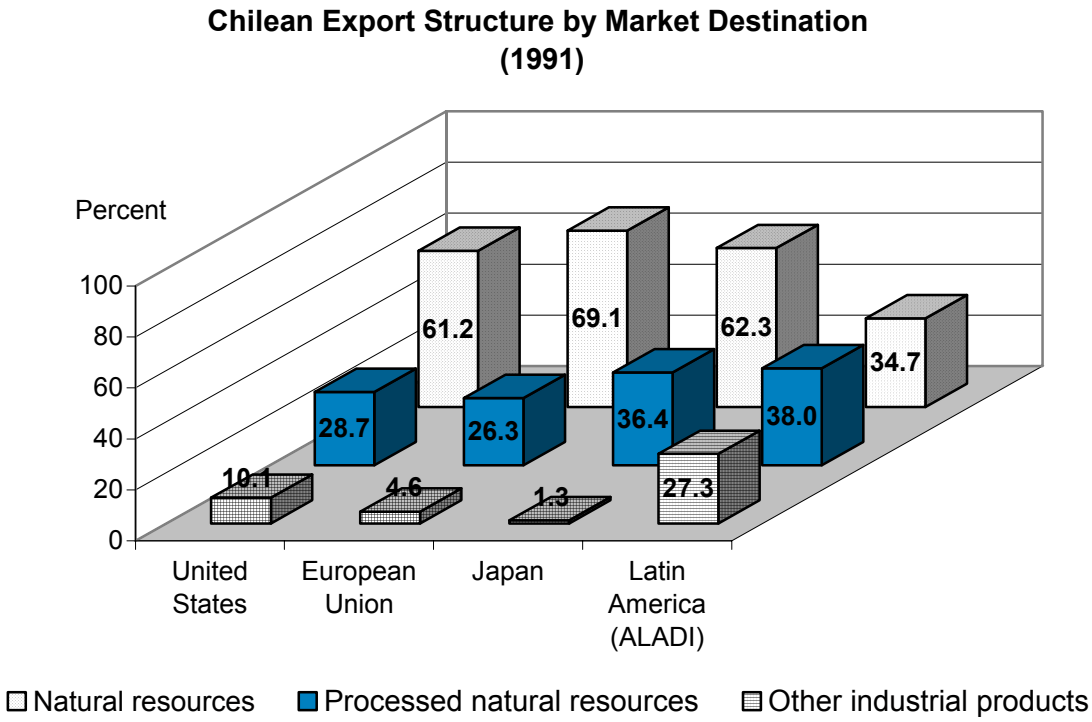
Chilean Export Structure by Market Destination

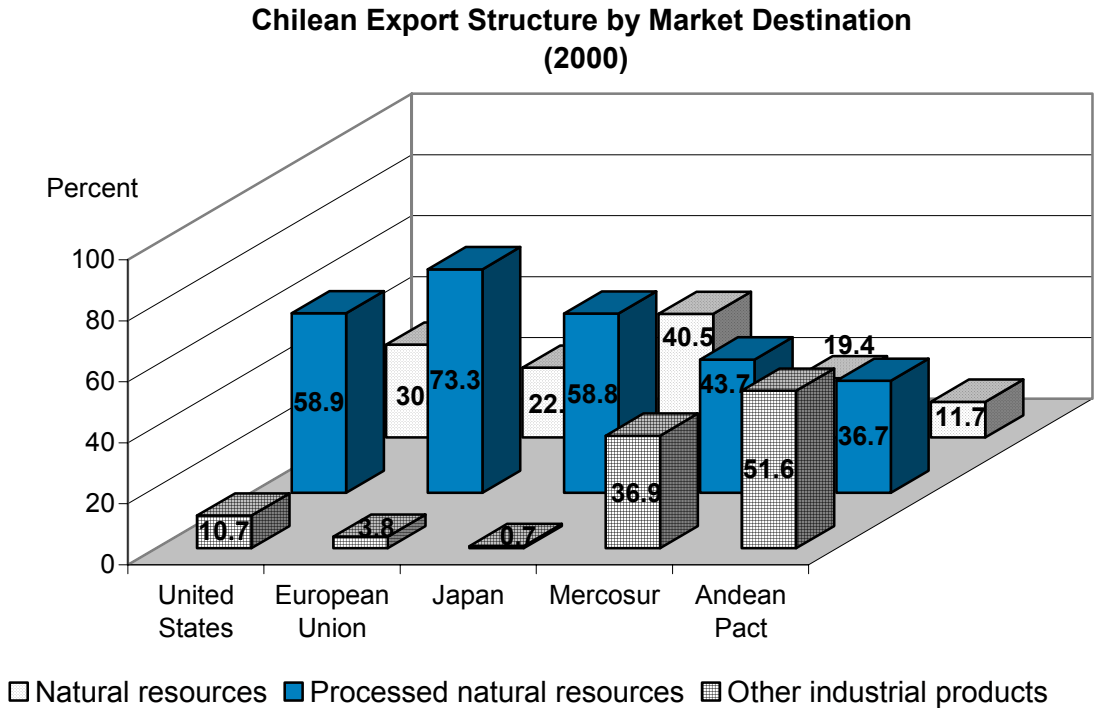
Having discussed the composition and the direction of Chilean exports, the question arises as to what types of products are exported to these different export destinations. Chilean exports can be classified into the following three categories (Campero and Escobar 1992): (i) export goods comprising natural resources; (ii) industrial goods based on further processing of natural resource exports; and (iii) other industrial products which include items such as chemicals, plastics, tires, vehicle parts, boats, and gearshifts.

Chile's export structure reveals the nature of the nation's comparative advantage. The export basket displays a significant preponderance of natural resources and processed natural resource exports. Over 86% of exports are based on natural resources, either raw or processed (Direcon 2000a). Copper still claims the most important share of Chilean exports and will continue to do so for the next years. Nevertheless, Chile has succeeded in diversifying its export base with fruits, vegetables, fish, wine, and wood products. In addition, there is an expansion of industrial exports not directly linked to the country's natural resources. The leading items among these are plastics and chemicals.

Exports bound for developed countries are highly intensive in natural resources, but the export structure has changed over the last decade. A comparison of the two diagrams in the following figure shows that exports of processed natural resources to developed countries increased significantly.

Figure 6: Comparison of Chilean Export Structures by Market Destination (1991 and 2000)





Source: Own calculations from data of Banco Central de Chile (2001); Campero and Escobar (1992).

In 1991, unprocessed natural resource exports accounted for 61.2% and 62.3% of exports destined for the United States and Japan, respectively, and almost 70% of exports directed to the EU. Exports based on processed natural resources constituted the second most important category of exports to developed countries with a share of 28.7% to 36.4%. In 1991, only 10.1% of exports to the United States, less than 5% to the EU, and around 1% to Japan were other industrial products (Campero and Escobar 1992).

In 2000, the share of natural resource exports to industrial countries dropped to levels between 23% and 40%, while processed natural resource exports increased significantly to levels between 59% and 73% and became the dominant export category. In 2000, the share of other industrial products exports to the EU and Japan was even lower than in 1991, while the share of those exports destined for the United States increased only slightly (Banco Central de Chile 2001).

In the case of exports to Latin America, other industrial products dominate the export structure and their share increased considerably between 1991 and 2000, as Figure 6 illustrates. In 2000, other industrial products accounted for more than half of all exports to the Andean Pact and over a third to Mercosur. While the share of processed natural resource exports remained about the same, the share of natural resource exports to the region decreased (Banco Central de Chile 2001; Campero and Escobar 1992). This structure indicates that Chile's other industrial products are competitive in the region, but not in industrial countries where the share of other industrial exports remained low during the same time period.

There is a certain global similarity in the structure of Chilean exports to industrial countries. Over 90% of exports to those markets consist of either unprocessed or processed natural resources. However, the types of natural resources exported to each of these markets vary and come from different sectors. Natural resource exports can be subdivided into mining, fruits and vegetables, fishing, and forestry exports. With regard to unprocessed mining exports, Japan is the largest market, while the EU and the United States are the main destinations for processed mining exports. With regard to fruits and vegetables, the United States is the main market. Japan and the United States are the principal markets for fish products, while all three trading partners are

important for processed forestry exports. Latin America is the most important market for metal-mechanical products, tires, plastics, and chemicals (Banco Central de Chile 2001).

The results of the analysis have shown that the structure of trade between Chile and developed countries differs from that between Chile and developing countries. The following theoretical explanation can be given for this empirical finding. If a country's endowment of capital and labor is somewhere between that of a relatively capital-abundant country and that of a relatively labor-abundant one, then the country will have different patterns of bilateral trade. Its exports to the capital-abundant country will be relatively labor-intensive and those to the more labor-abundant one will be relatively capital-intensive (Deardorff 1987). Therefore, following the same logic about endowments, the share of natural resource based exports will be larger in exports to countries that are relatively less endowed with natural resources, like most countries of the developed world. Thus, one explanation for the difference in composition of Chile's exports to Latin America and the industrial world is the similar natural resource endowment of Chile and other Latin American countries (IADB 1998).

Trade in manufactured goods between countries with similar or identical factor endowments can also be the result of intraindustry trade in differentiated products. The greater the similarity in factor endowments, the greater the share of intraindustry trade in commercial transactions between two economies (Labán and Meller 1997). Thus, a higher proportion of trade in manufactured products among countries of the region can be a reflection of intraindustry trade. Another explanation for the different composition of Chile's exports to Latin America and the industrial world are the bilateral tariff preferences between ALADI member countries and their less escalating tariff schedule.

Chile's pattern of export specialization and its concentration in natural resources is consistent with: (i) Chile's comparative advantage derived from an abundant natural resource endowment; (ii) Chile's unilateral and non-selective trade liberalization of the 1970s and 1980s; (iii) the instruments of export promotion that have been used in the past; and (iv) the fact that imports of natural resources in developed economies, which are Chile's principal destinations, have traditionally been subject to lower average nominal and effective protection rates than trade in goods with higher value-added.

The following conclusions can be drawn from the analysis of Chile's export structure. In Latin America, Chile has a comparative advantage in other industrial products, in addition to traditional natural resource and processed natural resource exports. The FTAs signed in the last decade with ALADI countries have opened those markets for other industrial products. These products are competitive in Latin America but are not yet ready for the developed countries' markets. Chile's comparative advantage with respect to developed countries is in the category of natural resources. The country has been able to increase its exports of agroindustrial and processed forestry and fishing products to these markets. Manufactured goods exports based on processing natural resources already exported to these markets have the best chances to succeed.

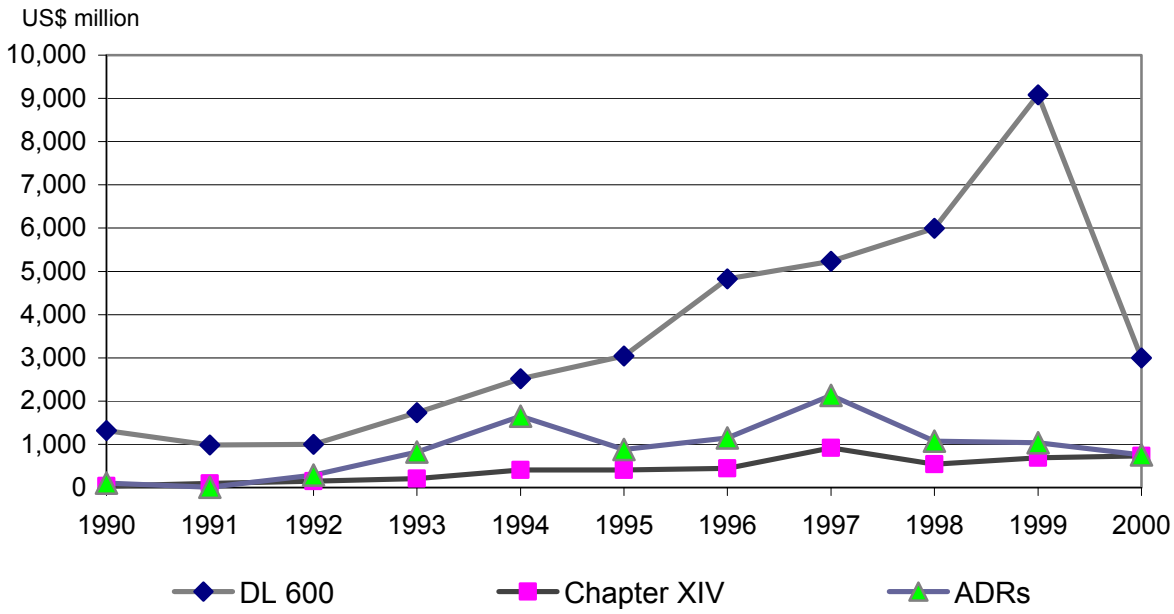
2.2 Origin and Composition of Foreign Direct Investment

Chile maintains a welcoming attitude towards foreign investors. Two legal bodies support foreign investment in the country: (i) Decree Law (DL) 600, which was passed in 1974 as one of the first initiatives in the post-Allende period to open up the Chilean economy to foreign interests. Foreign investors using DL 600 sign a contract with the government's Foreign Investment Committee; and (ii) Chapter XIV of the central bank's foreign exchange regulations, which mainly applies to foreign capital inflows in the form of stocks, bonds, most lending, bank deposits, and capital for so-called speculative purposes.

The following figure illustrates capital flows to Chile during the last decade and shows that potentially risky portfolio capital inflows accounted for only a small share of total foreign investment. Chile has successfully attracted long-term capital investment from around the world and has developed a sophisticated domestic capital market. Chile's long-term foreign currency-denominated debt has long been the best rated in Latin America and has been considered investment-grade by all credit rating agencies since 1992 (Foreign Investment Committee 2001).[29]

[29] Standard & Poor's upgraded the Chilean country risk rating in July 1995 to A-. Moody's upgraded it in June 1995 from BAA2 to BAA1. Even in the 1999 recession, Chile's credit rating remained investment-grade. Since then the agencies have regularly confirmed their ratings for Chile (EIU 2001b).

Figure 7: Foreign Investment Flows to Chile: Main Investment Mechanisms (1990-2000)



Note: DL 600 represents materialized FDI inflows via the Foreign Investment Committee.
ADRs stand for American Depository Receipts.
Chapter XIV represents investment inflows via the central bank's foreign exchange regulations.

Source: Based on data from the Foreign Investment Committee (2001).

The DL 600 line in Figure 7 tracks the development of materialized FDI under DL 600 from 1990 up to 2000. Foreign direct investment (FDI) inflows under DL 600 increased sharply in the 1990s and achieved significant levels as a percentage of GDP, accounting on average for 6.3% of GDP between 1990 and 2000. They reached a record-high of US$9.1 billion in 1999, equaling 14.4% of GDP. In 2000, however, foreign investment dropped by two-thirds to 5.3% of GDP (Foreign Investment Committee 2001).

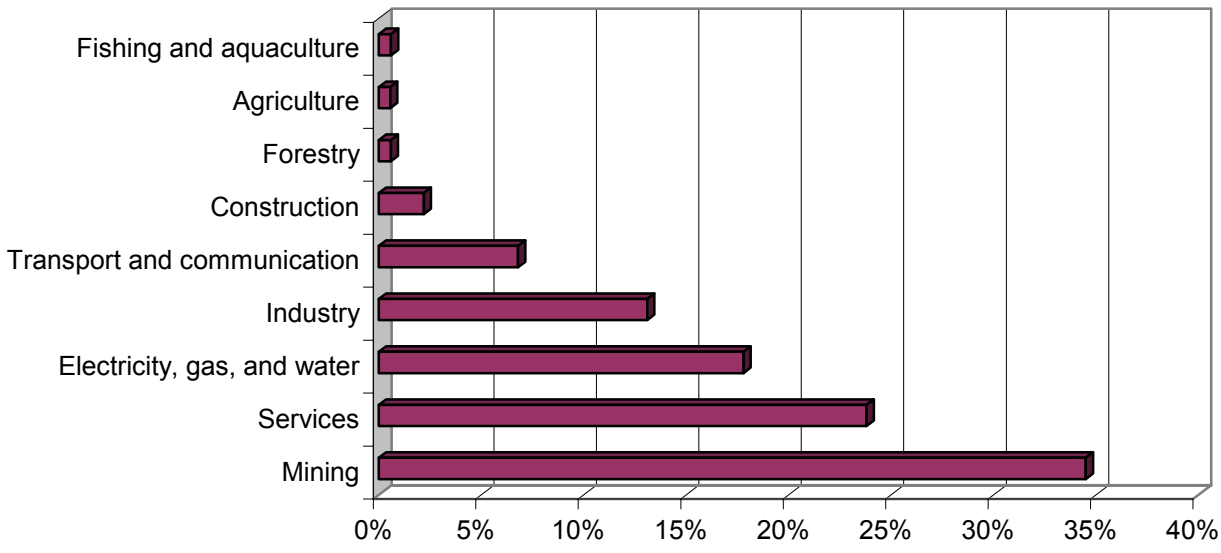
The steep drop in FDI can be explained by several factors, among them, the fact that 1999 was an atypical year in which only two mergers and acquisition transactions, those by Spain's electric company Endesa España, represented 40% of total FDI entering the country (Foreign Investment Committee 2001).[30] In addition, crises that

[30] The acquisition of Endesa and Enersis in Chile by Endesa España in 1999 equaled US$3.55 billion (Foreign Investment Committee 2001).

hit emerging markets in recent years have made investors more cautious. Higher rates of return in the United States during the technology boom further decreased FDI flows to emerging countries.

FDI inflows from 1985 to 2000 can be divided into distinct periods, which differ not only in the amount of FDI that was attracted but also in the sectors into which the FDI was channeled. Between 1985 and the early 1990s, foreign investors responded to the incentives offered by the privatization of state-owned companies and foreign debt conversions in the form of debt-equity swaps. Although these conditions were no longer relevant in the 1990s, FDI continued to flow steadily into areas such as mining, financial and insurance services, energy, infrastructure, agribusiness, technology, and tourism. The influx of capital occurred both in the form of new productive projects and through mergers and acquisitions. Figure 8 shows the sectoral breakdown of total materialized foreign investment between 1974 and 2000.

Figure 8: Sectoral Breakdown of Foreign Investment in Chile under DL 600 (1974-2000)



Source: Based on data from the Foreign Investment Committee (2001).

In the first half of the 1990s, investments were mainly channeled into greenfield projects. During the second half, FDI was heavily concentrated in acquisitions of private firms. These differences are related to a number of sectoral developments. In

the 1990 to 1995 period, most of the multinational companies that entered the country were attracted by the possibility of obtaining raw materials. FDI was therefore concentrated in activities linked to Chile's natural resource based comparative advantages. Mining consequently accounted for 58% of total FDI, services for only 24%, and manufacturing, mostly natural resource processing industries, for 15%.

These figures shifted in the second half of the 1990s, as the operations of multinationals in Chile were redirected towards services as a means of taking advantage of the domestic market's growth. Thus, in this period, FDI was closely linked to large-scale acquisitions in the electricity, telecommunications, and banking sectors and to the public utility operating concessions. During these years services accounted for nearly two-thirds of total FDI, mining's share shrank to 24%, and manufacturing was the destination for 10% of these investment flows (ECLAC 2000).

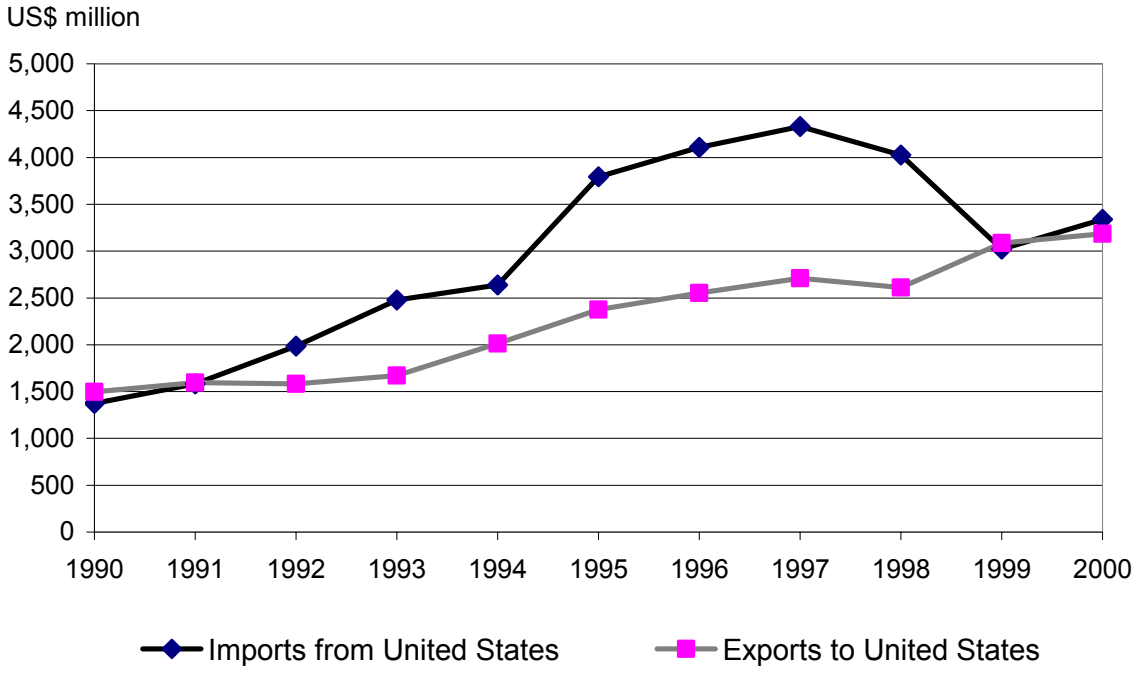
The change in the sectoral structure of investment in the second half of the 1990s also led to a change in the geographical distribution of investment sources. In the first half of the 1990s, two-thirds of investment funds came from Canada and the United States and only 15% from the EU. In 1995-1999, however, flows from North America accounted for only 37% of the total, while those from the EU amounted to 45%. Within Europe, the largest investor was Spain, whose large-scale acquisitions of Chilean utilities accounted for 30% of the investment flows during this period (ECLAC 2000).

In conclusion, FDI inflows have been very important for Chile's economic growth and export success. The macroeconomic conditions coupled with the transparent investment regime have attracted investment into those sectors in which Chile possesses a strong comparative advantage. The opening of the economy and the trade agreements Chile concluded made the country even more attractive. Industrial countries have been the main investors, transferring know-how and technology. The negotiations on NAFTA accession in the first half of the 1990s and the signing of the FTA with Canada in 1996 increased the interest of North American investors in the Chilean market considerably, but that interest diminished in the second half of the decade. An FTA with the United States will give new momentum to investment inflows to Chile.

3 Trade and Investment Relationship with the United States

The increasing trade volume between Chile and the United States reflects Chile's economic reforms and policies, including trade reform, and has contributed to Chile's achievement of the highest economic growth rates in the region. It also signals the growing interest of the United States in Latin American markets, particularly in countries that have achieved some measure of economic and political stability. In 2000, besides being Chile's largest export market, the United States was also the principal source of Chilean imports. The United States accounted for 18.1% of Chile's exports and 19.1% of its imports. The following figure tracks the bilateral trade flow over the last decade.

Figure 9: Chilean Merchandise Trade with the United States (1990-2000)



Source: Based on data from Banco Central de Chile (2001).

Despite lower imports from the United States in the last few years, due mostly to the Chilean economic slowdown in 1998/99, Chile ranked as the 32nd largest market for United States exports and its 37th most important trading partner in terms of trade turnover in 2000. In absolute terms, the United States exports more to Chile than to

Sweden, Russia, South Africa, Indonesia, Australia, Denmark, or Norway and only a little less to Chile than to India. As for per capita terms, the United States exports more to Chile than to Brazil, Argentina, Italy, or the Philippines (USITC 2001). Thus, Chile is indeed an important partner for the United States, regardless of its size.

Exports to the United States

In 1999, exports to the United States accounted for one-third of Chile's worldwide exports in agriculture, one-quarter of its worldwide forestry exports, and one-fifth of its fishing exports. Only 12% of worldwide mining exports and 14% of other industrial products exports were sent to the United States (Banco Central de Chile 2000). The following table illustrates the sectoral export development to the United States for the period of 1993 to 1999.

Table 1: Chilean Exports to the United States by Sector (1993-1999)

(In percentages)	1993	1994	1995	1996	1997	1998	1999
Mining	30.3	36.7	41.7	38.5	34.2	22.9	27.5
Agriculture [1]	35.6	32.0	30.5	33.8	34.0	36.5	33.9
Forestry [2]	8.0	8.8	9.2	8.9	11.6	13.5	15.8
Fishing [3]	12.4	11.2	10.4	11.3	12.4	14.7	12.3
Industry[4]	13.6	11.1	7.9	7.1	7.3	11.7	9.8
Others	0.1	0.2	0.3	0.4	0.5	0.7	0.7
Total exports	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Note: [1] Includes agroindustrial products.
[2] Includes processed forestry products such as chemical wood pulp.
[3] Includes processed fishing products such as fishmeal.
[4] Other industrial products such as chemicals and plastics.
Source: Based on data from Direcon (2000b).

Agriculture has become the most important export sector to the United States, accounting for one-third of exports in 1999. Mining dominated the export structure to the United States until 1998, when agriculture, especially as a result of its fruit exports, became the leading export sector. But mining still is the second largest export sector, with a share of 27.5%. In 1999, the forestry sector was the third most important export

sector with a share of 15.8% of exports to the United States, while it accounted for only 8% in the early 1990s. The fishing sector was in fourth place with 12.3%. Exports of other industrial products represented 9.8% of exports to the United States with chemical products as the main export good in this category (Direcon 2000b). The export composition to the United States differs from Chile's total exports to the world. While mining dominates worldwide exports, agricultural goods, including agro-industrial production, account for the largest export share to the United States. A comparison of Table 1 and Table 4 in Appendix 7 points out this difference in the sectoral composition.

Looking at the growth rate of Chilean export products to the United States during the last decade, some products, especially those related to copper mining as well as some fresh fruit products, show relatively modest growth rates and are referred to as traditional exports. In contrast, those products that show growth rates above the average are considered non-traditional products. These non-traditional exports to the United States are processed forestry products; fresh and processed fish, especially salmon; and agroindustrial products such as processed vegetables, canned fruits, juices, and wine. Most of these products were exported in small quantities or not at all at the beginning of the 1990s. The United States is an important export market for Chile's non-traditional products. For example, it accounts for over 80% of Chile's total exports of wood moldings (99.2%), avocados (98.9%), wood frames for doors (98.6%), salmon (96%), fiberboard (88.2%), seed corn (86%), and apple juice (82.1%) (Direcon 2000b).

The comparison of the Chilean export structure to the United States in 1991 to that in 2000, which is illustrated by the two diagrams in Figure 6 (p. 40), has revealed that the share of processed natural resource exports in total exports to the United States increased during the last decade, while the share of natural resource exports declined. The analysis also shows that in 2000, processed natural resources accounted for a higher share in total exports to the EU than in those to the United States. In 1991, it was the opposite, i.e., the share of processed natural resource exports to the United States was higher than to the EU. The development in the EU export market indicates that Chile should be able to further substitute processed for unprocessed natural resources in the U.S. export market.

When comparing the sectoral development of Chilean exports to developed countries over the last decade, a negative correlation between natural resource exports of a certain sector and the corresponding processed natural resource exports to the same market destination can be observed. In the case of the United States, Chile's unprocessed forestry exports decreased, while there was a significant simultaneous increase in processed forestry exports. This suggests that there is substitution of natural resource exports with the corresponding processed natural resource exports to the same destination market, i.e., a substitution in favor of products with higher value-added.

The share of other industrial products in total exports to the United States remained low over the last decade, at about 10%, but it is high compared to the share of other industrial exports to the EU and Japan, as Figure 6 (p. 40) illustrates (Banco Central de Chile 2001; Campero and Escobar 1992). The low level of other industrial products can be related to the limited competitiveness of Chile's value-added exports in the U.S. market and the tariff escalation for products with higher valued-added in the United States.

The limited level of competitiveness of Chilean products in the United States can be explained by two factors. First, there are comparative advantages that other countries have over Chile, implying a lower chance of entering and competing in the markets for these products. Second, some countries have preferential access to the U.S. market, which creates artificial comparative advantages. The United States has signed FTAs with Canada, Mexico, Israel, and Jordan, and grants preferential access to the Andean Pact, Central American, and Caribbean countries, which compete in similar export products. An FTA with the United States would put Chile on equal level with its regional competitors.

Imports from the United States

The United States is not only Chile's most important export destination, but also the principal country of origin for its imports. As Figure 9 (p. 47) illustrates, imports from the United States had shown continuous growth until the Asian crisis. Between 1991 and 1997 alone, Chile's imports from the United States nearly tripled, growing from

US$1.6 billion to US$4.3 billion in 1997. As a result of the economic recession in Chile in 1999, Chilean imports from the United States decreased by US$1 billion from 1998 to 1999 and since then have been increasing only slowly (USITC 2001).

The United States is Chile's main provider of capital goods. In 1999, capital goods imports from the United States represented about one-third of Chile's total capital goods imports. One fifth of Chile's intermediate goods imports originated in the United States (Banco Central de Chile 2000). Table 2 shows the development of the Chilean imports from the United States between 1992 and 2000. Imports of intermediate products have dominated the import structure and accounted for half of total imports in most years, followed by capital goods with a share of about 40% and consumer goods imports (Banco Central de Chile 2001).

Table 2: Structure of Chilean Imports from the United States (1992-2000)

(In percentages)	1992	1993	1994	1995	1996	1997	1998	1999	2000
Consumer goods	7.8	7.5	8.4	8.5	10.0	9.8	8.7	9.2	9.0
Intermediate goods	55.3	51.3	51.8	51.9	47.5	47.5	47.8	53.6	51.2
Capital goods	36.9	41.2	39.8	39.6	42.5	42.7	43.5	37.2	39.8
Total imports	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Based on data from Banco Central de Chile (2001).

Given its liberal trade regime and economic growth rates, Chile provides an attractive and growing market for U.S. exports. Chile's need for imported capital goods will continue to grow. The further development of the Chilean economy will also increase demand for services. With its service-oriented economy, the United States is in a strong position to continue its growth in services exported to Chile.

U.S. Investment in Chile

The United States is also the principal investor in Chile. Since 1974, U.S. companies have invested about US$13.5 billion in Chile, representing 31% of all foreign investment (DL 600) during that time period, making it the largest and most consistent investor. U.S. multinationals continue to be a major source of foreign investment in

Chile. In 2000, the United States represented 25% of all FDI. Although this accounts for a high share of total investment, in absolute terms it represents only US$734 million, compared to nearly US$2 billion in 1999. This is the lowest amount of U.S. FDI since 1993 (Foreign Investment Committee 2001). This drop coincides with a reduction in global investment. Many investors have lost confidence, especially in emerging markets due to recent crises in Turkey and Argentina.

U.S. investment inflows contributed largely to Chile's economic success in the 1990s. To continue its economic growth Chile needs to attract new investment in the future. An FTA with the United States will give momentum to currently low investment inflows. Chile's resource based export economy provides ample opportunities for U.S. investors. In addition, U.S. investment will help diversifying Chile's economy further and expand into new export industries.

In conclusion, the analysis of Chile's trade and investment relationship with the United States shows the importance of the United States for Chile's continuing economic growth. The U.S. market is a significant future market for Chile's agroindustrial, processed forestry, and fishing products. As the export trend shows, these products are very competitive in the U.S. market and there is high growth potential, especially for products that have not been exported yet due to the escalating U.S. tariff schedule. An FTA with the United States will eliminate that tariff schedule and enable Chile to continue the path of export expansion, especially of products with higher value-added. Much of the investment in Chile's successful export industries originates in the United States. Other investing countries have been more active in buying existing companies and service providers than establishing new operations and bringing in capital goods. An FTA with the United States will increase the attractiveness of Chile as a location for investments from both the United States and other parts of the world.

PART III: ANALYSIS OF THE ECONOMIC IMPACT UPON CHILE OF A FREE TRADE AGREEMENT WITH THE UNITED STATES

Building on the previous two parts, this part examines the potential impact on Chile's economy of an FTA with the United States. It begins with an overview of the literature on trade creation and trade diversion. The findings are applied to the Chilean case in order to determine the extent of static welfare gains and losses. The second chapter examines potential costs of an FTA such as adjustment costs for the traditional agricultural sector and tariff revenue losses for the Chilean government. The impact on the import sector is followed by an analysis of the effects of improved market access on exports to the United States and the potential for export expansion. Chapter 4 focuses on the dynamic effects and the main channels through which they may occur. The fifth chapter discusses non-traditional gains which result mainly from reduced uncertainty in trade relations with the United States. The final chapter explores Chilean environmental and labor issues that will arise in the FTA negotiations. In addition to discussing the concepts of fair trade and the pros and cons of policy harmonization, this chapter examines the potential impact of the FTA on Chile's environmental and labor policy.

1 Trade Creation and Trade Diversion

1.1 Theory of Trade Creation and Trade Diversion

The welfare impact of PTAs is an issue which has been subject to an ongoing debate. Early contributions are from Viner (1950), Meade (1955), and Lipsey (1957). In static welfare analysis, Viner's (1950) seminal concepts of trade creation and trade diversion remain central. In *The Customs Union Issue* (1950), Viner points out that a move towards free trade by two nations which continue to maintain tariffs against other countries could leave them worse rather than better off. He accepts that customs union (CU) formation would increase trade between the member countries but he argues that whether this is desirable or not depends on the source of increased trade. Viner identifies two possible cases: trade creation and trade diversion. Trade creation

involves a shift in domestic consumption from a high cost domestic source to a lower cost partner source, as a result of reducing tariffs on trade between partner countries. Trade diversion involves a shift in domestic consumption from a low cost world source to a higher cost partner source, as a result of eliminating tariffs on imports from the partner.

Viner argues that the closure of (high cost) home industries through trade creation would be advantageous for the home country because it would release resources for use in industries in which the home country has a comparative advantage. The partner country would gain or at least not lose from its new exports to the home country, and therefore the union as a whole would be better off.

In contrast, trade diversion can create a situation in which members of the PTA end up buying from higher cost sources – their partners in the PTA – while also losing the tariff revenue they would previously have collected on imports from outside the PTA thus reducing their welfare. The partner country would, in Viner's analysis, derive no benefit from this – the higher price would be needed to meet its higher costs – and therefore the union as a whole would be worse off. Viner concludes that an assessment of the welfare effects of a CU depends on the balance between trade creation and trade diversion: a predominantly trade-creating union would be desirable, while a predominantly trade-diverting union would be damaging.

Viner is vague about the assumptions underlying his analysis – as Meade (1955) observes, Viner's analysis is most suitable under (i) constant costs of production and (ii) perfectly inelastic demand. Meade (1955), Gehrels (1956), and Lipsey (1957) point out that relaxing the demand assumption opens up the possibility of a further source of gain – a consumption effect. The removal of tariffs on imports from the partner country can lead to a fall in prices paid by the home consumer, and, if demand is not completely inelastic, to a rise in quantity consumed (Meade 1955).

When a tariff is imposed it introduces a divergence between relative prices facing consumers and real opportunity costs of goods to the economy. In a CU, some dutiable goods formerly imported from outside sources will be replaced by similar goods imported from a partner country without duty but at a higher real cost. The shift to a

higher cost source of supply tends to lower the country's real income. The income-reducing effect of trade diversion does not need to occur when changes in relative prices and the resulting substitution effects in consumption enter the analysis. Basically, the pre-union MFN tariff distorts both production and consumption (Lipsey 1960).

Viner's analysis rules out substitution in consumption and looks to shifts in the production location as the cause of welfare changes in CUs. By focusing on the costs of production alone, Viner neglected the possibility that eliminating the price distortion within the union might improve welfare through adjustments in consumption patterns. Removal of the constraint on consumption produces a less distorted pattern of consumption, which in turn can raise welfare. Allowing for consumption effects provides an additional potential source of gains from trade creation on top of the production effects. This makes it more likely that the CU is welfare-improving overall, even in the presence of trade diversion.

The distinction between trade creation and trade diversion represents an over-simplification and misses some potential gains from a PTA, even if it is mostly trade diverting. There are several grounds on which a PTA can be desirable even if it is predominantly trade diverting. Wonnacott and Lutz (1989), Frankel, Stein and Wei (1995), and R.J. Wonnacott (1996) argue that, under certain circumstances, trade diversion can be beneficial. Besides the diversion's traditional supply switching effect and Vinerian terms of trade loss from purchasing from a more expensive source, it also triggers a process of trade liberalization between partners in which standard effects of increased competition and specialization may reduce a partner's costs enough to make it the lowest cost source. It may benefit the home country by making the Vinerian terms of trade effect positive rather than negative and increase world welfare by lowering the cost of producing the good (R.J. Wonnacott 1996). New competition can reduce the market power of inefficient domestic monopolies. Economies of scale allow producers to operate at lower costs (Frankel, Stein and Wei 1995).

Production under economies of scale can improve efficiency despite trade diversion. Even though the partner's goods are initially more costly than those of outside producers, their costs can become competitive by international standards once the

partner has access to the home country and is able to exploit economies of scale. Even if the partner remains a higher cost producer than outside countries, economies of scale cause a reduction in total costs and increase welfare (Wonnacott and Lutz 1989).

Another means by which a PTA may be desirable from the members' point of view even if it leads primarily to trade diversion is the fact that it is trade diversion, the shift of demand away from imports from the outside world, which may lead to an improvement of their terms of trade at the rest of the world's expense (Krugman 1991). This terms of trade deterioration for third parties is also called the beggar-thy-neighbor effect of a regional integration arrangement. It can make the PTA an attractive proposition for potential members despite negative trade diversion effects on member countries. This argument holds in the case where the FTA is sufficiently large, taken as a group, to affect world prices (Fernández 1997).

Fernández (1997) explains the members' terms of trade gains and the excluded country's loss in the following way. If as a result of an FTA all prices are left unchanged, with tariffs eliminated for FTA members but maintained for all other countries, then the FTA countries will buy more from one another. Each FTA country will substitute away from consumption of its own goods, and all FTA countries will substitute away from consumption of goods bought from non-member countries. The net effect on the demand of each FTA country will be ambiguous because each country would buy less of its own goods but sell more to the other. The demand for third party goods, however, will decrease if goods are sufficiently strong substitutes. Thus, to clear markets the price of third party goods will have to fall which will create a positive terms of trade effect for the member countries, as long as no member country's price decreased by too much. The resulting distributional effect, also called beggar-thy-neighbor effect, occurs at the expense of the third party.

Viner's simple theory has been reworked and criticized many times but provides a basic framework for the analysis of whether members or non-members of a PTA benefit from such an agreement. The distinction between trade creation and trade diversion allows for an analysis of the welfare effects and remains an essential component of any evaluation of a PTA, even though the case against trade diverting

PTAs has lost significance through the existence of economies of scale (Wonnacott and Lutz 1989).

The following model analyzes trade creation and trade diversion considering both consumption and production effects. The model is set in a partial equilibrium framework and depicted in the following Figure 10.[31] The analysis focuses on a world of three countries, two of which – the small home country (H) and the large partner country (P) – form a PTA, the rest of the world (RoW) being excluded. H is small and cannot influence world prices. It faces a completely elastic supply from P and RoW. Markets are perfectly competitive and goods imported from the RoW, from P, and domestically produced import substitutes are homogeneous. Production of the homogeneous good in H is under rising marginal costs. There are no externalities. Welfare effects are analyzed in relation to three groups: consumers and producers whose welfare is reflected, respectively, in consumers' surplus and producers' surplus, and the government that receives tariff revenues (Hine 1994).

H's supply of a particular product is shown by curve S_H and H's demand by D_H. Furthermore, the product is produced by P and RoW at prices P_P and P_{RoW} respectively. Prior to the PTA, H applies a non-preferential tariff t_0 to the product. H meets its demand with domestic production and imports from the RoW at the price of $P_{RoW} + t_0$. There are no imports from country P since they are more expensive than those from RoW. The production level of H is q_2 and the level of consumption is q_3. The excess demand is met by q_2q_3 imports.

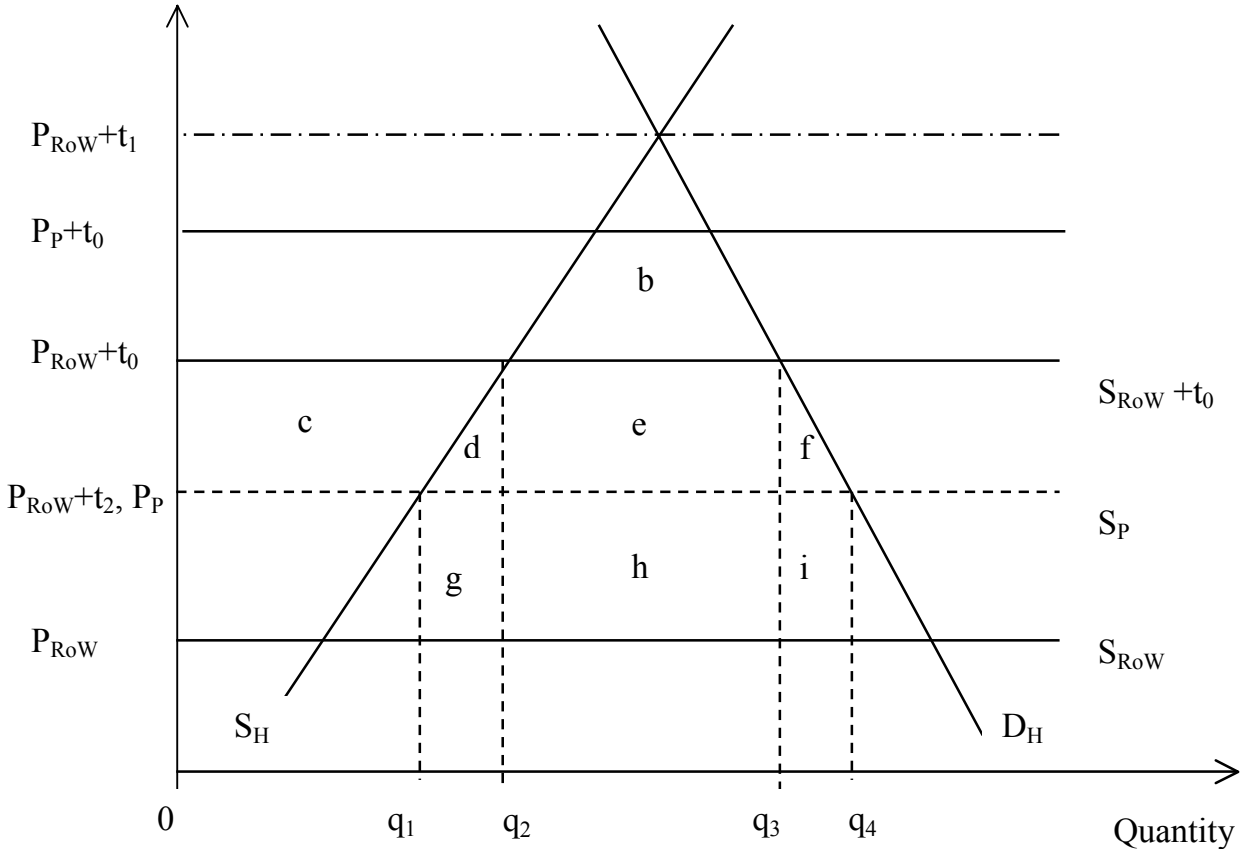
A PTA formed between H and P gives consumers in H access to tariff-free imports from P, lowering H's price to P_P. Consequently, production of q_1q_2 in H is displaced by lower cost production in P and consumption increases by q_3q_4. Imports rise to q_1q_4 and now come exclusively from P. The extra trade – imports $q_1q_2 + q_3q_4$ – represents trade

[31] Most preferential trade theory is set within either a partial equilibrium or general equilibrium framework. The partial equilibrium approach ignores potentially important feedback effects between sectors, but has the merit of providing a simple framework for analyzing some of the key issues. However, quantitative studies of integration schemes should ideally be general equilibrium in nature so that they are internally consistent through capturing the many important feedback effects. They should also be disaggregated sufficiently to pick up intersectoral adjustments.

creation. Imports of q_2q_3 from RoW are switched away to P, a higher cost source of supply – this is the trade diversion.

How do these changes affect welfare in H? Area (e) is a redistribution of tariff revenue to consumers in H. The lower price will increase the welfare of consumers, measured by the gain in consumers' surplus of (c+d+e+f), but will leave producers worse off by area (c) – the fall in producers' surplus. All imports now come from a tariff-free source – P – hence the government will lose the tariff revenue of (e+h). The net effect in H can be expressed as: (d+f) – (h), which is in general indeterminate.

Figure 10: Trade Creation and Trade Diversion of a PTA for a Small Country when the Partner Country and the Rest of the World are Large



Source: Adapted from Hine (1994); Valdés (1992).

The components (d) and (f) are resulting gains, with (d) the production effect as high cost production in H is replaced at the margin by lower cost production in P, and (f) the consumption effect as the distorting effect of tariffs on consumers in H is reduced. Welfare increases both because consumption expands and production is reduced, allowing productive resources to be shifted into more efficient alternative uses (Valdés 1992). Area (h) is the trade diversion loss, reflecting the deterioration in H's terms of trade as imports are shifted to a higher cost source. The tariff preference given to P results in the substitution of RoW imports for those from P. All imports are now supplied by P at the price of P_P which is higher than the price P_{RoW} which the RoW could offer (Hine 1994).[32]

The model illustrates the basic proposition by Viner that it is not possible to make any general statement about the economic desirability of CUs since a CU can be trade creating and/or trade diverting. This conclusion depends critically on the underlying assumptions and each customs union must be assessed individually. Following Lipsey and Lancaster (1956), CUs can to be regarded as a good illustration of the theory of the second-best, which states that reducing some distortions while others remain in place does not necessarily increase welfare. If it is impossible to achieve the optimum condition of global free trade, then a change that brings about the satisfaction of some of the optimum conditions, in this case an FTA, can make things either better or worse (Lipsey and Lancaster 1956).

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[32] This assessment of the welfare effects of a PTA formation is based on the (arbitrary) assumption that the initial tariff in the home country is t_0. Assuming instead that the pre-union tariff is t_1, the minimum prohibitive tariff. CU formation can only result in trade creation, and there is a net welfare gain of (b+d+e+f). If a country's MFN tariff structure is prohibitively high, so that the country is in virtual autarky, preferential liberalization would, of course, improve resource allocation without diverting any trade, simply because there is no trade to divert. But this extreme case is of no practical interest since it is difficult to identify any single country, let alone several, that are sufficiently close to autarky to make this theoretical possibility relevant. Similarly, if the RoW supply price had exceeded that of P, only trade creation could arise from PTA formation. Alternatively, with an initial tariff in the home country of t_2 the PTA could be purely trade diverting, producing a welfare loss for H of (g+h+i). In this situation the partner country's price (without a tariff) is the same as the tariff-inclusive price from RoW, so removing the tariff on P's product means that the consumer price does not fall. In this case there will be no trade creation, just possibly some switching from RoW to partner imports (but only possibly since from the consumer's point of view, goods cost the same and it does not matter which they buy).

1.2 Extent of Trade Creation and Trade Diversion

The question of the desirability of an FTA poses a trade-off. Favorable effects come from the elimination of distortions in the relative price between domestic goods and the products of the other member. The potential unfavorable effects arise from the introduction of distortions in the relative price of member and non-member goods. In terms of classic CU theory, the trade-off is between trade creation and trade diversion.

An FTA with the United States will result in a more efficient resource allocation in Chile if by opening its markets the country encourages the substitution of cheaper U.S. imports for the output of inefficient domestic producers, thereby stimulating specialization and more efficient production. These gains from trade creation must be weighed against the effects of trade diversion, which occur when Chile no longer takes full advantage of international labor division. In contrast, it substitutes cheap goods from third countries that have a real cost advantage for more expensive goods from the United States. The FTA will change Chile's pattern and direction of trade as imports from the United States become cheaper, encouraging consumers to substitute these for local production and for imports from the rest of the world. These trade effects create real income changes for consumers and producers as well as changes in government tariff revenues.

The following factors are important to consider in evaluating the extent of trade creation and trade diversion (Schiff 1996a): whether the goods are homogeneous or differentiated, and in the homogeneous case, whether Chile is a small or large buyer of the product in question in the United States and in the markets of the rest of the world. The cases examined below are those which seem most relevant for Chile.

In the case of homogeneous products, it is plausible to assume that Chile's imports from the United States and the rest of the world are small and thus Chile will only import from one source. For those imports from the United States, which are cheaper than Chile's imports from the rest of the world (before forming the FTA), only U.S. goods are imported. Under these circumstances, forming the FTA results in pure trade creation and increases Chilean welfare.

On the other hand, Chile's imports from the United States can replace cheaper goods and services previously imported from Europe, Asia, and Latin America. This will result in trade diversion due to the replacement of a cheap non-U.S. source of imports by a more expensive one (but on the exports of which no tariffs are paid), and will result in a loss. There will also be trade creation. Since Chile's consumer prices fall, this results in trade creation and welfare gains.

In the case of differentiated products and services, other things being equal, trade diversion will be smaller if the elasticity of substitution between U.S. and non-U.S. products is low. Trade creation will be larger if the elasticity of substitution between imports from the U.S. and domestic products is high. The extent of trade diversion will also depend on the difference in Chile's tariffs for both sources of imports.

The models for FTA welfare analysis do not yield ready guidelines on regional integration arrangements for policy makers owing to both the difficulty of deriving analytical solutions to the model and the problem of making generalizations about policy options. For these reasons, economists have been drawn to the process of identifying the particular characteristics that are more amenable to deriving clear insights or policy prescriptions to issues surrounding FTAs.

Whether trade creation or diversion dominates in terms of welfare effects is an empirical matter that must be decided from the characteristics of the member countries. It is not possible to make any general statement about the economic desirability of an FTA since it can be trade creating and/or trade diverting. The conclusion depends critically on the underlying assumptions and each FTA must be assessed individually. The following sections analyze the extent of trade creation and trade diversion for Chile as a result of an FTA with the United States.

Trade Creation

The conventionally emphasized static effects of FTAs revolve around issues of resource allocation. The allocative efficiency argument maintains that, in the absence of market rigidities or imperfections, free trade policies will promote specialization in those activities in which comparative advantages prevail, hence maximizing economic

welfare. On the supply side, gains occur because production efficiencies result from the more effective reallocation of resources towards high-yield, low cost production. On the demand side, gains occur because consumer welfare is enhanced by lower prices and greater variety of goods and services (Bouzas and Ros 1994).

Trade creation is greater the more responsive supply and demand conditions are in the two countries to changes in prices induced by internal liberalization. In principle, there are two different – but not incompatible – scenarios under which trade creation might be maximized. First, in cases in which production structures and factor endowments are similar, trade creation based on an expansion of intraindustry trade, product differentiation, and economies of scale might occur. This is most likely among countries with: (i) similar factor endowments and production structures; (ii) overlapping demand structures and relatively high per capita incomes; and (iii) a relatively large combined market. Alternatively, trade, predominantly interindustry trade, can expand on the basis of differences in resource endowments and thus in productive structures across members, i.e., through specialization guided by comparative advantage (de la Torre and Kelly 1992).

The trade creation that will occur in the FTA with the United States will be rather the result of differences in resource endowments, thus in productive structures between Chile and the United States, than of an expansion of intraindustry trade. Trade will expand through specialization guided by comparative advantage. However, the extent of trade creation will not be very high. For many years Chile has had in place a relatively low and uniform MFN tariff rate. In addition, since July 1997 Chile has had free trade with Canada and the Chilean economy has been exposed to competition from a developed country. During these years, domestic industries had to adjust to increased competition from Canadian producers. However, Canada's trade pattern is more natural resource-oriented than that of the United States, though less so than that of Chile. This might still allow for some trade creation.

Trade Diversion

Level of External Protection

The incentives for trade diversion are minimized when the members' tariffs on external trade are low. Trade diversion is both more likely and more costly when the external trade barriers are high. It is more likely since the relative price differences created by preferential liberalization will be greater with a higher external tariff inducing trade diversion in more sectors. If a country has moderate tariffs, then relatively few importers will find an incentive to shift their sourcing from outside countries to member countries once preferential access is granted. However, if a country has high tariffs then the preference afforded to member countries will provide a substantial incentive for importers to look within the region rather than to the rest of the world.

Trade diversion is also more costly since a higher external tariff will provide greater incentives for inefficient sectors to expand. Producers are able to charge high prices because the tariff protects them from world competition and they capture what was previously tariff revenue on internal trade. Fundamentally, the gains from competition with low cost suppliers – gains to consumers, gains in developing an efficient industrial structure, and competition-induced efficiency gains at the firm level – are lost if competition from the lower cost suppliers is inhibited. These are arguments both for low tariffs on average, and for tariff schedules that are relatively uniform, avoiding peaks. Very high rates in particular sectors are almost certain to produce trade diversion.

For a developing country, Chile has a low MFN tariff. In 2001, it had a simple average uniform tariff of 8%, which will be gradually reduced by one percentage point per year to reach 6% in 2003 (Banco Central de Chile 2001). As a result of Chile's several FTAs, the effective average tariff rate paid for Chilean imports at the beginning of 2001 was only 5.5% (CCS 2001). An 8% margin of preference for a country like the United States may cause some trade diversion. However, the continuing unilateral reduction of the uniform tariff reduces the likelihood and will limit both the extent of trade diversion and the cost of any trade diversion that may occur.

Though Chile has currently a low uniform tariff, it must make sure that its unilateral liberalization strategy is not reversed once the FTA is implemented. The extent of trade diversion also depends on the way in which the FTA with the United States affects trade barriers vis-à-vis the rest of the world. If a protected industry loses sales because of increased imports from the United States as a result of the FTA, it might pressure the government to provide higher protection against imports from other suppliers. If the Chilean government were to respond to this pressure by increasing protectionist measures towards non-member countries, trade diversion would also increase.

Chile's uniform tariff, however, will minimize lobbying by special interests for protection because it diffuses the benefits of protection. If the only way protection can be increased is by increasing protection for all industries, lobbying for protection then yields only dispersed benefits as well as costs to the lobbyists and is thus less likely to occur (Matusz and Tarr 1999). In addition, Article XXIV of GATT permits departures of the MFN clause for PTAs provided that the duties and regulations affecting third countries will not on the whole be higher or more restrictive than those prior to the formation of the PTA.[33] Therefore, Chile's WTO obligations will limit its ability to raise external barriers.

In addition, trade diversion is higher if a partner country's costs are out of line with costs and prices in the rest of the world. This would not be the case if the partner itself has low trade barriers. Prices and costs in the partner country would then, in most cases, not exceed the price at which imports from the rest of the world are sold in the partner country. This means trade diversion will be small, if the partner country itself has low protection and production costs are close to world minima (Schiff 1996a).

By forming an FTA with the United States, Chile is entering into an agreement with a country which is relatively open and whose large economy benefits from very high factor mobility and extremely competitive conditions. Given its openness, relatively low tariffs, and competitive market conditions, one would expect that the difference in costs between U.S. and third country exports would not be large for most competing

[33] GATT rules for PTAs are discussed in Part I, Chapter 1.1.

products and that the United States is competitive relative to other suppliers. The extent of trade diversion should be much smaller in this case than if Chile entered into an FTA with a country which, other things being equal, was highly protectionist and had a non-competitive market structure. The relative inefficiency of a preferential trading partner can be the source of significant trade diversion effects. This problem will not occur in the case of a Chile-U.S. FTA since the United States is efficient compared to third party suppliers (Schiff 1996a).

Moreover, the risk of trade diversion is reduced by Chile's strategy to negotiate FTAs with its main trading partners (Agosin 1999). Chile is currently also negotiating FTAs with the EU and Japan. Chile imports most intermediate and capital goods from the United States, the EU, and Japan. Success in signing these agreements would further minimize any risk of trade diversion induced by the FTA with the United States.

Volume of Trade with the United States

FTAs between countries that are already major trading partners and have relatively open trade regimes suggest less pressure for trade diversion. They are likely to derive large benefits from entering into an FTA because trade flows are generally consistent with least cost sourcing, before regional preferences are introduced. If prospective union partners are trading heavily with each other, it is because each offers the other the least cost source for a large set of goods. Thus, the likelihood is reduced that a large number of goods will be diverted from least cost suppliers outside the union to higher cost suppliers within the union (Harmsen and Leidy 1994).

The notion of natural trading partners originates in Wonnacott and Lutz (1989) and refers to prospective members of an FTA which would have traded extensively with one another even in the absence of a trade arrangement. Based on the work of Viner (1950), both Lipsey (1960) and Johnson (1962) provide detailed criteria for determining whether or not a given set of countries constitute natural trading partners. The criteria are either volume of trade with potential partners, i.e., the share of imports that originates in member countries, or distance and transport costs between them. If the prospective members are already major trading partners, the FTA will be reinforcing natural trading partners, not artificially diverting them. If the prospective members are

geographically close, transport costs are lower. Groupings of distant nations could be economically inefficient because of high transportation costs (Wonnacott and Lutz 1989).

Lipsey (1960) already argues that a PTA is more likely to raise welfare, given the total volume of imports of the country, the larger the proportion of these imports that come from member partners and the smaller the proportion devoted to imports from the rest of the world. Trade diversion does not occur if tariffs are reduced only on imports from countries that already are the lowest cost supplier. This observation motivated Lipsey's claim that a PTA is likely to raise welfare if the PTA partners initially account for large shares of each other's imports, as would be the case if they were low cost producers.

According to Krugman (1991), countries that trade disproportionately large amounts with each other are natural trading partners and PTAs between them are likely to be welfare enhancing since they entail relatively low welfare losses from trade diversion. In a similar vein, Summers (1991) states that to the extent that blocs are created between countries that already trade disproportionately, the risk of large amounts of trade diversion is reduced.

Bhagwati and Panagariya (1996a) and Panagariya (1997) reject this popular theory that trade diversion would be minimized if PTAs were established among natural trading partners. They argue the more the home country imports from the partner country, the more it loses from the tariff preference due to tariff revenue losses resulting from an increase in diverted imports.

In addition, Bhagwati and Panagariya (1996b) argue the initial high volume could itself be a result of earlier preferences rather than natural circumstances. In other words, a large share of a country's trade with a partner might just reflect existing distortions – as has been true to a certain extent for the United States and Mexico before NAFTA because of offshore assembly provisions, and for the United States and Canada because of the long-standing GATT-sanctioned free trade in cars.

According to the natural trading partner theory, the more Chile trades with the United States relative to third partners, the lower is the likelihood that an FTA with the United States will result in a displacement of other suppliers from the Chilean market and the larger are the net benefits from preferential trade liberalization vis-à-vis the United States. In purely static terms, high trade concentration in the U.S. market implies limited room for welfare losses stemming from trade diversion (Erzan and Yeats 1992).

Chilean foreign trade is diversified both with respect to the destination of its exports and the origin of its imports, as shown by Figures 4 and 5 (p. 37, 38). About one-fifth of Chile's imports originate in the United States, implying the absence of any natural trading partner relationship (Banco Central de Chile 2001). The Chilean situation differs from that of Mexico, which had the United States as its natural trading partner. Trade with the United States accounted for more than two-thirds of its total trade when it signed NAFTA (WTO 1996). Although the United States is not a dominant supplier of Chilean imports, it is its largest single country trading partner.

In addition, an analysis of Chile's import structure shows that the United States is still by far the principal country of origin for Chile's main import categories, capital and intermediate goods. In 1999, 31.5% of Chile's total capital goods and 19.4% of its intermediate goods imports originated in the United States which makes the United States the dominant supplier for Chilean capital goods and to a slightly lesser extent for intermediate goods (Banco Central de Chile 2000). Although the United States is not a natural trading partner in terms of overall share of trade, the potential this creates for trade diversion is mitigated by the fact that the United States is a major supplier in Chile's main import categories.

Geographic Distance between Chile and the United States

Advocates of the natural trading partner theory argue that proximity, hence, reduced transport costs, define beneficial and natural trading partners. The presence of transport costs means that countries that are geographically close could have lower costs of supply than more distant countries. The relatively small transport and communication costs between geographical neighbors and the low cost of procurement

and processing of information result in more intensive trade among these economies, even in the absence of a specific regional trade arrangement. Forming an FTA with close countries could thus be less prone to costly trade diversion than forming one with more distant countries.

Krugman (1991) and Frankel, Stein and Wei (1995) have strongly pushed the idea that the presence of transport costs make PTAs among proximate countries an attractive option. Krugman (1991) recognizes the role of transport costs and subdivides the world into continents. He observes that if intercontinental trading costs are infinite – thus precluding intercontinental trade – a series of regional blocs each covering one continent would produce a first-best outcome equivalent to global free trade. Krugman (1991) calls PTAs that are drawn along continental lines natural – blocs for which low transport costs make regionalism a natural and beneficial policy and increase global welfare.

Frankel, Stein and Wei (1995) use the gravity model[34] as their tool to conclude that proximity is in general an important determinant of bilateral trade. They assume transport costs to be finite but non-zero and demonstrate that a comparison of transport costs between bloc members and non-bloc members is needed for a full assessment of whether or not such blocs are welfare improving. They find that as intercontinental transportation and business costs increase relative to intracontinental costs, regionalism becomes a better policy in terms of welfare.

Krugman (1991) as well as Frankel, Stein and Wei (1995) argue that lack of distance and, hence, reduced transport costs should define beneficial natural trading partners. In other words, the presence of transport costs should make PTAs among proximate countries an attractive option.

This argument is controversial. The opposite view is provided in Bhagwati and Panagariya (1996a) and Panagariya (1998, 1999). They demonstrate that trade diversion does not need to be larger if a PTA is created between countries that are not

[34] In its strictest form, the gravity equation states that trade between two countries is proportional to the product of their GNPs, and is inversely related to the distance between them (Frankel, Stein, and Wei 1995).

in geographical proximity. Panagariya (1998) argues that there is no basis in economic theory for giving transport costs special treatment in evaluating PTAs since they affect the final price of the good like other costs of production. "Transport costs are no different than any other costs and as such deserve no special attention in considering PTAs" (Panagariya 1998: 14). Leaving aside the possibility that sufficiently high transport costs eliminate the scope for mutually beneficial trade between countries, the principle of comparative advantage is valid with or without these costs (Panagariya 1998).

Winters (1997) and Schiff (1999) argue that it is better not to use the term natural trading partner. Some define natural in terms of outcomes, i.e., volumes of trade between potential partners, while others focus on transportation or transaction costs. In addition, in the first case large flows are far from sufficient to render preferential trade liberalization beneficial, while in the latter relative transportation costs may not matter (Winters 1997; Schiff 1999).

Some would argue that transport costs have an effect on trade diversion in an FTA between Chile and the United States since the two countries are geographically distant. An FTA between distant nations could be economically inefficient because of the potential high costs involved. However, the importance of this argument has declined in the past decade, as transportation costs have decreased, dependent on the specific sector. Moreover, communication has improved and become much cheaper and faster, another factor why distance is today relatively less important (Panagariya 1998).

In their analysis of Chile's decision to join NAFTA or Mercosur, Spilimbergo and Stein (1998) raise the issue of intercontinental transport costs. According to their model, Chile would choose Mercosur instead of NAFTA only if very high transport costs exist across continents that would greatly reduce the potential trade between Chile and NAFTA. Otherwise, NAFTA would be more beneficial despite the distance between Chile and NAFTA.

Amjadi and Winters (1997) point out that today's transport costs among trading partners should not be the decisive factor in whether or not to sign trade agreements, since these costs have decreased considerably in recent years. On the basis of transport

costs alone there is no reason why Chile should not sign an FTA with the United States. They study transportation costs of exports of Mercosur member countries (including Chile) and investigate whether transportation costs of exports between Mercosur countries and non-member countries (the United States) are sufficiently high to afford significant gains to Mercosur countries under their new CU.

Amjadi and Winters (1997) show in their analysis of Mercosur that exploiting differences in transport costs only results in small benefits for Mercosur. Transportation margins on intra-Mercosur and Mercosur-Chile trade are lower than those on trade with the rest of the world (represented by the United States) by about six percentage points. This margin offers little justification for pursuing regional preferences. The reason is that the margin of 6% is rather small when considering total costs. Amjadi and Winters (1997) argue that Mercosur (including Chile) is not enough of a natural trading bloc in terms of transportation costs to warrant the introduction of preferences in the absence of other resulting benefits.[35]

The argument of increased trade diversion in the case of an FTA with the United States based on geographic distance loses much of its weight if one considers that technical progress has reduced transport, communication, and information costs considerably worldwide and has increased the action radius of the economic agents. Today transport costs are no longer prohibitively high, and intercontinental trade is large and growing. The impact of geography on trade has declined dramatically in recent decades. Geographical distance is no longer defining trade patterns. Thus, transport costs between Chile and the United States will not affect welfare gains considerably.

[35] The results of Amjadi and Winters (1997) indicate that transport costs to other Latin American markets are not much lower than those to the rest of the world. It is conceivable that transport costs within Latin America can be very high, despite geographical proximity, because of inhospitable geography and poor infrastructure. If Chile ships to the United States using modern shipping practices, transport costs could actually be less of a problem than they are within Latin America.

Relative Economic Size of Chile and the United States

The economic size of countries forming a PTA is important for potential welfare effects.[36] The claim has been made that, other things being equal, it is better for a small country to form a PTA with a large country than with a small one (Schiff 1996b; Bhagwati and Panagariya 1996a). Being a small country unable to influence the terms of trade of a partner country in a PTA can be a distinct advantage.

Schiff (1996b) argues that for given tariff rates, the home country is better off if the partner country in a PTA is large since a large partner is more likely to satisfy the home country's import demand at the world price. Schiff (1996b) finds that a small country joining a large regional trade arrangement will gain in a manner similar to that of a small country liberalizing its trade on a unilateral MFN basis.

A tariff reduction on imports from the United States will increase Chile's welfare, specifically through welfare-improving combinations of increased consumption of low cost imports, reduced production of high cost domestic substitutes, and reduced consumption of imports from inefficient small third countries. The United States would be sufficiently large to satisfy Chile's entire import demand at little or no increase above the prevailing international terms of trade.

Conversely, if Chile joins a small regional integration arrangement that is unable to meet its total demand for imports except at substantially higher border prices, consumers in the country must continue to purchase imports from third countries at a high price, namely, the international terms of trade adjusted for the import tariff originally levied on an MFN basis. According to DeRosa (1998), then not only Chile, but also the PTA as a whole, will be worse off as a consequence of Chile's accession to the small regional integration arrangement. Analogous to the outcome in the Viner model under increasing costs of production, the small country will be worse off by the amount of its lost tariff revenues on imports from member countries in the small regional integration arrangements. The PTA as a whole will be worse off by the

[36] Economic size is measured by a country's GDP.

amount of resources in member countries devoted to expanding exports to the small country (DeRosa 1998).

The analysis of Schiff (1996b) and DeRosa (1998) show that Chile, unable to affect itself its international terms of trade, will increase its welfare by forming a PTA with a large country whose relative prices will not be affected by an agreement with a small country. On the other hand, Chile will reduce its welfare by joining a small regional integration arrangement that cannot supply a greater volume of imports to the small country except at higher intrabloc prices, in which case welfare of the PTA itself will also be reduced.

Conclusion

The analysis shows that trade creation and trade diversion resulting from an FTA between Chile and the United States will not be very high. Trade creation will be low since for many years, Chile has had in place a liberal trade regime, implying that most of the potential allocative efficiency gains have already been realized. The main reason for little trade diversion is Chile's relatively low unilateral external tariff which will be reduced further. With the low external tariff, relative price differences created by preferential liberalization between the United States and outside countries will be small and result in little incentive to shift sourcing and divert trade.

According to the natural trading partner theory, the United States does not qualify as a natural trading partner since less than one-fifth of Chile's imports originate in the United States. In addition, the two countries are geographically apart. Nevertheless, the FTA will not result in considerable trade diversion. The United States is Chile's principal single country trading partner and main country of origin for capital goods and intermediate goods imports. Transport costs have decreased over the last few decades and are no longer prohibitively high. The difference in relative economic sizes is a positive factor for Chile and makes sure that imports from the United States are at world prices.

These findings are in line with empirical studies on the effects of NAFTA. An USITC (1997) sector-by-sector study on NAFTA's effect on U.S. imports found that for 59

out of 68 sectors analyzed, NAFTA had a negligible effect on U.S. trade, due in part to the already low average duties. Imports from Mexico already received preferences under GSP and duty-free treatment for U.S. inputs. Those from Canada were substantially liberalized by the previously agreed Canada-U.S. FTA (CUSFTA), which became effective in January 1989. Out of the nine sectors with a significant effect on trade, the study found evidence of trade diversion only in apparel products, where there has occurred a considerable increase in U.S. imports from NAFTA partners and a decrease in imports from Asian and Caribbean countries between 1993 and 1996 (USITC 1997).[37]

Krueger (1999) and Soloaga and Winters (2000) analyze NAFTA's trade effects on the United States and Mexico. Both analyses find that NAFTA has not yet had much effect on trade patterns of its member countries. "The evidence to date bears out most economists' initial predictions: that for the U.S., the impact of NAFTA has been relatively small, and that for Mexico, changes in trade flows to date do not give much support to the view that NAFTA might be seriously trade-diverting" (Krueger 1999: 3). It is still early years for NAFTA. Tariffs have not been entirely eliminated for trade with Mexico. Even for trade with Canada, tariffs were not entirely eliminated until the 1990s (Krueger 1999).

[37] Similarly in the Mexican market, some trade diversion in apparel products has occurred. Following the peso crisis, Mexico increased tariffs on non-NAFTA imports of clothing from 20% to 35% in March 1995, just as it was reducing tariffs on NAFTA imports. Mexican imports from the rest of the world fell by 66% between 1994 and 1996, while those from the United States increased by 47% (USITC 1997).

2 Adjustment and Other Potential Costs

This chapter begins with an analysis of Chile's adjustment costs as a result of the FTA with the United States. Since most sectors will mainly benefit from the FTA, the following chapter focuses on the principal loser, Chile's traditional agricultural sector. The discussion then moves on to the asymmetric distribution of adjustment costs between Chile and the United States. Besides adjustment costs for Chile's agricultural sector, the FTA will result in fiscal costs, which are discussed in the following section. Finally, potential costs of strict rules of origin are analyzed.

Adjustment costs encompass a wide variety of potentially disadvantageous short-run outcomes that might result from trade liberalization. These outcomes could include, among others, a reduction in employment and output as well as the loss of industry-specific and firm-specific human capital (Matusz and Tarr 1999). Liberalization of trade is expected to create trade and generate efficiency gains. However, in the process of arriving at the full potential benefits of an FTA, adjustments will occur on account of the reallocation of resources induced by liberalized trade flows.

Transitional adjustment costs will be incurred as Chile's economy moves from one equilibrium position to another. These costs could be substantial in the short run, with transitional welfare losses reflecting temporary unemployment and idle capacity during a period when firms – faced with competition from U.S. suppliers – go out of business while resources are slowly reallocated to better uses. Clearly, such transitional losses would be less if the degree of labor and capital mobility within Chile increases.

Coeymans and Larraín (1992) analyze the sectoral impact of a potential FTA with the United States on Chile's employment in a general equilibrium model. Their model assumes that the labor force and the rate of unemployment remain constant, so that there will be no changes in overall employment. Real wages and sectoral employment will change. Although the assumptions of this model limit its usefulness, the results do serve to highlight the fact that there are sectoral winners and losers.

Coeymans and Larraín (1992) state in their analysis that the reduction of employment in certain sectors does not mean that these sectors will face lower levels of employment in the future. To the contrary, as time passes these sectors will grow. The following employment changes are relative to what would occur in the absence of an FTA and are not absolute figures. In other words, the results indicate that employment levels of certain sectors will increase less or more with the FTA than in the case without an FTA (Coeymans and Larraín 1992: 42).

Coeymans and Larraín (1992) anticipate that the FTA will result in a short-term decline in employment, relative to the level in the absence of an FTA, of 0.51% in the industrial and 0.02% in the service sector, which will be offset by an increase in employment of 0.26% in agriculture, 0.15% in mining, and 0.05% in fishing. The increase in the demand for labor will be reflected in a 1.35% increase in real wages. In the long term, there will be a slight reduction in employment, again relative to the level in the absence of an FTA, in the agricultural, fishing, and service sectors, with declines of 0.39%, 0.16%, and 0.57% respectively, while there will be an increase in employment in the mining sector of 6.86% and in the industrial sector of 2.6%. In the long term, real wages will increase by 11.36%.

The more heterogeneous an FTA membership is in terms of development levels and the more important trade is as a percentage of GDP, the greater the potential gains from an FTA will be. It follows, however, that the adjustment process will be more complex (Devlin, Estevadeordal and Garay 1999). Hence, in an FTA with heterogeneous countries such as Chile and the United States, economic and social adjustments in some sectors will occur. The costs of these adjustments will depend on factors such as initial economic conditions in Chile, the nature of domestic economic policy, progress in structural reforms, exceptions and phase-out periods for tariffs, and the availability of adjustment assistance.

2.1 Impact on Traditional Agriculture

Potential adjustment costs of the proposed FTA will be borne mainly by producers of traditional Chilean agricultural goods such as wheat, flour, edible oil, and sugar. Although the agricultural export subsector will benefit, duty-free imports from the United States will aggravate the present difficult situation faced by producers of these import-competing products. Agriculture will become the most contentious issue in Chile's FTA negotiations because the negotiations take place against a backdrop of stress on profitability in large subsectors of agriculture during the last decade. This phenomenon – partly reflected in a decline in (real) farm prices for grains – has led to intense pressure for protection of import-competing subsectors. An FTA with the United States increases the risk of decline for these import-competing subsectors.

In an FTA with the United States, Chile will have to commit to reducing and ultimately eliminating all tariffs and non-tariff barriers on agricultural imports from the United States. Due to Chile's price-band regime, imports of sensitive commodities such as wheat, flour, edible oil, and sugar are currently exempt from the flat tariff regime and enjoy levels of protection much higher than 8%. The U.S. government will oppose Chile's reliance on the price-band system because it limits the competitiveness of wheat and oilseed exports to Chile (USTR 2000).

Given that tariff equivalents in Chile for imports of these commodities are particularly high due to the price-band mechanism, internal prices are expected to fall as a result of the preferential tariff liberalization and competition from the United States. Domestic production will fall in response to lower prices. Beyond the question of whether Chile's welfare as a whole will increase or not, the FTA with the United States will have an adverse effect on the domestic production of basic commodities.

In addition, Chile's strict sanitary and phytosanitary requirements prevent the entry of numerous U.S. products. As a result of efforts by the U.S. government, Chile began to open its market to some trade in certain horticultural products, including citrus fruits, table grapes, kiwis, apples, and pears. However, trade in a wide range of meat and dairy products is precluded due to specific requirements. One of Chile's most

protective sanitary measures is the requirement that all imported livestock products originate in facilities previously inspected by the Ministry of Agriculture. Imports of unprocessed U.S. poultry are still prohibited. Chilean grading and quality standards on beef are unique in the world and effectively prohibit imports from the United States. Chile approves the import of food products on a case-by-case basis only. There is no blanket approval process for permitting identical products to enter Chile, after they have been tested and found in compliance with local health regulations (U.S. Department of Commerce 2000).

The U.S. government continues to press Chile to implement and enforce WTO-consistent sanitary and phytosanitary requirements. During the FTA negotiations the United States will certainly exert pressure to lift these non-tariff barriers since the United States has a significant export interest in these commodities. This will result in the additional adjustment costs for these meat and dairy producers.

Imports protected by Chile's tariffs and non-tariff barriers, especially by the price-band system, compete not only with imports from the United States but also with imports from Mercosur. Before agricultural imports from the United States will be able to enter Chile tariff-free, agricultural products from Mercosur will already be sold duty-free in the market. Chile will face agricultural adjustment costs from its association with Mercosur. Production costs for annual crops in Chile are above those in Mercosur countries. Argentina's cost advantage is estimated at 30% for wheat and rice, and 50% for maize. The cost advantages enjoyed by all Mercosur countries for oilseeds are even higher (EIU 2000).

Although Chile was able to negotiate extended phase-out periods for tariffs on its most sensitive products – eighteen years for wheat and wheat flour (2014), sixteen years for sugar (2012), and fifteen years for beef, rice, and vegetable oil (2011) – social problems will arise. The majority of agricultural products has a shorter phase-out period and will enter Chile duty-free during this decade. It is important for Chile to ensure, in the negotiations with the United States, that the reduction of tariffs of sensitive products is extended over a longer period of time to avoid the double exposure to increased imports from Mercosur and the United States. By the time the

phase-out periods of the FTA with the United States will be over, Chile's traditional agriculture will have had to adjust to competition from Mercosur. While adjustment costs will occur in any case, the FTA with the United States will increase them.

A study by Quiroz, Larraín and Labán (1996) estimates the potential agricultural output effects of joining NAFTA. They show that cereal products will be negatively affected, whereas agroindustrial production will increase. Quiroz, Larraín and Labán (1996) conclude that at the end of a transition period Chile will be faced with a significant reduction in production of wheat and maize. Olvarría and Rojas (1996) estimate if Chile accedes to NAFTA, the price of wheat will fall by more than 15%, which would diminish the cultivated surface and lead to the disappearance of a great part of the Chilean production. The price adjustment will result in a reduction in the land used of about 22% for the cultivation of wheat and in a reduction in income of about 48% (Olvarría and Rojas 1996: 185).

Quiroz, Larraín and Labán (1996) point out that these negative effects of NAFTA on traditional crops will occur in the long run with or without NAFTA. In other words, there will be a fall in prices and a reduction of the cultivated surface in the future anyway. Therefore, NAFTA accelerates a process that will be inevitable. Indeed, the structural adjustment process of the agricultural sector has already begun. Between 1987 and 1995 the cultivated surface for traditional crops was reduced by approximately 300,000 hectares, as a consequence of decreased competitiveness due to falling real prices. Restructuring processes have been observed in the use of land. The land area cultivated under vegetables and flowers has increased by about 20,000 hectares, while that under vineyards and fruits has increased by 50,000 hectares. At the same time, the structural adjustment provoked a modernization of the entire sector (Gómez 1996: 206).

Muchnik, et al. (1992) use a partial equilibrium model to analyze employment effects in the agricultural and agroindustrial sector of an FTA between Chile and the United States. The results indicate that employment will decrease by 10.4% in the sector of importable agricultural goods, i.e., wheat, maize, sugar beet, and oilseeds, while employment will increase in the sectors of both exportable agricultural goods, i.e., fresh grapes, peaches, vegetables, and wine by 2.5%, and agroindustrial goods, i.e.,

among others, tomato paste, raisins, and canned peaches by 28.3%. The overall effect will be an increase of 1.5% in employment.

One of the most revealing results of this study is the regional impact in terms of production and employment. The output reduction in traditional crops will be regionally concentrated, which leads to complex political negotiations. The benefits from agricultural export expansion will take place in Central Chile, but the costs in terms of reduced production and employment will occur in the South where most of the traditional products are cultivated. The South is typically rural and has few alternative opportunities.

The agricultural provisions of the FTA between Chile and the United States will be similar to those signed between Mexico and the United States in NAFTA. In that agreement, both countries immediately eliminated all non-tariff barriers by converting them into tariffs or tariff-rate quotas. The liberalization of sensitive farm products has been gradual and phased out over a fifteen year period. In most cases, tariffs have been phased out over ten years and tariffs were immediately eliminated on a number of products. The two countries established a working group on agricultural subsidies that has worked towards eliminating all agricultural export subsidies between the two countries. Furthermore, parties can take a safeguard action against import surges that result from tariff reductions under NAFTA and that constitute a threat of serious injury to a domestic industry.[38] Chile should make sure in its negotiations with the United States that similar safeguards are established against sharp increases in imports of goods that could negatively affect its domestic industries.

Matusz and Tarr (1999) surveyed more than fifty studies on trade liberalization, virtually all of which found that adjustment costs are very small in relation to the benefits of trade liberalization. The explanation for the low adjustment costs in relation to the benefits is primarily that adjustment costs are typically short term and terminate when workers find a job, while the benefits of trade reform can be expected to grow with the economy. The results of these many studies surveyed by Matusz and Tarr

[38] In NAFTA, there are two types of safeguards: (i) bilateral safeguards applying to emergency actions taken against import surges that result from tariff reductions under NAFTA; and (ii) global safeguards applying to import surges from any country worldwide.

indicate that the adjustment costs Chile faces in the short run will be small in relation to the long-term benefits of trade liberalization.

In conclusion, entering into an FTA with the United States raises challenges for the Chilean agriculture. While the FTA will be beneficial for nearly all the other sectors, traditional agriculture will be adversely affected. The agricultural sector will inevitably be faced with profound adjustments in its import-competing subsector. The current scheme of price-bands on domestic basic grains and oilseeds will come under pressure and local producers of wheat and maize will be affected adversely by U.S. competition. The bilateral FTA will eliminate parts of Chilean agriculture in the long run and impose heavy social costs. The expected consequences for the traditional agricultural subsector will be quite serious under present conditions, unless the reduction of tariffs can be stretched over a longer period of time. Assuming that a similar phase-out procedure will be used as in NAFTA for Mexico's sensitive agriculture, Chile's traditional sector has some time to prepare for the liberalization of the market. The challenge ahead is to implement a strategy to enhance the competitiveness of this subsector without postponing conversion to other activities such as fruit and vegetable production.

Chile should consider establishing a compensatory mechanism to remedy trade liberalization shocks for its traditional agriculture by providing some income support during the transition into other sectors of the economy. The issue of compensation for adjustment is new in Chile and has been brought up recently by agricultural associations. The United States had created a trade adjustment assistance system for companies hurt by NAFTA. To ensure stability Chile might consider a similar system for its traditional agricultural producers.

2.2 Asymmetric Distribution of Adjustment Costs

The FTA will combine two economies that are very heterogeneous in terms of their development levels. This leaves a major practical issue unresolved of how transition costs or adjustment costs are dealt with. From a political economy standpoint, transition costs cannot be excluded from the analysis, particularly if they are unequally

distributed among partners. Due to the peculiarities of the Chilean - U.S. bargaining structure, a political economy gap might emerge with respect to how costs are effectively distributed between the two countries.

To begin with, and as stressed by standard trade theory, the counterpart of larger efficiency gains by the smaller partner country is a larger reallocation of resources and higher dislocation costs. These will be higher the more protected the economy is and the more structural rigidities exist such as imperfect price/wage flexibility or specific factors of production. Adjustment costs will also be influenced by macroeconomic and exchange rate policies (Bouzas and Ros 1994). All these factors will make the transitional problems more difficult to tackle in Chile than in the United States.

The prominence of brand-new issues in recent trade agreements reflects the concern in the North for its own adjustment costs. They have usually attracted much more attention than the transitional problems in the South. In the negotiations of the FTA between Chile and the United States so far, much more attention has been given to the adjustment problems of the fruit growers in California than to those of the traditional farmers in southern Chile. Yet, as argued above, the latter are likely to be far more difficult to overcome.

This political economy gap between how costs are distributed and how they are being addressed is rooted in the asymmetries between domestic coalition in the North and in the South (Bouzas and Ros 1994). In Chile, and in contrast to unilateral liberalization, preferential trade liberalization will tend to stimulate the formation of coalitions in favor of liberalization prompted by their interest in obtaining access to the large U.S. market. These coalitions can balance the influence of those negatively affected by preferential trade liberalization, thereby improving the odds of policies to succeed and limiting the need to devise policies to compensate for the costs of adjustment.

In the United States, however, sectors negatively affected by trade liberalization will be more vocal than those benefiting from market access to the small country's market. This tendency will be reinforced since the potential losers in Chile are structurally weaker in the political arena than their counterparts in the larger country. These arguments help explain why policies dealing with adjustment costs will likely receive

more attention and resources in the United States than in Chile (Bouzas and Ros 1994).

In Chile, exporters will dominate the lobbying scene. To them, regional integration appears as an attractive option, particularly compared to unilateral liberalization. In an FTA with the United States the binding commitment – to free internal trade – is reciprocal and thus more acceptable to lobbies that influence the political process. A number of economists have even argued that politically sustainable agreements tend to be those that are trade diverting – maintaining higher external protection, delivering minimum benefits to consumers, but raising returns to producer groups (Hirschman 1981; Bhagwati 1993; Grossman and Helpman 1994, 1995). Political economy reasons therefore make it even easier for Chile to liberalize trade in an FTA than unilaterally or through the multilateral process.

Creation of preferences goes beyond technical issues and obviously has a political component. In principle, this is not necessarily bad: an FTA represents a compromise among parties with different interests (Hinojosa-Ojeda, Lewis, and Robinson 1995). However, it is important that policymakers minimize adjustment costs and establish a compensatory mechanism if it appears that adjustment costs might be excessive for a certain sectors. The most important complementary policies are ensuring macroeconomic stability and structural policy reforms to improve labor market flexibility.

Following the economic downturn in Chile in 1998-99, labor market conditions deteriorated significantly. In 2000, despite the initial strength of the recovery in economic activity, unemployment remained high at 9.4% (Banco Central de Chile 2001). Unemployment was expected to decrease in 2001, but forecasts have been revised to an unemployment rate between 9% and 9.5% in 2001. Recent discussions on the response of the labor market to the economic crisis in 1998-99 have pointed out to the weak job creation capacity of the economy (IMF 2001). Chile's unemployment has been persistent despite the resumption in aggregate output growth.

A problem is that skills required for the new jobs in expanding sectors are substantially different from those in the contracting sectors. The adverse effect of an FTA with the

United States on employment in the Chilean agricultural sector could deteriorate the existing mismatch. Unemployed workers moving to expanding sectors have to acquire the necessary skills involving a costly and time consuming training process. Having a lower job creation rate implies in general a higher unemployment duration, which imposes extra costs to the matching process: the longer the worker is unemployed, the harder it is for the person to maintain the skills (IMF 2001).

Labor market regulations can adversely affect labor market outcomes and dynamics by altering the labor market matching process, increasing employment costs, and reducing incentives to work. Recent studies on labor market legislation in Chile by Edwards and Cox Edwards (2000) and Heckman and Pagés (2000) construct various indexes seeking to quantify the overall costs of job security regulations in the case of Chile and compare it to other countries. One of the findings of these studies is that job protection has increased in Chile since the early 1980s and it remains very high from an international comparative perspective. Edwards and Cox Edwards (2000) argue that the reduction of payroll taxes (within the context of the social security reform) and the decentralization of bargaining increased labor market flexibility and contributed to the reduction of unemployment. Their analysis suggests that the reform on job security had no significant effect on the aggregate rate of unemployment. Other studies show that minimum wages and job protection policies tend to have a substantial impact on the level and distribution of employment in the case of Chile as they adversely affect employment of young workers (Pagés and Montenegro 1999).

In particular, high severance costs reduce the job creation response to output recovery as firms want to make sure that growth is sustained before hiring additional workers (Pagés and Montenegro 1999). Similarly, wage indexation prevents the downward adjustment of real wages despite the pressure from labor markets as the pool of unemployed workers increases following the output adjustment. Correspondingly, these institutional factors together with structural adjustments across sectors represent important elements explaining the high unemployment persistence in Chile (IMF 2001).

The FTA with the United States might aggravate the high Chilean unemployment rate. It is important that Chile implements structural reforms and reviews its labor legis-

lation to increase job creation. These regulations come at a cost as they introduce some implicit and explicit barriers restraining labor market flexibility. Labor market rigidities limit the labor matching process and can contribute to an expected slow response of the Chilean labor market to the employment effects of an FTA with the United States.

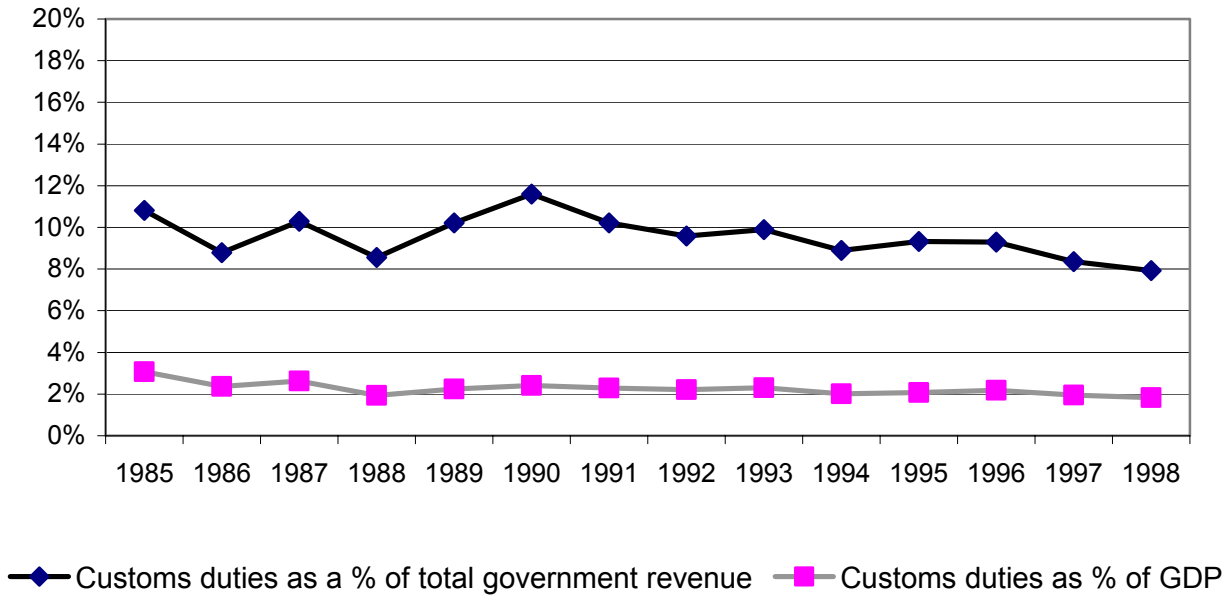
2.3 Fiscal Costs

Membership in an FTA results in a loss of tariff revenue. The loss occurs directly as tariffs on intra-FTA trade are reduced and also indirectly when trade diversion occurs and importers switch away from external imports subject to tariffs to tariff-free intraregional imports.

Hoekman, Schiff and Winters (1998) argue that if a developing country pursues an FTA with a major trading partner that has already granted it largely duty-free access, static welfare effects will be driven more by revenue losses as the country removes tariffs on existing imports than by any changes in trade patterns. In the case of Chile, this means that the rectangles of Figure 10 (p. 58), i.e., tariff revenue losses, associated with an FTA with the United States could outweigh the triangles, i.e., welfare gains from positive consumption or production effects (Hoekman, Schiff and Winters 1998).

If the government is constrained in its alternative revenue sources, then a loss of tariff revenue can be particularly damaging. Many developing countries are heavily dependent on trade taxes as a source of revenue, with some African countries raising as much as one-half of government revenue from trade taxes (World Bank 2000c). Chile is not very dependent on trade taxes as a source for government revenue compared to other developing countries, but there could be a shortfall of government revenue due to tariff revenue losses. The following figure illustrates the importance of customs duties for Chile's fiscal budget and GDP.

Figure 11: Share of Customs Duties in Chile's Government Revenue and GDP (1985-1998)



Source: Own calculations from IMF data (1999, 2000).

As the figure above shows, the share of customs duties in Chile's total government revenue has been declining since the early 1990s. In 1998, 7.9% of total government revenue consisted of import duties compared to 11.6% in 1990. Import duties accounted for 1.8% of GDP in 1998 compared to 2.4% in 1990 (IMF 1999, 2000).[39] Although Chile' reliance on import duties to finance its fiscal budget has decreased, they are still important.

Chile needs to ensure that alternative tax systems and fiscal instruments are in place before removing sources of trade tax revenue. The loss of tariff revenue associated with tariff reductions for U.S. imports requires the development of alternative revenue sources and the broadening of existing sources. With such measures in place Chile should be able to fund this loss in income from new sources. This in turn would have the positive effect of accelerating fiscal reform.

[39] NAFTA resulted in tariff losses for Mexico. Before NAFTA, in 1993, 6.8% of total Mexican government revenue consisted of import duties. These duties accounted for 1% of Mexico's GDP. These figures dropped to 3.9% and 0.6%, respectively, in 1997 (Own calculations from data of the IMF 1999, 2000).

2.4 Impact of Rules of Origin

In an FTA, as distinct from a CU, each member country retains its own external tariff vis-à-vis the outside world. Member countries fear that imports from outside countries destined for a high-tariff member could enter through a low-tariff member. Or more subtly, entrepreneurs in the low-tariff country could import a product in almost finished form, add a small amount of value to it, and export it to the high-tariff country duty-free. The phenomenon is called trade deflection, which is defined as the redirection of imports from outside countries through the FTA member with the lowest external tariff to exploit the tariff differential (Panagariya 1998). Therefore, FTA agreements include rules of origin which products must meet to qualify for duty-free passage between members of an FTA.

Rules of origin have become an integral part of FTAs and the rules of international trade. The rules of origin in a potential FTA between Chile and the United States will be similar to those in the NAFTA treaty, which are outlined in Appendix 8. The provisions in NAFTA were negotiated with a view towards ensuring that the benefits of tariff reductions under NAFTA will accrue mainly to producers and production in North America. In general, the rules require that imports from non-NAFTA countries must be sufficiently processed in North America to undergo a change in tariff classification or substantial value must be added in North America before the products into which they are incorporated can qualify for preferential treatment. This means that some products that contain non-NAFTA primary material are not eligible for preferential tariff treatment and will face tariffs when imported.

While the basic purpose of rules of origin is to prevent trade deflection, they raise several difficulties. Rules of origin have been used not simply to avoid trade deflection but have been imposed as protectionist devices. Lobbies can manipulate them to keep imports out. This could indeed have happened in NAFTA, as illustrated by the fact that the stringent rules of origin were sought by the United States even though U.S. tariffs were generally lower than those in Mexico. In the absence of rules of origin, the possibility of final goods imports coming into the United States through Mexico was minimal. Nor would it have made sense for a producer in the United States to import

inputs through Mexico. The intent of the rules of origin had to be partly protectionist: a stringent rule of origin undermines Mexico's ability to compete with an inefficient U.S. firm producing final goods and also makes internal markets in inputs more profitable. In one area, textiles and apparel, in which U.S. tariffs were high and the scope for trade creation substantial, the triple transformation rule of origin was adopted to maintain a high level of protection for U.S. producers (WTO 1995; Panagariya 1998).[40]

The United States may use rules of origin in the FTA with Chile to protect certain industries. To satisfy a rule of origin requirement, a Chilean producer could find it profitable to import a part from a higher cost U.S. source rather than from his former East Asian supplier. This trade diversion could happen whenever the tariff protection in the United States gives net effective protection to the Chilean producer provided that he meets the rules of origin. Consequently, the rules of origin could force Chile to import a larger share of its intermediate inputs from the United States – even though they are more expensive than those from other countries – to qualify for the preferences under the FTA. This could end up taxing certain industries by diverting demand to less efficient suppliers. Generally speaking, the more restrictive the rules of origin, the greater the scope for trade diversion involving intermediate products. Furthermore, a foreign producer could find it profitable to invest in Chile to satisfy rules of origin, even though a Chilean facility was of higher cost than that of a third country (Krueger 1993, 1995).

Given the current export structure, rules of origin in the FTA will not affect a significant portion of Chile's major exports. Chilean exports of natural resources and of processed natural resources will satisfy the requirement that goods be totally obtained in Chile or incorporate enough national value-added. But rules of origin will become a problem if Chile increasingly exports goods with higher value which is one it principal trade policy objective.

[40] The triple transformation or "yarn-forward" rule for textiles and apparel ensures that yarn, cloth, and garment must all be manufactured within NAFTA in order to confer origin, making it impossible for Asian firms to send cloth to Mexico for manufacturing into garments for the U.S. market.

In the case of Mexico, which imports most of its intermediate inputs from the United States, the impact of the NAFTA rules of origin has been less significant, except in three sectors – textile, steel, and automobile – in which the rules enable the United States to maintain its protection. For example, under NAFTA rules of origin, apparel produced in Mexico gains tariff-free access to the U.S. market provided it meets the "yarn-forward" rule, which for many products requires virtually 100% sourcing of inputs in North America. Mexican clothing manufacturers face a choice between sourcing all inputs beyond the fiber stage in North America and obtaining preferential treatment or sourcing inputs outside the FTA at potentially lower cost, but forgoing duty-free access to the United States and Canada (Panagariya 1998).

In practice, the costs of bookkeeping and implementing rules of origin are high. Goods crossing internal frontiers have to be controlled and retained to ensure compliance and to collect customs duties that are due. The cost associated with the bookkeeping necessary for adequately measuring the levels of regional value-added incorporated into an export product is sufficiently high that some North American firms have decided that they would rather skip the bookkeeping and instead pay the MFN tariff on their exports to NAFTA partner countries. In other words, some export companies have preferred simply to pay the same duties as those paid by companies from non-member countries rather than attempt to make use of the tariff preferences established in NAFTA (Wonnacott and Wonnacott 1995).

Herin (1986) studied the costs of bookkeeping and implementing rules of origin for free trade between EFTA (European Free Trade Association) and the EC (European Community). The costs associated with the rules of origin imposed by the EC were high enough to cause companies to pay the relevant MFN tariff on one-quarter of EFTA’s exports to the EC rather than satisfy the input requirements and/or do the paperwork necessary for duty-free entry. In practice, the benefits of trade liberalization have often been substantially offset by the costs associated with rules of origin.

Rules of Origin and Multiple Free Trade Agreements

The proliferation of crisscrossing FTAs leads to a replacement of Chile's non-discriminatory MFN tariff and poses the danger that a veritable "spaghetti bowl" phenomenon will emerge where tariffs will vary depending on the ostensible origin of the product. Complex and protection-accommodating rules of origin might find their way into practice. This is occurring at a time when multinationals are becoming truly global, and the identification of local content and origin of traded goods and services is becoming increasingly meaningless and subject to inevitable arbitrariness (Bhagwati and Panagariya 1996a).

After completing negotiations with the United States, Chile will have not only rules of origin in place with respect to the United States and the other NAFTA countries, but also with respect to Mercosur and most Latin American countries with which Chile has signed bilateral agreements over the last decade. These FTAs have different schedules for tariff cutting since they have been negotiated at different points of time without synchronization of schedules. As a result, for a given product, there are several tariff rates depending on the source to which the good is assigned. This renders rules of origin very complex and implies a cumbersome and expensive bureaucracy and increased transaction costs.

It must be noted that there are two methodologies applied in Chile to determine the origin of goods. The first is the general ALADI regime of 1980, which is applied in most of the economic complementation agreements concluded within the framework of ALADI, i.e., in the trade agreements signed by Chile since the early 1990s with Bolivia, Venezuela, Colombia, Ecuador, and Peru, and to a certain extent in the agreement with Mercosur. The second methodology is the regime adopted under NAFTA, which is the basis for the new generation agreements signed with Canada, Mexico, and the CACM. A significant difference between the basic methodologies concerning origin applied in NAFTA and ALADI is the greater complexity, specificity, and detail of NAFTA (Garay and Estevadeordal 1996).

Rules of origin can multiply distortions as overlapping FTAs lead to adverse incentives, opening additional sources of trade diversion. If Chile, which is already an

associate of Mercosur, enters into an FTA with the United States, a Chilean firm will have to buy components in the United States if it wants to exploit the preference of the Chile-U.S. FTA or buy components in Brazil if it wants to take advantage of the preferential tariffs in Mercosur. Thus, a manufacturer in Chile will have to make a decision on whether to buy his components in the United States or in the Southern Cone depending on whether he wants to sell the final product in the United States or in Mercosur. This occurs notwithstanding the fact that the most efficient supplier of the components could be in Asia. In this case, trade diversion will be inevitable (Panagariya 1998). The network of trade preferences creates trade diversion problems. Given the variety of bilateral FTAs, it is not easy to estimate welfare losses that will be induced by this trade diversion.

In conclusion, while rules of origin will be included in an FTA between Chile and the United States since the two countries have different external tariff rates, they imply several problems. Rules of origin can constitute protectionist barriers, and the effort to satisfy rules of origin requirements can imply considerable costs. Trade diversion can occur because of the tendency to use inputs supplied by the United States to be able to achieve the required minimum levels of local value-added. However, the United States is one of Chile's principal suppliers of intermediate goods, which reduces the likelihood and extent of any trade diversion. In its negotiations with the United States, Chile should attempt to establish relatively simple rules of origin to minimize trade diversion, protectionist effects, and administrative costs so as not to discourage investment which might be forthcoming as a consequence of the FTA.

3 Effects of Preferential Market Access

Until now, the analysis of the economic impact of an FTA with the United States upon Chile has examined the effects from changes on the import side and found these to be overall positive, but small. However, this analysis ignores potential gains from expanding exports through improved market access to the partner country. One of the principal gains that a country like Chile will realize from an FTA with the United States is the reciprocity effect – the reciprocal opening and the U.S. commitment to keep its markets open for Chilean exports of goods and services.

The following claims, related to welfare effects resulting from changes on the export side, are not subject to debate. The benefits of improved market access are larger: (i) the greater the importance of the United States as a market for Chile's exports; (ii) the higher the tariff level of the United States and the larger the U.S. reduction in trade barriers; and (iii) the higher the proportion of manufactured exports on which protection is generally higher in the United States (Schiff 1997).

This chapter explores the gains for Chile from improved access to the U.S. market. The analysis begins with the positive terms of trade effect of a small country partnering with a large country. After a discussion of Chile's second export stage, the potential for export expansion is examined. The focus is on the improved ability to expand into higher value-added sectors. The following sections examine the U.S. tariff structure facing Chilean exports and compare Chile's current market access with that of its principal competitors, most of which receive preferential U.S. market access. The final section discusses Chile's position as a hub in the hemisphere due to its preferential access to markets in the region which would be consolidated by duty-free access to the Unites States.

3.1 Terms of Trade Effect

The analysis of trade creation and trade diversion has shown that the welfare effects of a PTA are not clear-cut. Only in some circumstances a PTA could be welfare improving for a small country. The question arises of whether there is an alternative

trade policy, not involving trade discrimination, which could secure the benefits of trade creation without exposing a country to the losses of trade diversion. Cooper and Massell (1965) argue that there not only is such a policy, but that there is always a non-preferential policy that is superior to PTA membership even if the PTA is only trade creating. They consider the formation of PTAs as a second-best alternative compared with a non-preferential tariff cut, which results only in trade creation. If correct, this suggests that there is no economic rationale for PTA formation. A small country's best policy is unilateral free trade and it can gain nothing from a PTA that it cannot obtain from a unilateral tariff reduction. PTAs must be established for political or other non-economic reasons. However, an important missing element in the analysis of Cooper and Massell (1965) is the value to the home country of improved access to the market of the partner country (Wonnacott and Wonnacott 1981; Kowalczyk 2000).

Wonnacott and Wonnacott (1981) stress this point and argue that the analysis of Cooper and Massell (1965) is unsatisfactory since PTA formation is often motivated by potential export expansion resulting from improved market access. The Wonnacotts conclude that many studies on the impact of PTAs ignore the benefits of improved market access and terms of trade. Hamilton and Whalley (1985) in a simulation study of world trade confirm the argument of the Wonnacotts that the gains from reducing a partner's tariffs are typically a more important issue in evaluating potential benefits from a PTA than the traditional concerns of trade creation and trade diversion.

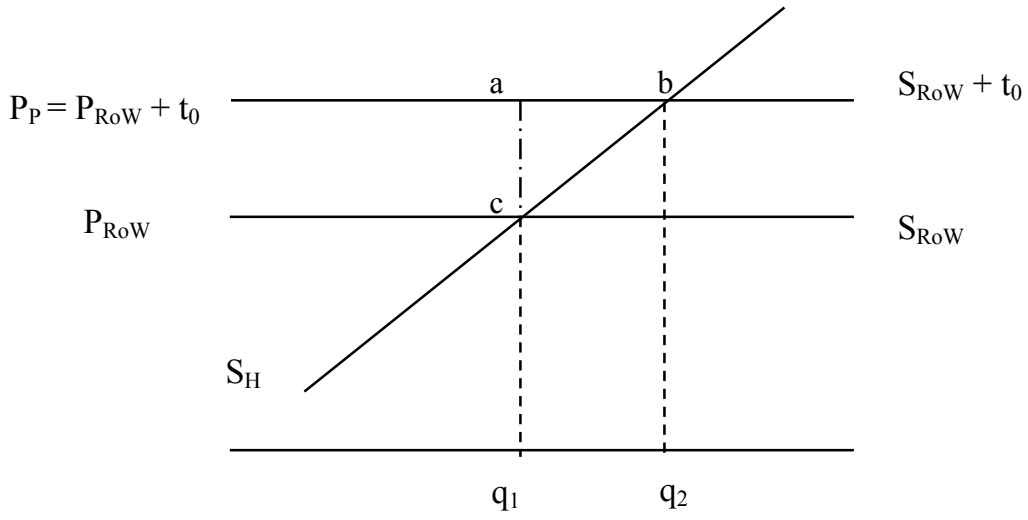
Countries entering PTAs typically benefit from increased market access provided by reductions in their partner’s trade barriers. Thus, to determine the welfare economics of preferential trade liberalization, it is necessary to analyze the PTA's ability to expand the home country's exports. The home country is assumed to be small in world markets. Standard tariff theory, which does not consider discriminatory policies, defines a small country as one that cannot affect world market prices or, equivalently, one unable to affect its own terms of trade (Kowalczyk 2000).

However, changes in a trading partner's tariff can affect a small country's terms of trade. Preferential tariffs create a segmentation of markets, which allows nations to discriminate among their trading partners. Thus, even though world market prices are constant, the small country can influence its terms of trade through its integration

strategy (Kowalczyk 2000). Prices that the large partner country observes in the domestic market do not change with the preferential trade liberalization and equal the world price plus the tariff. As a result of the PTA the small country can sell its exports to the partner country at the tariff-inclusive price without paying the tariff and thus receive a higher export price than prior to the signing of the PTA. This is the improved terms of trade effect for the small country of preferential market access and will result in an export expansion. Producers whose product prices were too high before the PTA, thus not competitive in the partner country, now have a cost advantage over their competitors and can increase their exports.

The model used to demonstrate the terms of trade effect for the small country is set in a partial equilibrium framework, which is illustrated in Figure 12. It assumes that the exporting country is small and not able to supply the importing country's entire market without raising the price, i.e., it cannot offer an infinitely elastic supply of exports – hence, the upward-sloping supply curve S_H of the home country to its partner country. The RoW, on the other hand, is large enough and therefore, the supply curve from RoW, S_{RoW}, is equal to the horizontal line at the RoW's price. Since the exporting country is not capable of supplying the entire market, the importing country will have to buy some imports from RoW. Thus, it is ultimately the RoW price that determines the domestic price. Forming a PTA with the small country will not change the importing country's domestic price.

Figure 12: Terms of Trade Effect of a PTA for a Small Country



Source: Adapted from Fukase and Martin (1999).

Prior to the PTA, the price received by the small country was the price in the partner country, $P_{P,}$ less the tariff applied by the partner country, t_0. So the net price was $P_P - t_0$. This price is equal to the world price P_{RoW} of the good since the domestic price is assumed to equal the world price plus the tariff. Suppose that there is a PTA concluded with the partner country, but not with the RoW. Since the small country is treated preferentially, it can now receive the full domestic price from the importing country P_P. This will induce it to move along its supply curve from q_1 to q_2. The small home country exports more and receives a higher price for its exports, providing the terms of trade gain.

The benefit to the home country is given by the increase in the price of the amount of t_0 times the initial quantity of exports q_1, plus the gains resulting from its ability to increase its export supply to this market shown by area abc in Figure 12. The total gains to the home country are represented by $t_0 * q_1 + abc$. This is the welfare benefit from improved terms of trade (Fukase and Martin 1999).

As long as the small country imposes no other distortions in its export markets, the terms of trade gain is a net gain to it. In contrast with the case of trade creation on the import side, no offsetting loss must be considered. The specification of the gains to the home country from increased access to its partner's markets assumes that the partner's external trade barriers remain the same, and that the additional exports supplied by the home country and any other country given preferential access to this market are not sufficient to reduce the price in the partner's market below $P_{RoW} + t_0$. If sufficiently large suppliers obtain access to this market, this price will fall, reducing the gains to the home country.

This analysis demonstrates that the effect of preferential market access on exports must be an important factor in evaluating a PTA. The gains are positively related to the size of the initial barriers imposed on the home country, the price responsiveness of the home country's exports, and also the magnitude of the initial trade flows between partners. Being a small country unable to influence prices in the partner country in a PTA can be a distinct advantage.

Chile gains more on its exports in an FTA with a large partner country like the United States than with a smaller one. The reason is that a large partner continues to import from the world market after the FTA is formed. And since the partner charges a tariff on imports from the world market, the small country realizes an improvement in its terms of trade by selling to the partner at the higher tariff-inclusive price. In other words, Chile benefits from improvements in its terms of trade resulting from tariff cuts in the United States.[41] While exporters to the United States from outside the FTA pay a tariff and receive only the international market price, exporters from Chile can charge the tariff-inclusive price in the U.S. market, i.e., the international market price plus a certain amount of the external tariff.[42] Considering the terms of trade effect is important and increases the attractiveness of an FTA with the United States, given the size of the U.S. market (de la Torre and Kelly 1992; Coeymans and Larraín 1992; Bond 1997).

3.2 Second Export Stage

Chile's export structure has changed over the last two decades which is reflected in the decreased relative weight of copper exports and the diversification of exports towards fruits and vegetables, fish, and forestry products. Additionally, the growth rate of exports has been very high, exceeding the growth rates of the non-exporting sectors of the economy. However, development of the export sector has been inadequate in several aspects. Diversification of markets and goods by itself does not seem to be sufficient. Despite significant diversification of its exports Chile continues to export primarily natural resources or derivatives with a low level of processing to its principal export markets, as Figure 6 (p. 40) has illustrated.

This phenomenon is, among others, the result of its natural comparative advantages, previous import substitution policies, and scarcity of capital for industrial investment. Some of these factors are difficult to change. In addition, tariff policies in principal

[41] While the terms of trade effect is applicable for Chile in general, there are particular markets in which Chile is large, for example copper. In those cases, the assumption of the terms of trade effect, i.e., that the exporting country is small, does not hold anymore.

[42] If Chile were to add the total amount of the tariff to the international market price, Chilean imports would be as expensive as those from third country producers, and it would lose its price advantage.

export markets discriminate against imported processed goods in order to protect local industry. These progressive tariff structures make the export of processed goods to developed countries difficult.

The Chilean export boom up to now has been mainly based on unprocessed natural resource exports. The literature identifies several possible drawbacks to such a development strategy (Labán and Meller 1997). First, natural resources are generally subject to significant price volatility. Countries which specialize in natural resource exports find it too costly to hedge against them. The volatility creates an important source of instability in their domestic economies with a consequent negative impact on growth. Second, natural resources have low price and income elasticities of demand. Thus, the rate of expansion of natural resource exports will slow down at some point. Third, most natural resource exports are destined for developed countries. The relatively lower growth rates observed in those countries than in emerging markets further limit the growth in demand for natural resources. Finally, natural resource exports generally use low-level technology. The drawback is that in this case the economy does not benefit from positive externalities generated by high-level technologies (Labán and Meller 1997: 117).[43] The arguments presented support a development strategy based on the promotion of manufactured natural resource exports that require the use of modern technology.

While natural resources will continue to be the basis of Chile's comparative advantage in world trade in the years to come, the challenge is to take advantage of this by adding more value to natural resources and to diversify into technologically more sophisticated products and services. Chile seeks to intensify the technological sophistication of goods which the country already exports and to develop clusters of modern activity around natural resource products (Agosin 1999).

[43] Positive externalities are benefits that accrue to parties other than the firms that produce them. High-level technology generates knowledge and creates learning effects that will improve productive efficiency. These learning effects will spillover into the rest of the economy as managers and workers open new businesses or move to other industries in the economy. Since they will bring their newly acquired skills with them, it will cause an improvement in productive efficiency in those sectors as well. In this way, the supply of many manufacturing industries will be increased allowing these sectors to compete more easily with firms in the rest of the world.

The discussion of Chile's second export stage focuses on bringing higher value-added to current natural resource exports through processing. The primary objective is to develop an export sector that displays a broader degree of diversification, with products involving greater processing and technological effort. The second export stage is thus based on promoting forward natural resource linkages. This means exporting apple juice, wine, and canned fruit instead of fresh apples and grapes, wood furniture and paper instead of sawn wood, manufactured copper products instead of copper ore. The implicit assumption is that processed natural resource goods will introduce and disseminate modern technology which generates higher domestic externalities (Labán and Meller 1997).

Hirschman (1958) developed the concepts of backward and forward linkages and analyzed their importance for economic growth. Backward linkages occur as the setting up of an industry brings with it the availability of a new expanding market for its inputs. The new firms exert a backward pressure for establishing domestic industries that supply the new entrants. Forward linkages occur when one industry uses another industry's outputs as its inputs (Glass, Kosteas and Saggi 1999).

While the expansion of processed natural resource exports is based on forward linkages as the mechanism for introducing modern technology, the growth of fruit exports shows that the exploitation of backward linkages can also have an important effect on the application of modern technology. Exporting fresh fruit is a highly complex process. High-technology equipment is required to handle large volumes of fruit that have to be kept fresh. Modern technology is used to produce standard high quality fruit catering to the tastes of developed country consumers. In addition, irrigation systems for dry areas have been installed (Labán and Meller 1997). The salmon industry also has many backward linkages. It has spawned local industries for floating cages, nutrients, fishnets, packing materials, and transport services (Agosin 1999).

Backward linkages induced by fruit and salmon exports have therefore required the introduction of technological innovations. It would be very difficult to specify which type of technology has the largest external effect on the economy: the technology used

in the forward processing of natural resource exports or the technology used in the backward linkages (Labán and Meller 1997).

If Chile wishes to sustain a strong and stable output growth path in the future, it will have to maintain the dynamism of the export sector through further diversification. The recession that began in 1998 and extended to the end of 1999 served once again to highlight the extreme sensitivity of the economy to fluctuations in natural resource prices. In this context, the public policies for achieving greater future stability must be designed to foster growth in non-traditional goods exports.

To increase exports of non-traditional products, Chile has had in place for many years a simplified duty drawback system for imported inputs used in export production of non-traditional goods.[44] Under this system, until recently, non-traditional products qualified for an automatic rebate of 10% of their export value instead of a refund of the actual duty paid on imported inputs, as is the case in Chile's standard drawback program.[45] The program's aim has been to foster export diversification and to stimulate exports by small firms.

The WTO considers Chile's simplified duty drawback system to be an export subsidy because tariffs on imported inputs have been decreasing, while the percentage of the automatic rebate stayed the same. Developing countries are obliged to eliminate all export subsidies by 2003 as part of their Uruguay commitments (WTO 2001). The Chilean government reduced the rebate rate from 10% to a value of 7% and then further to 5% and will lower it to 3% by 2003 in order to comply fully with the Uruguay Round norms (ProChile 2001). At a 3% level, the rebate rate will be about the same as the tariffs actually paid on imported inputs used for export production.

[44] Non-traditional products show growth rates above the average within the export basket and have not been exported until recently. Non-traditional exports to the United States are fresh and processed fish, processed forestry products, and agroindustrial products such as processed vegetables, canned fruits, and juices (Direcon 2000b).

[45] The standard duty drawback system exists for all other exporters who have to certify the percentage of imported inputs used in their exports. The exporters are refunded the actual duty paid on imported inputs used in production (USTR 2000).

The elimination of this export subsidy will adversely affect export growth of non-traditional goods (Agosin 1999). Without a trade policy that focuses on improved market access conditions for such exports to foreign markets, it will become more difficult for Chile to maintain the actual rates of export expansion, and economic forces will tend to reinforce the existing pattern of export specialization.

Chile's trade policy attempts to eliminate external barriers to processed exports, which are, in general, higher than those applied to raw materials. It is not possible to obtain improved access conditions for these products by a simple unilateral tariff reduction. Chile and other developing countries have sought to have these barriers removed in multilateral trade negotiations with little success. Chile hopes that the FTA with the United States will consolidate the second export stage.

Trade barriers in industrial countries have a common structure. Typically, no tariff or very low tariffs are applied to raw material imports. However, trade barriers increase or escalate as a product undergoes processing. The United States has significant escalation in its tariff structure according to a product's value-added content. As Chile tries to consolidate its second export stage and continue its path of export diversification, tariff scheduling in the United States will remain a significant obstacle. Chile's export basket is diversifying rapidly, and barriers that are of no concern today could limit export growth in the near future. In addition to tariff escalation, the United States has in place seasonal restrictions on many fruit and vegetable imports.

A reduction and finally elimination of tariff escalation schedules and of seasonal restrictions in a bilateral FTA with the United States would have significant effects on the composition of Chilean exports. It would foster the second export stage and provide a stimulus to the production and exports of processed products, either manufactured products based on natural resources or other industrial products.[46] Obviously, the greater effect on trade will be generated on those goods having higher initial protection. The problem in estimating trade effects for such goods ex ante is that, up to now, only a few have been exported.

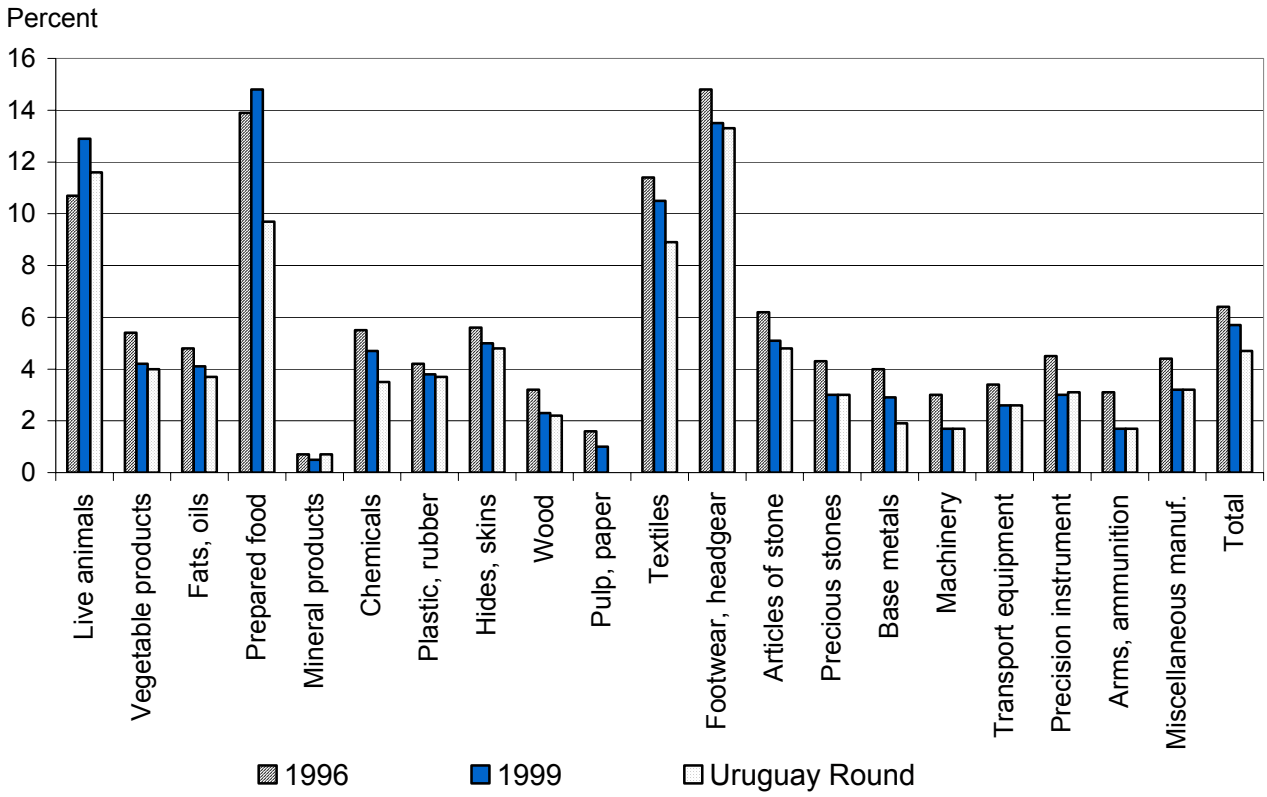
[46] The leading items among these other industrial exports are chemicals, plastics, tires, vehicle parts, boats, and gearshifts.

3.3 Export Expansion

Tariff Protection in the United States

Following the Uruguay Round, all U.S. tariff lines except two (covering crude petroleum) are bound, and all applied MFN rates coincide with the bound rates, thereby guaranteeing a high degree of predictability. Taking the simple average applied MFN tariff for all lines as a measure, the level of overall tariff protection in the United States is now among the lowest in the world and decreasing. The following figure shows average U.S. MFN tariff rates for HS (Harmonized Tariff Schedule) sections in 1996, 1999, and after the implementation of the Uruguay Round, which has to occur by 2004 at the latest.

Figure 13: Simple Average Applied U.S. MFN Tariff Rates by HS Section (1996, 1999, and after the Implementation of the Uruguay Round)



Note: The Uruguay Round tariffs are those that will apply when it is fully implemented (2004). HS stands for U.S. Harmonized Tariff Schedule which is divided into twenty-two sections.

Source: Adapted from WTO (1999a). Data provided by U.S. authorities.

As Figure 13 illustrates, the average applied U.S. MFN tariff declined from 6.4% in 1996 to 5.7% in 1999 (WTO 1999a).[47] While the total average tariff decreased, protection for some broad categories of agricultural products even increased between 1996 and 1999. The applied MFN tariff average for live animals and meat products increased from 10.7% in 1996 to 12.9% in 1999 and that for prepared food, beverages, and tobacco increased from 13.9% to 14.8% over the same period. The increase in tariff protection for agricultural products is mainly the result of converting non-tariff barriers to tariffs under the Uruguay Round (WTO 1999a).

The efficiency losses associated with tariffs depend not just on average applied tariff rates, but also on the dispersion of those rates across products. In the United States, live animal and meat products (HS Section I); prepared food, beverages and tobacco (Section IV); textiles and clothing (Section XI); and footwear (Section XII) are the broad categories of products most protected by MFN tariffs and will remain so even once the Uruguay Round is fully implemented, as shown by Figure 13. By contrast, mineral products (Section V); wood pulp and paper (Section X); and machinery (Section XVI) receive little tariff protection. The higher the dispersion in tariff rates, particularly within groups of similar, highly substitutable products, the greater the likelihood that consumers' and producers' decisions are distorted by the tariff structure (WTO 1999a).[48]

Notwithstanding the low overall level of tariff protection, 5% of MFN tariff lines involve rates exceeding three times the overall simple average applied MFN rate. The proportion of such tariff peaks has risen from 4% in 1996 to 5% in 1999 and is

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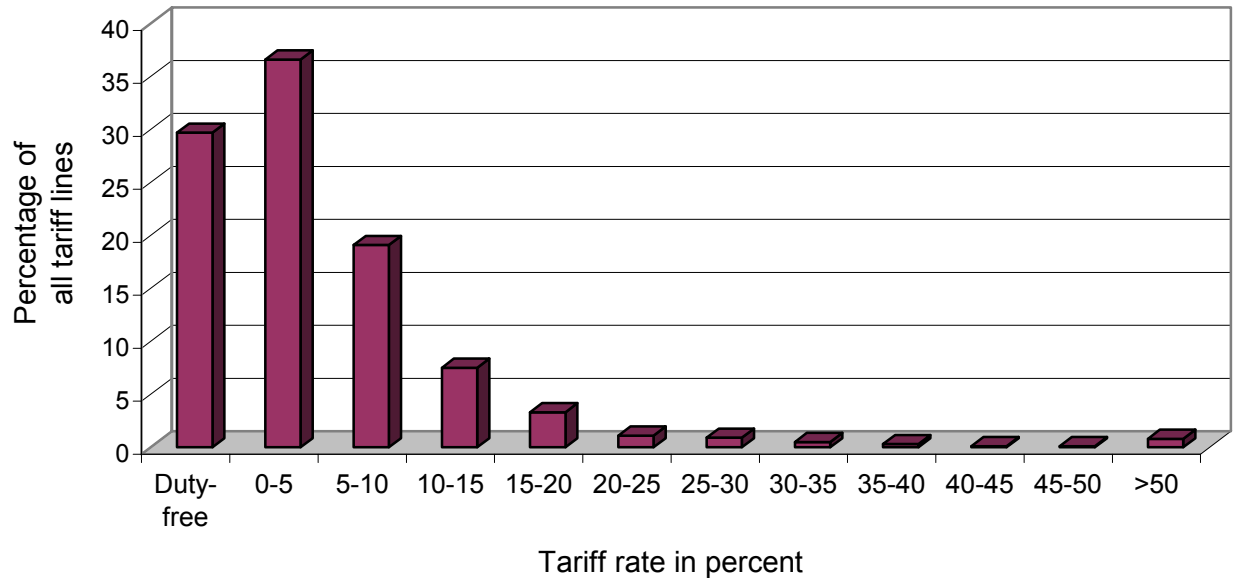
[47] Tariff estimates differ among sources. ECLAC (2001) estimated the applied U.S. MFN tariff average for all products subject to tariffs to be 5.1% and the collected duty rate, i.e., total duties collected as percentage of the overall import value, to be 1.8% in 1999. In the World Bank's Development Indicators (2000a), the mean U.S. MFN tariff declined from 5.2% in 1998 to 4.8% in 1999. Mean tariff is the unweighted average of the applied rates for all products subject to tariffs. The trade-weighted mean tariff was 2.5% in 1999 (World Bank 2000a). The unweighted average tariff is a better indicator than the import weighted average, which weighs duties by the amount imported of each commodity. Import weighted averages assign small weights to highly protected products, thus tending to underestimate the degree of tariff protection – no weight at all would be attached to a prohibitive tariff, for example (WTO 1999a: 50). Therefore, import weighted average tariffs are not used as a reference in this analysis of the U.S. tariff structure.

[48] A uniform nominal tariff would minimize the net welfare cost of such protection (WTO 1999a). Tariff uniformity may also be desirable because of administrative simplicity and on political grounds (Panagariya and Rodrik 1993).

expected to rise to 7.3% once the Uruguay Round is fully implemented (WTO 1999a). A complete distribution of U.S. MFN tariff rates is depicted in Figure 14. Tariff peaks affect mainly the same broad product categories whose average tariffs are the highest, i.e., agricultural and food products as well as textiles, clothing, and footwear.

Figure 14: U.S. MFN Tariff Rate Distribution Across Tariff Lines (1999)

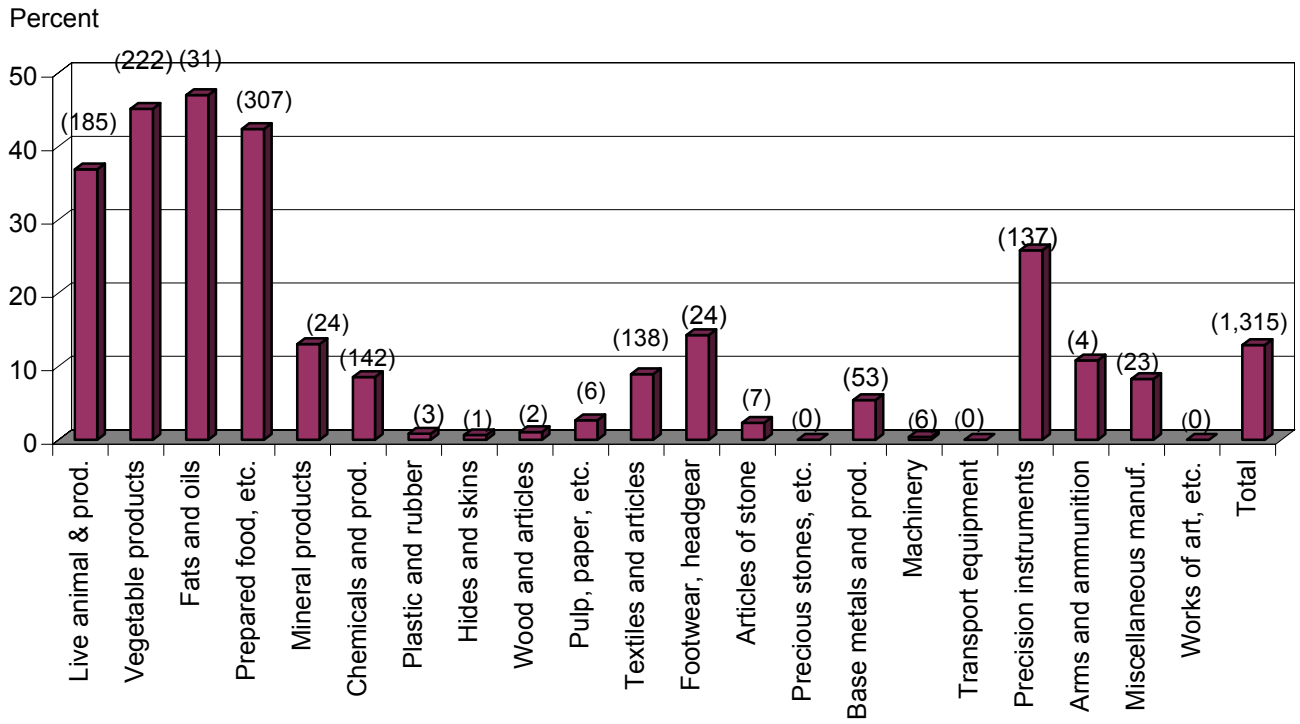


Source: Adapted from WTO (1999a). Data provided by U.S. authorities.

Specific (and compound) duties are another feature of the U.S. tariff system. In 1999, they accounted for 12.9% of all tariffs. For Chile, they apply to agricultural exports such as prepared food and vegetable products, but also to other industrial goods such as chemicals (WTO 1999a). The United States claims to ensure transparency of most of these duties by providing estimates of their ad valorem equivalents. These estimates show that although specific duties accounted for less than one-seventh of all tariffs in 1999, all but sixteen of the top hundred tariffs (in ad valorem equivalent terms) entailed specific duties ranging from 40.6% to 232.2% (WTO 1999a).[49] The following figure shows the distribution of U.S. specific duties.

[49] These ad valorem equivalent estimates are computed by taking MFN duties actually collected in 1998 as a percentage of MFN import values in that year.

Figure 15: Share of Specific Duties in the U.S. Tariff Schedule by HS Section (1999)



Note: Each bar in the chart depicts the percentage of tariff lines out of the total within each HS section that are specific or compound duties. The figure in parentheses above each bar shows the number of tariff lines in each HS section with specific rates.

Source: Adapted from WTO (1999a). Data provided by U.S. authorities.

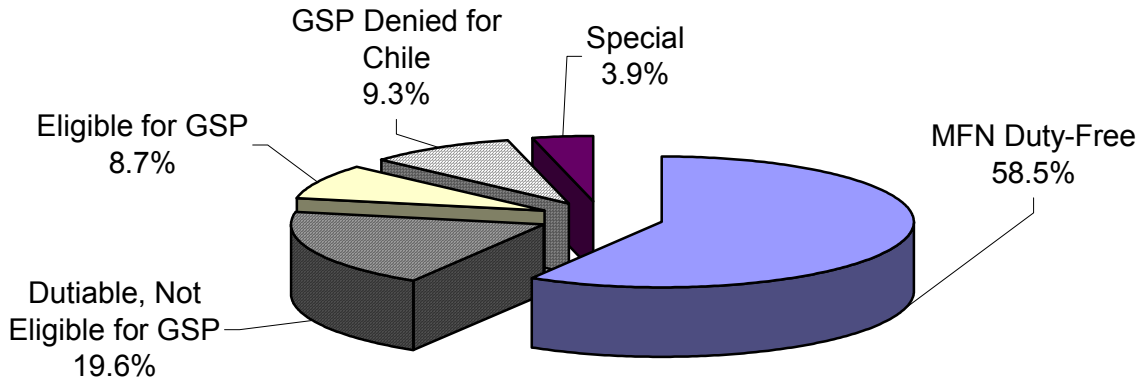
In conclusion, the U.S. tariff structure shows a high tariff escalation which means that the level of effective tariff protection increases as goods undergo further processing. This tends to promote primary goods exports by developing countries, thereby possibly slowing their move to higher value-added production. In 1999, U.S. tariff protection based on applied MFN tariff averages for mining and quarrying was 0.5%, whereas for industrial products it was 4.7%. Protection of agriculture and agro-industrial production was even higher with an applied MFN tariff average of 10.7% (WTO 1999a). U.S. tariff escalation is a major obstacle to Chile's objective to produce and export goods with higher value-added. Chile's comparative advantage towards the United States is in exports of agroindustrial goods and processed natural resources.

Market Access for Chilean Exports

Chile receives MFN and preferential treatment under the U.S. GSP program (USITC 2001). In 1999, the simple average applied U.S. tariff for all import products from Chile subject to tariffs was 1.9%, whereas the collected duty rate for imports from Chile was 0.6% (ECLAC 2001: 144).[50] The fact that the tariff rate imposed on total Chilean exports is small reflects their nature: natural resources with no important degree of processing. In general, these goods are scarcely protected by the U.S. tariff system. However, the analysis of the general structure of the U.S. tariff system in the previous section has revealed a strong tariff escalation in some sectors to protect the U.S. industry. The U.S. tariff schedule clearly tends to affect higher value-added goods adversely.

The subject of tariff escalation is a great obstacle for Chile in its economic development, given its effort to increase the level of value-added content to its natural resource exports through processing. In general, as developing countries abandon their internal growth strategies and apply liberal international trade policies, more diversified export baskets emerge, and the subject of tariff scheduling and other non-tariff export barriers take on added significance.

Figure 16: Tariff Status of the Top Fifty U.S. Imports from Chile (1999)



Source: Own calculations from USITC data (2000).

[50]The collected duty rate equals total duties collected as percentage of the overall import value (ECLAC 2001).

Figure 16 breaks down the tariff status of the top fifty U.S. imports from Chile in 1999 and summarizes the information of Table 5 in Appendix 9. The appendix analyzes the top fifty U.S. imports from Chile, their respective tariff rates, and their share in total U.S. imports from all sources during 1999 and the first seven months of 2000. These fifty products accounted for 83% of U.S. imports from Chile in 1999 and for 82.8% for the first seven months of 2000, and thus can be considered broadly representative of total U.S. imports from Chile (USITC 2000). The data are based on USITC figures for 1999 and arranged according to the categories of tariff treatment to which these items are subject. The following are the key points from the analysis in Appendix 9:

- *Twenty-nine products* accounting for 58.5% of the value of the top fifty U.S. imports in 1999 (53.2% in the first seven months in 2000) are *free of duty because of MFN treatment*. Neither the GSP nor any future FTA can affect the tariff treatment of these items.

- *Ten products* accounting for 8.7% of the top fifty U.S. imports from Chile in 1999 (and the same percentage for the first seven months in 2000) are eligible for *duty-free treatment under GSP*. If not for the GSP, these products would be subject to ad valorem tariffs ranging between 0.1% and 10.5%. The simple average applied tariff rate on these items is 4.4%. This is a relatively low margin of preference, but is actually higher than the average U.S. tariff rate of 1.9% for Chilean imports in 1999.

- *Six items* accounting for 19.6% of the top fifty U.S. imports from Chile in 1999 (21.9% for the first seven months in 2000) are *dutiable* products that have *not* been *designated for the GSP*. These products are fresh grapes, wine, avocados, preserved tomatoes, pears, and raisins. They are subject to tariffs ranging between 0.3% and 11.6% and the simple average applied tariff is 3.4%.

- *Two copper products*, refined copper cathodes and copper ores, accounting for 9.3% of the top fifty U.S. imports from Chile in 1999 (11.9% for the first seven months in 2000) are not eligible for GSP when imported from Chile. The country *exceeded the GSP's competitive-need limits* on these products, but the impact of this exclusion is not particularly great. They are subject to relatively low tariffs on an MFN basis.

Although tariff barriers are currently few, their elimination will have an effect on export volume. The existence of an important degree of dispersion suggests that potential benefits in terms of access to specific product markets will occur from the tariff reduction in the FTA. The dispersion is not accidental and the highest tariffs are concentrated on manufactured, i.e., processed goods.

GSP provides limited benefits to Chilean exporters, and should be analyzed on a product-specific rather than an economy-wide basis. It affects only a relatively small share of Chilean exports to the United States. In 1999, only one-eighth of total U.S. imports from Chile entered duty-free under the GSP. This does not mean that all of the remaining imports paid duty. Over half of all these goods are already duty-free when imported from any country that enjoys MFN treatment by the United States. Moreover, many of the other items that the United States currently imports from Chile are subject to relatively low tariffs. This means that the margins of preference that the GSP can extend to eligible products are correspondingly low. However, some of Chile's high-growth exports, such fruits and vegetables, and its textiles and clothing exports are excluded from the system.

There are, however, some Chilean products for which the GSP is significant. The program extends a substantial margin of preference to products such as methanol and plywood. Methanol is a rapidly growing chemical export to the United States. It was among Chile's top fifteen export products to the United States in 1999.[51] Currently, methanol can be imported from Chile into the United States duty-free under GSP. The MFN tariff is 10.5%. It is not certain that the United States will continue to grant GSP status for this specific product in the future because of the competitive-need limits.

GSP competitive-need limits provide for the removal of a country's GSP benefits for a specific product whenever U.S. imports from that country exceed either one of two triggers. The first of these limits is the market share trigger. A country will lose its GSP privileges for a product whenever it accounts for more than half of U.S. imports

[51] Methanol exports to the United States reached US$44.9 million in 1999 (US$48.1 million in the first seven months in 2000), a significant increase from only US$6.2 million in 1995. Chilean methanol imports accounted for 17.5% of total U.S. methanol imports in 1999 (20.4% in the first seven months of 2000) (USITC 2000).

of this product in the calendar year. The second is the dollar value trigger. The competitive-need limits are reached whenever imports of a product from a country exceed a specific amount that is increased each year. For 2000 the dollar limit was US$95 million, and it increases by another US$5 million in each subsequent year (VanGrasstek 2000). The first of these limits is generally more troublesome for countries like Chile, although in the case of the rapidly growing exports of methanol it is the dollar value trigger that poses the more important restriction.

Moreover, GSP is not guaranteed to last forever. As a matter of fact the program is reviewed periodically and can be canceled. In addition, countries become excluded or graduate as their per capita income rises. U.S. law provides that a beneficiary country can be excluded completely from the program if the president determines that a beneficiary developing country has become a high-income country, as defined by the official statistics of the World Bank. This provision has been used to graduate the newly industrialized economies in Asia. Hong Kong, Korea, Singapore, and Taiwan graduated in 1989 and Malaysia in 1997 (UNCTAD 2000). The World Bank defines countries as high income with GNI per capita of US$9,266 or above. In 1999, Chile had a GNI per capita of US$8,410 at purchasing power parity rates, which increases the chance that the United States will graduate Chile from GSP (World Bank 2000a).[52]

The analysis so far on U.S. tariffs for Chilean exports shows that GSP does not solve the problem of Chilean market access. Despite GSP tariff escalation persists, limiting and prohibiting high-growth exports. Tariff escalation has increasingly become a problem for Chile as the country is moving towards exporting goods with higher value-added. To assess which Chilean sectors and product types will benefit most from a tariff reduction in the FTA, it is necessary to examine which are most affected by the current tariff structure.

[52] The benefits of guaranteed market access to the United States versus GSP are discussed further in Part III, Chapter 5.1.

Agriculture and Agroindustry

In 1999, the simple average applied MNF tariff for agricultural and agroindustrial exports to the United States was 10.7%, more than double the average tariff of 4.7% for industrial products and much higher than the overall average of 5.7%. Some 42% of the duties applied on agricultural goods are specific duties which are less transparent than ad valorem duties and can be used to conceal high ad valorem equivalent tariffs. In addition, the United States imposes seasonal tariffs on most fruit and vegetables imports during their own growing season. Agricultural exports not only face high tariffs but also high non-tariff barriers such as quarantine requirements and marketing orders (WTO 1999a).[53]

Chile's agricultural exports consist mainly of fruits and vegetables. A large share is exported to the United States to satisfy demand for fresh produce during the winter months. Chile's leading agricultural exports to the United States are fresh grapes which accounted for 53.4% of Chile's total fruit and vegetable exports to the United States in 1999. Other important agricultural exports to the United States include peaches, avocados, apples, plums, kiwis, and pears (USITC 2000).

Most fruit and vegetable products face variable U.S. tariff barriers depending on the season of the year. Grapes face a tariff of US$1.13/m³ between February 15 and March 31, zero percent between April 1 and June 30, and US$1.8/m³ during the rest of the year. The ad valorem equivalent tariff of the specific duties is 0.3%.[54] Avocadoes face a specific duty of US$0.11/kg equaling an ad valorem tariff of 8.5%. The principal vegetable export products are asparagus and tomatoes. Asparagus receives GSP treatment if exported between September 15 and November 15. Otherwise it faces a tariff of 21.3%. Tomatoes face a tariff of US$0.04/kg between March 1 and July 14 and between September 1 and November 14, equaling an ad valorem tariff of 4.7%, whereas between July 15 and August 31 tomato imports face a tariff of US$0.03/kg,

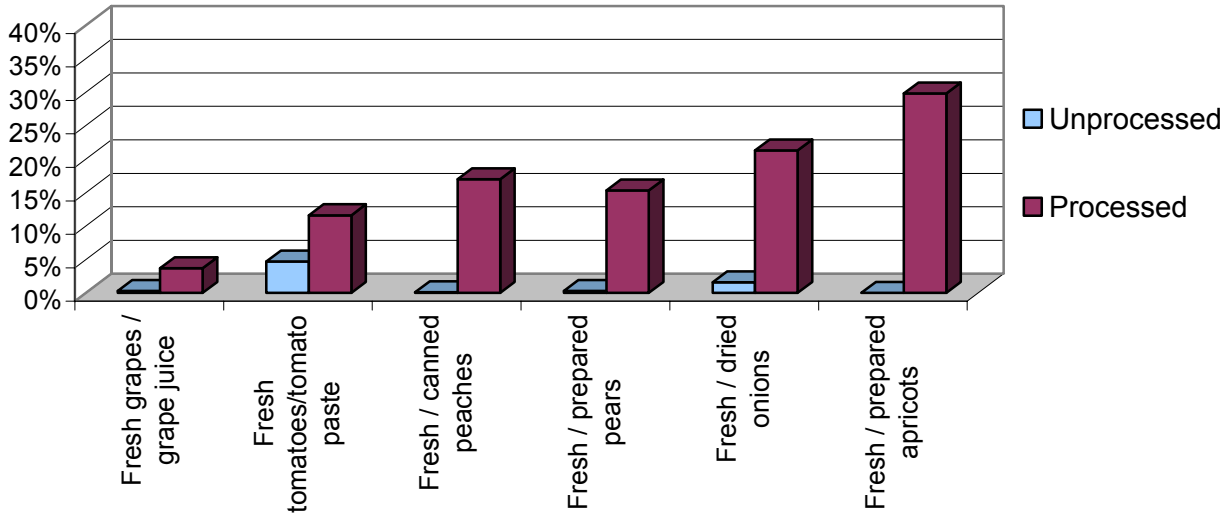
[53] Marketing orders impose certain quality standards to domestic as well as foreign produce. From the Chilean perspective marketing orders are intended to protect U.S. growers because the same standards do not apply off-season (Butelmann and Frohmann 1992).

[54] The tariff references are based on USITC (2001) data. The ad valorem equivalent estimates are based on 2000 MFN duty rates and 1999 imports (USITC 2001).

equal to an ad valorem tariff of 2.8%. From November 15 through the last day of February, Chile's tomato exports are GSP eligible (USITC 2001).

The United States is also a leading market for Chile's exports of processed food products. In 1999, the top export products were wine, apple juice, tomato paste, and canned peaches. Tariff escalation has an especially large impact on Chile's exports of processed fruits and vegetables. The simple average applied MFN tariff rate for prepared foodstuffs and beverages reached 14.8% in 1999 and was the highest of all HS sections, including the rate for textiles. Commitments made in the Uruguay Round, if implemented, would reduce the average tariff to 9.7% but it would remain among the highest sectoral rates (WTO 1999a). The following figure gives examples of the U.S. tariff escalation facing agricultural export products.

Figure 17: Selected U.S. MFN Tariffs for Unprocessed and Processed Agricultural Products (2000)



Source: Based on USITC data (2001).

U.S. tariff escalation is well hidden and tariffs vary significantly between agro-industrial products. In general, agroindustrial products such as juices, canned or frozen fruits, and vegetables face much higher tariffs than fresh or chilled export products. Figure 17 clearly points out that the penalty on value-added is considerable.

The U.S. tariff for wine is US$0.06/liter equal to an ad valorem tariff of 1.3%. Despite the tariff Chilean wine has been competitive in the U.S. market. Chile's exports of wine to the United States have been booming in both volume and value and are a strong competitor to the California wine industry. Chilean wine achieved an 8% market share in 2000, making Chile the fourth largest supplier of imported wine, behind France (33.1%), Italy (30.3%), and Australia (16.6%). In 2000, the United States was the second most important export destination of Chilean wine after Europe and accounted for about one-fifth of Chile's wine exports (ProChile 2001; USITC 2001).

With tariff-free access Chile can shift a significant quantity of its growing wine supply to the United States. Chilean wineries have already undertaken joint ventures with foreign wine producers, including those in the United States. These international partnerships facilitate the growth of new varieties year round by capitalizing on the reverse seasons. Through joint ventures, foreigners offer Chilean producers new technology and innovations. To take full advantage of these joint ventures, tariff-free access to the U.S. market is very important.

Since the late 1980s exports of processed tomatoes to the United States have been growing despite facing an MFN tariff of 11.6% (USITC 2001). Considering that the main competitors are Mexico and Canada, which have preferential access and are geographically closer, the FTA is important for future export growth.

Chile is a competitive producer and significant exporter of canned and preserved peaches to the U.S. market despite the 17% MFN tariff (USITC 2001). Chile is expanding its canned fruit industry in general as a result of the contraction of Chile's fresh fruit markets. Chilean fresh fruit exports have encountered increased competition in export markets together with declining export prices, forcing Chilean producers to shift more to canned fruit production. Elimination of tariff escalation is crucial for further export growth of canned fruits.

Quiroz, Larraín and Labán (1996) estimate the effects of Chile joining NAFTA on Chile's agriculture and conclude that the agricultural export sector of fruits, vegetables, and agroindustrial goods would benefit considerably. The opening of the U.S.

market would allow the agricultural sector to develop new businesses exploiting comparative advantages and would create new opportunities for exports with safeguards against future barriers and protectionist intentions for agricultural exports. A study by the World Bank (1994) analyzes the potential effects for Chile if it were a NAFTA member and concludes that while primary agricultural exports to the United States could increase by 5.8%, mainly because increased exports of grapes and other fruits, exports of agroindustrial goods to the United States could increase by as much as 43%.

The analysis in this section reveals that tariff rates for Chilean agricultural products increase with the level of processing. Agriculture is one of the sectors that could gain considerably from a reduction in tariff escalation. In addition, due to the high tariffs Chile has not begun to export other products in which it would have a strong comparative advantage. A comparison of Chile's production and export structure shows that Chile produces many goods which it does not export at all or not in a significant quantity because of high tariffs. It could potentially export these products to the U.S. market due to its industry profile and demand in the United States. Such products include, among many others, garlic and onion powder, which both face a tariff of 29.8%; peach jam facing a 7% tariff; and pear preserves facing a 12% tariff (USITC 2001).

Forestry Sector

Chile's participation in the U.S. forestry product market has grown considerably during the last few years. The United States is Chile's primary market for forestry products such as furniture. In 1999, the United States received 45.8% of Chilean processed wood (Banco Central de Chile 2001). Until the mid-1980s, the U.S. furniture market was dominated by Brazil, which had to step out because of internal problems, leaving a niche that was occupied by Chile. In general, forestry exports to the United States are mostly basic furniture made out of radiata pine[55] and native species such as lenga.[56]

[55] Radiata pine is valued for its versatile and durable structure. Chile has the advantage that it grows much faster in Chile than in other parts of the world (ProChile 2001).
[56] Also called Tierra del Fuego oak. It grows only in Southern Argentine and Chilean subantarctic forests.

The largest exports were wood moldings, coniferous wood sawn, wood sheets, furniture, and wooden doors.

Many of these products are exported to the United States duty-free under the GSP program. If the United States abandons GSP or Chile no longer qualifies, Chile would face MFN tariffs on its forestry exports which would punish their higher value-added. For sawn wood and wood pulp, tariffs would be zero percent. For finished furniture, however, they would be between 3.2% and 8% (USITC 2001). An FTA with the United States offers Chile secure access to the U.S. market for those forestry products that currently receive preferential access via GSP treatment.

In addition, furniture exports are part of those exports that Chile aims to increase in its second export stage. Guaranteed duty-free access to its largest market would attract investment and technology in this high-growth sector. However, to be able to take full advantage of improved market access for forestry products, Chile also must enforce its environmental laws and control the origin of forestry products. It needs to develop a sustainable forestry management. Otherwise environmentalist will prevent Chile's export growth.[57]

Fishing Sector

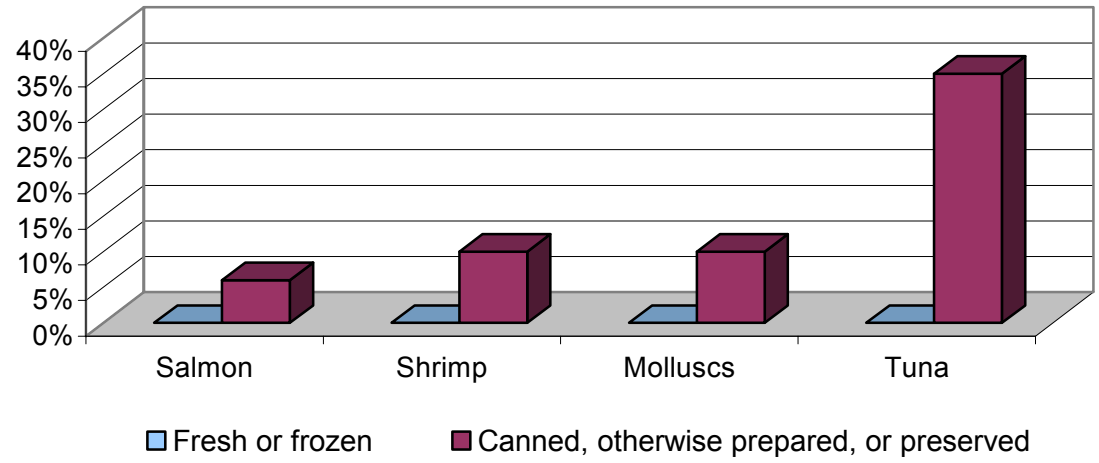
The United States is the second largest market for Chilean fish and seafood products besides Japan. In 1999, fish and seafood exports to the United States accounted for 21.2% of total Chilean fish and seafood exports (Banco Central de Chile 2001). Fresh salmon is the most popular Chilean fish export to the United States. Fishmeal exports to the United States, on the other hand, are of little significance although they are one of Chile's main exports worldwide.

An FTA with the United States will not generate spectacular benefits in terms of better access of unprocessed fishing products to the United States because the actual protectionist barriers are very low. However, the problem is the existing tariff escalation in the United States for fishing products with higher value-added which

[57] Chile's environmental standards and principal problems are discussed in Part III, Chapter 6.4.

restricts the sectoral development. The following figure illustrates the tariff escalation for selected unprocessed and processed fishing exports.

Figure 18: Selected U.S. MFN Tariffs for Unprocessed and Processed Fishing Products (2000)



Source: Based on USITC data (2001).

While fresh and frozen salmon exports do not face any duties entering the United States, smoked salmon, salted salmon, or prepared salmon face tariffs of 5%, 3%, and 6%, respectively. In 2000, Chile's exports of prepared or preserved salmon were worth only US$170,900, while fresh salmon exports amounted to US$17.2 million (USITC 2001). Chile would be capable of processing salmon quite competitively due to its lower labor costs and natural advantages, but the current tariff escalation in the United States prohibits these types of exports. With an FTA it would be possible for Chile to incorporate a higher level of value-added in its fishing exports.

Mining Industry

Tariffs are generally low on copper products, but slightly higher on other mining products. Most of them are GSP eligible, though some products graduated from GSP because they no longer fulfill the competitive-need criteria. This is the case with Chile's copper exports, both refined and non-refined. Chile has successfully sought a

competitive-need limit waiver, which secures permanent protection of a product's GSP status, for lithium carbonates and refined copper articles. They would face an MFN tariff of 3.7% and 1%, respectively. Chile has previously received de minimis waivers, which last for only one year at a time, for molybdenum oxides and hydroxides as well as for unwrought rhenium and rhenium powders, which would face tariffs of 3.2% and 3%, respectively (USITC 2001).

Mineral products face lower tariffs on average than other processed natural resources and most of them are GSP eligible. Due to Chile's high comparative advantage in many mining exports, some products capture close to or above 50% of the U.S. market and are thus excluded from GSP. To receive a waiver is a very time consuming and costly task with an uncertain outcome. Considering that mining is the second most important export sector after agriculture, it is important for Chile to secure market access for mining exports through an FTA.

Textiles

The Multi-Fiber Arrangement (MFA) regulates a high proportion of U.S. imports in the sector of textiles and apparel from Chile. Even though Chile has not signed the MFA, the United States tends to deal with non-signatories the same way as it does with those who have in fact signed. Chile's market share in the United States is low. Chile exports trousers and cotton sweaters, but only in small quantities. The problem is the high tariff which varies between 16.5% and 28.9% for trousers and 18.2% for cotton sweaters. These and some other selected products might benefit from preferential access under the FTA (Anderson and Smith 1997).

However, the FTA will incorporate strict rules of origin, probably similar to NAFTA's triple transformation rule, making it unlikely that Chile would experience a major expansion in its textiles and apparel industry as a result of the FTA. In addition, dismantling of the MFA as part of the Uruguay Round agreement will erode the margin of preference in textiles and clothing. The MFA phase-out promises to remove the quota restrictions on U.S. imports of textiles and apparel by the year 2004, gradually replacing quantitative restrictions with tariffs.

The U.S. Trade and Development Act of 2000, whose aim is to strengthen U.S. economic partnerships with Sub-Saharan Africa and the Caribbean Basin, extends preferential treatment to the Sub-Saharan African and Caribbean countries (which includes Central American countries).[58] The act expands the CBI program to extend preferential treatment to certain textile and apparel products assembled from U.S. fabric that have been excluded from the program. It reduces duty rates for textiles covered by the agreement by up to 100%, and such products are free of quantitative restrictions. For other products, the tariff rate is reduced up to 100% of the difference between the current rate and the rate applicable to Mexican goods under NAFTA (White House 2000).[59]

The legislation moves Caribbean countries closer to NAFTA parity. They receive quota-and duty-free access on exports assembled from U.S. fabric. Under NAFTA, the fabric can originate anywhere in NAFTA, i.e., Mexico can use Mexican-made fabric. The Caribbean countries are still at somewhat of a disadvantage, but it is an improvement over the previous Section 807 provisions of the CBI. Under Section 807, Caribbean countries could export garments assembled from U.S. parts and pay U.S. import duties only on the value-added of the final good rather than on the value of the entire garment.[60]

The U.S. Trade and Development Act of 2000 makes it even less likely that Chile will see many gains in its textile sector as a result of the FTA. Basically there are two types of countries that have a comparative advantage over Chile in textiles and apparel: those with extremely low labor costs (Africa and some Asian countries), and those with relatively low labor costs coupled with proximity to the U.S. market to serve the

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[58] The United States hopes that this act will encourage additional U.S. exports of cotton and yarn and U.S. investment in the region, improving the global competitiveness position of the U.S. textile industry (White House 2000).

[59] In addition to extending preferences to the Caribbean countries, the act expands the GSP to provide duty-free treatment to virtually all products exported to the United States from Sub-Saharan Africa. It also extends duty-free and quota-free benefits to apparel made in Africa from U.S. yarn and U.S. fabric or from yarns not available in the United States. In addition, it grants duty-free and quota-free benefits to apparel made in Africa from African fabric to a limit that grows over time. The escalating cap starts at 1.5% of U.S. imports of all apparel and rises over eight years to 3.5%. Africa's current share is only 1.1% of the U.S. apparel market (White House 2000).

[60] For Central America, the most important factor influencing investment in the textile and apparel sector has been the Caribbean Basin Initiative (CBI) and its Section 807 treatment of textiles.

need for rapid replenishment of strong-selling items (the Caribbean and Mexico). Chile does not fall into either group. Therefore, it is unlikely that the majority of Chilean textiles and apparel will be competitive in the U.S. market, even with preferential access.

Conclusion

One of the most important gains that Chile will realize from an FTA with the United States is the reciprocity effect. The reciprocal opening and the U.S. commitment to keep its markets open to Chilean exports of goods and services are missing in a unilateral liberalization strategy.

Improved U.S. market access for Chilean exports improves the country's terms of trade by receiving a higher export price than before the FTA. Quiroz, Larraín and Labán (1996) stress that the FTA tariff reduction increases the profit margin for Chilean exporters. Since prices in the United States, in general, will not change as a result of the FTA, Chilean exports will sell at the same price or at a slight discount in the U.S. market. Exporters will gain from a profit increase equal to the tariff or the tariff minus a discount.

The analysis of the U.S. tariff schedule shows that Chile's exports to the United States are burdened by tariffs that are, on average, low but greatly dispersed. In the main categories of Chilean export industries and those with the highest growth rates– agriculture, forestry, fishing, and mining – there is a clear tendency for U.S. tariff schedules to affect higher value-added goods adversely. Nevertheless, escalation levels differ for each category. The greatest level of escalation affects agriculture and especially agroindustrial production. Neither GSP nor the Uruguay Round reduced tariff escalation in this category. GSP primarily benefits fresh products while most processed agricultural goods are excluded.

The elimination of tariff escalation will have a major effect on the composition of Chilean exports in the long term. What Chile needs are open markets for products which it is just beginning to export and for those that it could produce for the U.S. market if it had better access to it. Chile has the capability of increasing some small

volume exports but high tariffs preclude Chile from exporting them to the United States since they would not be competitive. The FTA will broaden access to the U.S. market for these highly protected, higher value-added products by eliminating the U.S. tariff escalation, thereby promoting an increase in processed exports.

3.4 Equal Market Access to the U.S. Market

The incentives for a non-member country to attempt to become a participant of a trade arrangement, such as for Chile to become a member of NAFTA, depend generally on the strength of the effects of trade and investment diversion and the change in terms of trade. Other things being equal, the overall potential for trade and investment diversion and negative terms of trade effects will be related to the margin of preferences exchanged by partner countries and their importance as trade and investment partners for the non-member country (Bouzas and Ros 1994).

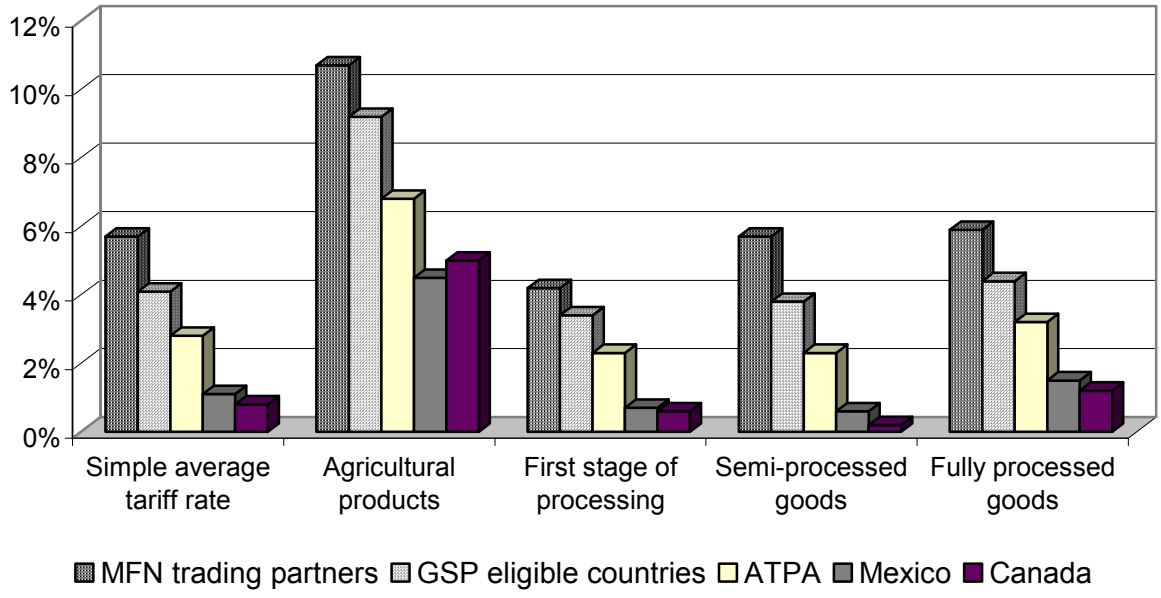
NAFTA has liberalized trade in goods and services between the three member countries and the margins of preferences exchanged have been high. Although its importance is not uniform throughout the region, the United States is one of the largest trading partners and source of FDI for most Latin American countries, especially for Chile. As a result, one would expect that discriminatory arrangements of the North-South variety such as NAFTA would heavily influence attitudes and reactions in a wide spectrum of countries in the Western Hemisphere, and they actually did so. Chile is the best example in that it has been trying to accede to NAFTA or at least to sign an FTA with the United States to minimize exclusion costs for the last ten years. Other Latin American countries have also exhibited a strong commitment to free trade with the United States and their neighbors when they participated at the third Summit of the Americas in April 2001.

An FTA with the United States does not give Chile formal NAFTA membership, but it grants Chile access to the U.S. market on an equal basis with its competitors Mexico and Canada and avoids further costs of exclusion from NAFTA. The FTA is not only important as a means of reducing and ultimately eliminating tariff escalation, but also as a fundamentally defensive measure (Butelmann and Meller 1995). Market access to the United States has become an important objective for Chile as a means of reducing

trade and investment diversion towards Canada and Mexico. Missing preferential market access to the United States will tend to diminish Chile's capacity to compete with NAFTA members' exports that have preferential access conditions to the markets sought by Chilean products, thereby making it more difficult to sustain vigorous expansion in the export sector.

The United States grants unilateral preferential tariff treatment to GSP eligible countries, to Caribbean and Central American countries due to CBI, and the Andean region to the ATPA. Reciprocal tariff preferences are granted under NAFTA and the FTAs with Israel and Jordan. While the simple average applied U.S. MFN tariff rate was 5.7% in 1999, the collected duty rate was only 1.8% in 1999 (WTO 1999a; ECLAC 2001). The much lower collected duty rate shows that a considerable quantity of imports entered the United States duty-free under MFN or received some type of preferential treatment. The following figure compares U.S. tariff preferences by agreement.

Figure 19: U.S. Average Tariff Rates for MFN and GSP Eligible Countries, ATPA Beneficiaries, Canada, and Mexico (1999)



Note: Agricultural products include prepared foodstuffs and beverages (HS Sections I to IV).
Chile is a GSP beneficiary.
ATPA stands for Andean Trade Preference Act.

Source: Based on WTO (1999a).

The simple average tariff applied to imports from Mexico in 1999 was 1.1% compared to 0.8% for both Canada and Israel. Imports from GSP beneficiary countries, to which Chile belongs, were subject to an average tariff of 4.1%, about one-fourth less than the MFN tariff rate but three to four times higher than the rate for NAFTA countries. Imports from CBI countries faced an average tariff of 2.7% in 1999, while those from ATPA countries were subject to an average tariff of 2.8% (WTO 1999a). For all trading partners, tariffs on agricultural products are significantly higher than on fully processed goods, which in turn are higher than those on goods in the first stage of processing or semi-processed goods (WTO 1999a).

As a GSP eligible country, Chile encounters lower tariffs in the United States than MFN countries. However, they are still much higher than the tariffs on exports from NAFTA countries. An FTA with the United States would reduce Chile's tariffs significantly, as the comparison of tariffs for NAFTA countries and GSP beneficiaries in Figure 19 has pointed out. The average tariff on agricultural products for GSP beneficiaries is 9.2%, nearly as high as the respective MFN tariff of 10.7%. GSP reduces the average MFN tariff, but protection still remains very high, in particular for agricultural and agroindustrial goods, which are the Chilean exports with the highest growth potential for the U.S. market. Average tariffs for Mexican and Canadian agricultural exports are 4.5% and 5% respectively, about half of those of GSP countries (WTO 1999a).

Tariffs for goods in the first stage of processing and semi-processed goods are close to zero for NAFTA members, but still about 2.3% for ATPA beneficiaries and 3% to 4% for GSP eligible countries. For Canada and Mexico, tariffs on fully processed goods are 1.2% and 1.5%, respectively, while they are 3.2% and 4.4% for ATPA and GSP eligible countries. The results of this tariff analysis show that average tariffs are significantly lower for countries that have a reciprocal preferential trade agreement with the United States than for countries with unilateral preferences.[61] For all categories, ATPA and GSP grant lower tariffs than MFN treatment but they are still higher than those granted under bilateral agreements with the United States.

[61] The tariffs which CBI countries and Israel face confirm this pattern. CBI beneficiaries are subject to tariffs similar those for ATPA countries, while Israel faces tariffs comparable to those for Canada (WTO 1999a).

The results clearly indicate that Chile will improve its tariff treatment considerably with a bilateral trade agreement. Significantly lower tariffs for Canada and Mexico in all sectors and stages of processing clearly illustrate how important preferential access is for Chile, especially since NAFTA members and Chile compete in many similar products in the U.S. market. An FTA with the United States would reduce tariffs to levels comparable to those paid by NAFTA countries and open up the opportunity to diversify its exports further.

The following table lists the main Chilean competitors in ten of the principal U.S. imports from Chile during 1997 and 1999. Competition varies depending on the product, but in nine out of ten products Chile faces competition from Canada or Mexico. Wine was the exception. In the case of four products Chile faces competition from both.

Table 3: Principal U.S. Imports from Chile and Main Competitors (1997-1999)

		Percentage of Total U.S. Imports		
Product	**Country**	**1997**	**1998**	**1999**
Copper cathodes				
1	Peru	16.0	17.8	23.7
2	Canada	46.0	34.2	27.0
3	Chile	18.0	16.7	25.0
4	Mexico	9.9	27.5	11.8
Fresh grapes				
1	Chile	71.2	63.3	56.6
2	Mexico	25.7	32.9	39.2
3	South Africa	2.3	3.1	3.5
4	Argentina	0.1	0.1	0.2
Fillets and other fresh salmon				
1	Chile	44.2	52.4	43.5
2	Canada	30.1	26.7	26.6
3	Iceland	8.3	6.8	6.6
4	Norway	0.4	1.5	7.9

Product	Country	Percentage of Total U.S. Imports 1997	1998	1999
Wood strips and moldings for furniture				
1	Canada	38.1	34.3	25.8
2	Chile	22.6	24.5	16.9
3	Mexico	25.1	19.1	12.2
4	Brazil	5.8	9.1	6.3
Sawn wood				
1	Canada	94.2	93.5	92.2
2	Chile	1.3	1.5	1.9
3	Brazil	1.5	1.8	2.1
4	New Zealand	0.9	1.1	1.3
Wine				
1	France	36.9	38.5	36.1
2	Italy	29.1	28.4	28.7
3	Australia	9.8	10.5	12.9
4	Chile	8.3	7.7	7.4
Unrefined copper				
1	Canada	46.1	60.8	61.1
2	Chile	19.8	13.5	25.8
3	Mexico	25.9	20.0	11.1
4	Peru	4.5	2.7	1.5
Gold, nonmonetary				
1	Canada	61.7	47.9	52.6
2	Brazil	12.8	10.7	11.4
3	Peru	2.9	8.3	9.3
4	United Kingdom	1.8	2.7	5.3
5	Chile	2.6	1.5	2.7
Seed corn				
1	Chile	52.0	46.7	47.9
2	Argentina	17.6	36.7	36.3
3	Canada	18.6	10.4	7.1
4	France	6.2	3.2	6.1
Silver				
1	Canada	38.4	37.2	46.2
2	Mexico	33.3	41.3	33.8
3	Chile	17.4	7.4	10.4
4	Peru	10.4	9.5	6.9

Source: Based on Direcon (2000b).

Canada and Mexico are competitors in many natural resource products, both processed and unprocessed, which Chile exports or will export as it moves towards a second export stage. For the most part, these exports are either fresh or processed foodstuffs, fish, forestry, and mining goods. Chile has strong market power in fruit and vegetable products during the winter season of the Northern Hemisphere. Mexico has significantly increased its exports of fruits and vegetables and has the ability to produce during the winter season in the southern parts of the country.

Chile not only has a competitive disadvantage with respect to these principal export products, but also with respect to its non-traditional, high growth exports. Chile has difficulties gaining market share for these products in the United States as a result of preferential access of NAFTA countries. Moreover, Chile not only has problems acquiring market share, in some products with high growth potential it has even been losing market share to NAFTA members.

Chile's preserved cherries face an MFN tariff of 7.5% and capture less than 1% of the market. Canada exports them duty-free and has a U.S. market share of 39.1% (USITC 2001). Chile has the capacity to satisfy the total demand of the United States. It exports twice the equivalent of total U.S. demand each year to Japan. In the case of prepared or preserved peaches, Chile faces an MFN tariff of 17% while Mexico gets preferential access with a tariff of 4.5%. In 2000, Chile was still the market leader, but its position is endangered by Mexican competition (USITC 2001).

Not only are Chile's fruit exports adversely affected by NAFTA, but also its vegetable exports. Chile has problems exporting its tomatoes to the U.S. market. Depending on the season, Chile's tomatoes face an ad valorem equivalent tariff of 2.8% or 4.7%. All Mexican and Canadian tomato exports have duty-free access because of NAFTA. As a result, Mexico alone accounts for more than 60% of total U.S. tomato imports and together with Canada for over 90% (USITC 2001). Competition also increases in goods with higher value-added such as tomato paste, which faces an MFN tariff of 11.6%. Chile's market share of tomato products in the United States is diminishing, whereas those of Canada and Mexico are increasing. Canada pays no tariff at all for processed tomatoes and Mexico pays a preferential rate of only 2.3% (USITC 2001).

Another example of Chile's loss of competitiveness is asparagus which, if not imported during the two months of mid-September to mid-November, faces an MNF tariff of 21.3% while NAFTA countries have preferential access. Mexico accounted for 66.4% of total U.S. asparagus imports in 2000, while Chile captured 0.3% of the market. Chile's market share has decreased, while that of Mexico has increased. In 2000, Chile accounted for 64.9% of total U.S. imports of avocadoes, which has emerged as a rapidly growing export product for Chile. Mexico is second with a market share of 19.3%, which is still far below that of Chile, but Mexico has been able to increase its production over the last few years and has continuously been able to extend its market share (USITC 2001).

The analysis has shown that for a large percentage of Chilean exports to the United States, its primary competitors are Mexico and Canada. These specific products discussed here are representative for the majority of agricultural products. Agriculture is one of the many other industries that suffer from NAFTA preferences. Chile's export performance runs the risk of being adversely affected if it is not able to sign an FTA with the United States in the future. Since Mexico and Canada already have unrestricted access to the vast market under NAFTA and enjoy the geographic advantage of being close, it is important that Chile obtains similar access conditions.

Besides NAFTA countries, the Andean region, Caribbean and Central American countries, and Mercosur are the fiercest competitors for Chile in the U.S. market. Export-oriented programs have led to a surge in natural resource exports from Argentina and Peru similar to those of Chile. The CBI and ATPA grant the Central American, Caribbean and Andean countries preferential access to the U.S. market. This implies that Chile has to use all its force to be able to compete in the U.S. market. If additional countries like the Mercosur members, whose exports also compete with those of Chile, were to obtain preferential access to the U.S. market, the long-term impact would severely affect Chilean welfare.

Increased competition should also be expected for Chilean exports as a result of economic liberalization and export-oriented structural adjustment programs being undertaken in developing countries in other parts of the world. These countries possess significant endowments of natural resources and an abundance of labor. This

development will negatively affect Chilean natural resource exports and its ability to compete in export markets for labor-intensive manufactured goods.

In conclusion, an FTA will offer Chile preferential export treatment in the United States equal to that enjoyed by its principal competitors. This is important for Chile in order to compete under similar conditions, especially as Chile gradually begins to export processed products facing higher levels of protection. Entering into an FTA will give Chile access privileges to the U.S. market and therefore a competitive advantage over its regional competitors and also those in other parts of the world.

3.5 Hub and Spoke Constellation

Chile's preferential market access to different countries as a result of its multiple FTAs will allow the country to play the hub and spokes game.[62] Chile as a hub will trade freely with all its preferential trading partners, while these countries, the spokes, will continue to maintain trade restrictions among themselves (Kowalczyk and Wonnacott 1992). By taking advantage of its good economic image, this is precisely the direction in which the recent Chilean trade strategy has been heading.

An FTA with the United States will consolidate Chile's position as a hub in the hemisphere. Chile has signed FTAs with most South and Central American countries, Mexico, and Canada. Thus, Chile will be the center and its trading partners with whom it has signed FTAs will be the spokes. Chilean exports will have preferential access to each of the spoke countries' markets, whereas the spoke countries' exports will have duty-free access only in the hub country market and perhaps a few others.

Puga and Venables (1997b) and P. Wonnacott (1996) analyze how industrial location may change in response to FTAs. They conclude that a hub and spoke arrangement favors location in the hub, with better reciprocal access to spoke nations than these

[62] The overlapping FTAs or hub and spoke concept was first analyzed in Wonnacott (1975) as the two-sided triangle. It is the same problem as the star-shaped FTAs described by Park and Yoo (1989) in which the United States is the star and the partner countries are at the points. It was first called the hub and spoke problem in independent studies by Lipsey (1990) and Wonnacott (1990).

have to each other. Firms located in the spoke countries are penalized by a lower demand by both consumers and firms in the other spokes as compared to that enjoyed by hub firms. Spoke firms also have larger costs, as they face higher barriers than hub firms when importing intermediates from the other spokes. A hub and spoke arrangement thus might shift industrial production into the hub. Krugman (1993) gives a similar argument suggesting that the benefits to the hub will be relatively large. In a hub and spoke system, firms located in the hub will have better access to consumers than firms located in spokes. This creates a market access effect and causes the hub to have relatively more industry than the spokes.

Chile's hub situation might also be used to take advantage of duty-free passage of goods between NAFTA and Mercosur and vice versa. Some trade between the United States and Mercosur could be redirected through Chile, in cases where enough Chilean value can be added to meet the rules of origin of either agreement and thus qualify for duty-free passage. For example, Brazilian and U.S. parts may be assembled in Chile to take advantage of the duty-free access to both countries (P. Wonnacott 1996).

Hinojosa-Ojeda, Lewis and Robinson (1997) conclude in their welfare analysis of possible paths of economic integration in the Western Hemisphere that a regional hub position would involve large benefits for Chile. They argue that becoming a member of both NAFTA and Mercosur is slightly preferable to even hemispheric free trade, allowing Chile to become a regional hub and enjoying the trade diversion effects of continued protection among its various spoke partners.

Kowalczyk and Wonnacott (1992) and Baldwin and Venables (1995) argue that the benefits to the hub nation will be greater than to the spoke nations in a world of perfect competition. Kowalczyk and Wonnacott (1992) consider a three-country world forming a hub and spoke system. This arrangement may lead to trade diversion for the two spokes, but not for the hub. If the hub and spoke system is extended to allow for more countries to be linked to the hub, each new spoke will lead to more trade creation for the hub. The welfare implications for existing spoke economies depend upon whether the exports of the new spoke are complements to or substitutes for those of old members. If they are substitutes, existing spoke nations may be harmed by an

erosion of their degree of preference in the hub market. If they are complements, the initial members will also tend to gain.

Thus, while a hub and spoke system is beneficial for the hub, it creates a number of inefficiencies and disadvantages for the spoke countries. R.J. Wonnacott (1996) notes that a hub and spoke system works to the disadvantage of producers in all countries except for the center, unless, of course, the partner countries make their imports duty-free. Krueger (1995) argues that if any partner country feels itself disadvantaged by being a spoke it could offset that disadvantage by unilaterally lowering its own external tariffs.

The hub situation is beneficial for Chile. First, its producers have duty-free access to inputs from each partner and thus have a cost advantage relative to producers in the spokes in that they can obtain more of their desired inputs at lower prices. Second, Chile benefits from the preferences it gets in each spoke market, while exports of spokes to each other face discrimination in competing with duty-free exports from the hub. Finally, Chile has the advantage of becoming the preferred location for investment since it is the only country with duty-free access to most Latin American countries. Once the FTA is in place, firms could reach more markets tariff-free from Chile than from any of the other Latin American locations.

4 Dynamic Effects

4.1 Welfare Results of Empirical Models

Several empirical studies evaluate the trade and welfare effects of Chile's accession to NAFTA. The results obtained consistently show that the elimination of tariff and non-tariff barriers between Chile and the United States will have a positive effect on Chile's real income. However, estimates of welfare gains of these models are generally quite small. Existing modeling exercises focus mainly on improved resource allocation and not on the benefits of the dynamics of integration. As the analysis of potential trade creation and trade diversion for Chile has shown, gains from reallocation of resources will be small in an FTA with the United States. Most of the allocation gains have been achieved in Chile as a result of the unilateral liberalization since the mid-1970s. The following discussion of the CGE (computable general equilibrium) models by Brown, Deardorff and Stern (1998), Hinojosa-Ojeda, Lewis and Robinson (1997), and Harrison, Rutherford and Tarr (1997) is limited to the computational results and the assumptions of the different models are not mentioned in the scope of this study.

CGE Model by Brown, Deardorff and Stern (1998)

Brown, Deardorff and Stern (1998) use CGE modeling to estimate the aggregate and sectoral economic effects of a possible accession of Chile to NAFTA. The CGE model used is an extension of the model first constructed by Brown and Stern (1989) to analyze the economic benefits of the CUSFTA and later expanded by Brown, Deardorff and Stern (1992, 1995) to analyze NAFTA and a possible Western Hemisphere Free Trade Area. The reference year for the database of the model is 1990, the most recent year for which data were available at the time that the research was undertaken (Brown, Deardorff and Stern 1998).

The model analyzes the impact of tariff removal on trade between Chile and NAFTA countries. Non-tariff barriers are assumed to remain in place and international factor flows are taken to remain unchanged. Their model includes not only the standard arguments of exchange and specialization gains, but also pro-competitive effects and realization of economies of scale. However, some more complex mechanics of dynamic effects are not incorporated in this model. The result indicates a relatively

small impact on Chile's economic welfare or change in real GNP (gross national product). Chile's real income rises by a mere 0.37% of GNP.

Sectoral results show that Chile's exports to the United States rise in every sector except financial services. The largest increases are in agriculture (12.0%), leather products (15.5%), and glass products (17.3%). Chile's imports from North America increase on the order of 25% in most product categories. The remarkable uniformity across products and trade patterns is a reflection of Chile's uniform tariff code and general absence of non-tariff barriers. The largest increase in imports occurs in transportation equipment (37%), again reflecting Chile's high level of protection in this sector.

Small overall effects of NAFTA accession on Chile's real GNP are mirrored in the impact on factor returns. While returns on both factors of production rise, the return to capital (0.57%) increases more than the return to labor (0.36%). For the United States, neither factor of production loses. Both the real wage and the real capital return remain virtually unchanged. The results indicate that Chile's accession to NAFTA is unlikely to have any important distributional consequences in Chile. Both capital and labor should expect to gain, albeit by a small amount. The impact on the return to capital is slightly larger owing to the relative capital intensity of certain sectors (Brown, Deardorff and Stern 1998: 6). The impact on factor returns runs somewhat contrary to the standard Heckscher-Ohlin model. The fact that returns to both factors rise seems to be inconsistent with the Stolper-Samuelson theorem. From this theorem, it is expected that trade liberalization will raise return to the abundant factor in each country while making the other factor worse off. However, in the context of a differentiated products model with increasing returns to scale, like the one used in the Brown, Deardorff and Stern study, other forces can be at work undermining Stolper-Samuelson-type mechanics.[63]

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[63] Scale effects work very much like the relative price effects articulated in the Stolper-Samuelson theorem to determine the implications of trade liberalization for factor prices. Scale effects, like price effects, tend to accrue to one factor only. Brown, Deardorff and Stern (1995) have shown that an increase in output-per-firm in an industry raises the real return to the factor used intensively in that industry and lowers the return to the other factor. That is, if economies of scale are realized in the non-ferrous metals, and if capital is the factor used intensively in the production of non-ferrous metals, then the return to capital will increase economy-wide and the return to labor will fall. However, price and scale effects differ in one important respect. If returns to scale are realized across both labor intensive and capital intensive sectors, then the returns to both factors can rise. For a more complete discussion of factor prices in a differentiated products model see Brown, Deardorff and Stern (1993).

Brown, Deardorff and Stern (1998) conclude in their CGE analysis of Chile's accession to NAFTA that it has positive, but small welfare implications for Chile. They reiterate that CGE models do not provide predictions that can be compared with actual outcomes. The numerical results have to be interpreted in the light of their assumptions, parameters, and data. Brown, Deardorff, and Stern (1998) argue that the Chilean economy continues to undergo transition and therefore their results should be appropriately qualified.

In addition, they argue that there are several different channels as to how trade liberalization might increase welfare. Gains can come from a variety of sources that are mutually reinforcing. These sources include the following: (i) improved allocation of resources and lower prices to consumers and businesses; (ii) reduction in transaction costs and in the uncertainty of government policies; and (iii) dynamic changes resulting from improvements in the business environment, realization of economies of scale in production, added investment in physical and human capital, and technological progress. Brown, Deardorff and Stern (1998) stress that not all of these sources are included in their model.

In another scenario of the same model, Brown, Deardorff and Stern (1998) assume that tariff removal on trade between Chile and NAFTA countries is accompanied by FDI from the rest of the world that increases Chile's capital stock. The welfare impact of NAFTA accession on Chile is now a quite robust 5.15% of GNP.

CGE Model by Hinojosa-Ojeda, Lewis and Robinson (1997)

Hinojosa-Ojeda, Lewis and Robinson (1997) use a multi-country CGE model with 1990 as the base year to analyze the range of possible paths towards economic integration among NAFTA, Chile, and Mercosur. They examine the economic impact of alternative scenarios of trade liberalization and regional integration in the Western Hemisphere. One scenario estimates the effects of Chile joining NAFTA.

In addition to the static effects, Hinojosa-Ojeda, Lewis and Robinson (1997) also explore potential effects that positive externalities of the process of trade liberalization and integration may have on each country and the region as a whole. They attempt to

model some of the dynamic effects, including the effects on aggregate and sectoral productivity of increased exports and economies of scale and the effects of productivity-enhancing imports of new technologies via capital goods (Hinojosa-Ojeda, Lewis and Robinson 1997).

The analysis on the impact of the different scenarios on Chile shows that if Chile were excluded from NAFTA and/or Mercosur, the country would actually find itself negatively affected by the creation of those two trading blocs. NAFTA negatively affects Chile more than it does Brazil and Argentina. Like other small Latin American countries, Chile would be clearly in a very vulnerable situation if it were excluded from the major regional trade arrangements. It would suffer even more trade diversion if free trade were arranged between NAFTA and Mercosur members.

Chile is in a position to benefit from joining regional trade arrangements. A Western Hemisphere FTA is the first-best outcome for most of the countries in the region as well as for the region as a whole, both in terms of real GDP and total trade. In Chile's case, its first-best option is to have preferential access to both NAFTA and Mercosur, which would position it as a regional hub. Joining NAFTA provides more benefits for Chile than having free trade with Mercosur. In case of NAFTA accession, Chile’s welfare would rise between 0.2% and 1.3% of GNP, depending on the experiment conducted.

Hinojosa-Ojeda, Lewis and Robinson (1997) conclude that estimating the economic impact of a trade agreement is an extremely complex exercise from the technical point of view. The results obtained depend very much on the assumptions taken as the basis of the calculation. They admit that their results might underestimate the benefits for Chile.

CGE Model by Harrison, Rutherford and Tarr (1997)

Harrison, Rutherford and Tarr (1997) evaluate various trade policy options for Chile, including (i) accession to Mercosur; (ii) FTA with NAFTA; and (iii) unilateral tariff reduction. They use a multi-country CGE model of perfect competition with constant returns to scale to explore trade policy options facing Chile.

The global CGE model is an extended and updated version of a model which they developed to study the effects of the Uruguay Round. The model specification is explained in detail in Harrison, Rutherford and Tarr (1995a, 1995b). The model explicitly evaluates improved market access to the partner country as well as the traditional effects of tariff reform in Chile itself.

Harrison, Rutherford and Tarr (1997) conclude that an FTA with NAFTA dominates all the other policy options for Chile. The gains result mainly from Chile's improved market access to the NAFTA market. This result provides a concrete example of the point emphasized by Wonnacott and Wonnacott (1981) regarding the importance of improved market access in an FTA. An FTA with NAFTA offers more gains to Chile than further unilateral trade liberalization or an agreement with Mercosur. The analysis shows that (i) accession to Mercosur decreases economic welfare by 0.95% of GDP; (ii) unilateral tariff reduction to a uniform zero tariff reduces economic welfare by 0.26% of GDP; and (iii) an FTA with NAFTA increases economic welfare by 0.82% of GDP (Harrison, Rutherford and Tarr 1997: 37).

Several features of the Chilean economy drive the results. Key to understanding the small gains for Chile resulting from the analysis is to recognize that, contrary to other countries implementing FTAs, Chile starts with a relatively distortionless external trade regime, a flat tariff rate of 11% from 1991 up to 1998. Thus, the results differ from the analyses for other small open economies forming FTAs with large markets, such as Morocco, Turkey, and Tunisia with the EU (Rutherford, Rutström and Tarr 1993; Harrison, Rutherford and Tarr 1996). Tariffs in these countries were higher and dispersed in contrast to Chile's low and uniform tariff system. "Then, there is relatively little Chile can do to improve resource allocation *within* Chile through preferential trade arrangements. Significant gains can only come through improved preferential access" (Harrison, Rutherford and Tarr 1997: 27).

In a second scenario, Harrison, Rutherford and Tarr (1997) examine the impact of lowering Chile's external tariff from 11% to 6% and entering into an FTA with NAFTA. Reducing the external tariff reduces trade diversion costs and improves welfare to that extent. In this case, real income rises by 1.46%. This figure is considerably higher than that in the previous scenario and now closer to reality since Chile

will have reduced its tariffs to 6% by 2003. Nevertheless, the welfare results are only modest considering that the model incorporates the market access effects resulting from NAFTA countries' tariff reductions and the traditional effects of tariff reform in Chile.

Harrison, Rutherford, and Tarr (1997) conclude in their analysis of Chile's NAFTA accession that when imperfect competition and dynamic gains from trade were taken into consideration, there could be significant additional gains from liberalizing trade with a large, technologically advanced country such as NAFTA. Their model ignores such dynamic gains from trade liberalization that could arise from importing either products with modern technology or a greater variety of products.

In summary, the gains estimated by the three empirical models are rather small. The problem with most existing models is the lack of recent data on Chile's economic structure. The databases for the models involve reference years that are more than a decade old. The Chilean economy has continued to undergo transition, but these models do not incorporate any of the changes in Chile's economic structure.[64] Chile's diversification strategy has shifted Chile's export structure towards products which are increasingly harmed by the dispersed U.S. tariff schedule.

The models discussed above base their analysis on the goods exported in the year for which they could obtain the data. These unprocessed exports of the past usually faced low tariffs. They did not include the tariffs of those products that have not been exported yet because of high tariff protection. The reliance of these studies on older data has inclined them to misrepresent, to a certain degree, the impact of Chile's NAFTA accession on the sectoral diversification that now characterizes the Chilean economy. Including tariff escalation in an empirical model of NAFTA accession or an FTA with the United States should increase the positive welfare estimates.

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[64] Hoekman, Schiff and Winters (1998) criticize the use of CGE models to make ex ante statements of prospective trade blocs and argue that they are inappropriately called empirical models. They argue that these models reflect economists' theoretical views of the economies and the trading arrangements supplemented by data on trade and production patterns. These models produce mixed results for the static benefits of integration and usually suggest quite small effects unless authors postulate that integration either improves technical efficiency or dramatically changes market structures (Hoekman, Schiff and Winters 1998: 4).

Another reason that gains resulting from the CGE models analyzing economic integration for Chile are rather small is given by the fact that existing modeling exercises focus mainly on static effects. Many economists argue that there are important gains from free trade not accounted for in the conventional cost-benefit analysis. Trade creation versus trade diversion is only part of the assessment and not the major one. The net benefits of the dynamics of integration can be several times larger than those afforded by static reallocation effects (Brown, Deardorff and Stern 1998; Harrison, Rutherford and Tarr 1997). As a consequence, the results presented may understate the potential gains to Chile of NAFTA accession or an FTA with the United States.

Dynamic Effects

FTAs have become multi-dimensional in character, but economic integration theory continues to be based mainly on the Vinerian concept of trade creation and trade diversion. Static efficiency effects occur from the relative size of trade creation gains versus trade diversion losses. However, it must be admitted that this concept loses some of its relevance as a useful analytical tool with the increasing globalization of production and investment. The consequences of investment flows and accompanying flows of technology are not taken into account by classical Vinerian analysis, even though such flows may in many instances be more important than trade flows per se. As a consequence, Vinerian analysis does not permit a proper assessment of the full costs and benefits of an FTA.

The Vinerian framework focuses only on static efficiency gains and does not take into account dynamic gains. The term dynamic gains from FTAs is attributed to Balassa (1961) and is used to describe gains resulting from the impact of trade integration on participating countries' growth rates. Dynamics of integration are defined as gains that lead to sustained increases in a country's rate of economic growth over the medium to longer term (Winters 1997).

Having found that the static benefits are usually rather small, many proponents of regional integration have switched attention to dynamic effects. Despite the appeal of dynamic effects of regional integration, the various arguments and claims so far have

not been shown conclusively either theoretically or empirically, and the literature on dynamic effects is still evolving (Winters 1997; Hoekman, Schiff, and Winters 1998). Nevertheless, the dynamic models are sufficiently advanced to demonstrate that benefits behind the dynamics of integration are potentially large. It is therefore necessary to go beyond static trade creation and trade diversion analysis to better understand the longer-term dynamics (Devlin and Ffrench-Davis 1998). Trade liberalization can affect economic welfare in ways other than the standard analysis of distortions of consumer and producer choice.

A variety of channels have been identified through which dynamic gains can be generated through economic integration (Grossman and Helpman 1990, 1991; Krugman 1990; Rivera-Batiz and Romer 1991; Romer 1990). It has been argued that regional integration can: (i) stimulate domestic and foreign investment and changes in the location of investment; (ii) generate economies of scale by market enlargement and enhanced market competition which in turn reduces monopoly rents, lowers prices for consumers, increases product variety, and stimulates efficiency of businesses; and (iii) create spillover effects resulting from knowledge transfers among countries on both an intraindustry and interindustry basis and an accelerated pace of technological change.

The following sections examine these most important channels through which dynamic gains can be generated in an FTA with the United States. The analysis begins with FDI inflows and discusses why an increase in investment in Chile is likely to occur with an FTA and explains the benefits that result from FDI. The next sections focus on the enhancement of market competition and generation of economies of scale in Chile as a result of the FTA. The final section examines technology spillovers and knowledge transfer in an FTA with a large, technologically advanced economy such as the United States.

4.2 Foreign Direct Investment

Despite the term free trade, an FTA is concerned not only with free trade, but also with investment. Chile hopes to attract sizeable flows of FDI – from the United States as well as from all over the world. FDI flows have several positive effects on the host country. They add to national savings in financing investment and increase the stock of capital goods to expand productive capacity. FDI gives access to markets and technology by taking advantage of the scale or scope of the foreign investor, serves as a broad mechanism of business modernization, and increases productivity. These investment flows involve technology transfers which are a very potent source of learning and whose benefits can be spread within an industry and across sectors as a result of labor mobility. The additional capital will generate permanent changes in output and income and promote economic development of the host country by raising the economic growth rate (Baldwin and Venables 1995).

The extensive FDI flows into Chile during the 1990s have helped to develop the Chilean economy. However, investment inflows have slowed down in 2000 and 2001. Despite a couple of utility company acquisitions involving voluminous sums towards the end of the year 2000, FDI flows to Chile were well below the average of the preceding years, as illustrated in Figure 7 (p. 44). Although part of the decline can be attributed to the distortionary influence that the large-scale transactions of Endesa España had on the size of flows in 1999, there are a number of medium-term factors that have raised doubts as to the future growth of FDI in Chile (Foreign Investment Committee 2001).[65] Slowing investment in resource-based operations suggests that this area is becoming less attractive, while service sectors are already strongly trans-nationalized. Chile's authorities are beginning to make an effort to attract FDI in sectors involving more sophisticated technologies. Chile hopes that an FTA with the United States will speed up this new effort and facilitate investment in high tech-nology.

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[65] In 1999, FDI flows reached a record-high of US$9.1 billion. In 2000, however, foreign investment dropped by two-thirds. 1999 was an atypical year for Chile in which only two mergers and acquisition transactions, those by Spain's electric company Endesa España, represented 40% of total FDI entering the country (Foreign Investment Committee 2001).

Increase in FDI Inflows as a Result of the FTA

Chile will get a formal seal of approval for its economic policies by obtaining preferential access to the U.S. market. The increased credibility of domestic policies will further lower the country risk rating, which has been already investment-grade since 1992 and was part of Chile's success to attract large investment inflows (Butelmann and Meller 1995). But this rating does not seem to be enough anymore to lure investors. An FTA with Chile will not only reduce the official ratings but also that perceived by investors. The U.S. willingness to commit itself to a reciprocal trade agreement creates a positive perception of Chile by potential investors. The conditions established by the United States to sit at the negotiating table are a priori stricter than those of other countries.

As a result of the FTA investors will demand lower risk premiums which in turn will raise risk-adjusted rates of return (Coeymans and Larraín 1992). The improved risk classification will stimulate both domestic and foreign investment and further improve the reputation and rating of the Chilean capital market and its stock exchange.[66] It will also induce the repatriation of domestic flight capital. Foreign capital flows to Latin America have been drying up in the wake of the global slowdown in 2001. In addition, the crises in Turkey and Argentina in 2001 have reduced investors' confidence in emerging markets. In such an environment, an FTA with the world's strongest economy will help to rebuild confidence among investors and stimulate an increase in investment flows to Chile.

Developing country competition for FDI is sufficiently intense that significant distinguishing features in a country can be decisive in attracting investors. If the United States offers Chile preferences on its exports, U.S. investors might prefer to invest in its partner country Chile than in other Latin American countries. An FTA with the United States will promote Chile's image as an attractive country for investment in a time of tremendous competition among Latin American nations. Many countries in the region have opened up their economies over the last decade and look

[66] Interviews with Andrés Velasco (Professor of International Finance and Development at Harvard University), April 2001, and Mario Benavente (Foreign Investment Committee), September 2000.

forward to attracting FDI inflows. Most of them reformed approximately at the same time, so none can guarantee that it will get the desired FDI. The preference granted by the United States to Chile might only be marginal, but it is a distinguishing feature.

Blomström and Kokko (1997) argue that while CUSFTA had little investment effect, Mercosur and NAFTA both coincided with increased FDI inflows. According to them, the bigger the change in economic environment associated with the agreement and the greater the locational advantages of the country or subregion, the more likely the agreement will stimulate foreign investment from member countries and from third parties. The attribute labeled "economic change" summarizes the degree to which trade and investment flows are liberalized by the integration agreement. "Locational advantage" means the degree to which it is advantageous from a profitability standpoint to locate an economic activity in a particular geographic area. It refers to the availability and cost of various production factors as well as the country's or region's geographic location with respect to major consumer markets (Blomström and Kokko 1997).

The FTA with the United States will liberalize trade and investment flows for products and industries completely after a transition period and result in a considerable economic change. Although Chile is geographically far from the United States, it still has the great locational advantage of being close to the Mercosur and Andean Pact markets, to which it has preferential access. Chile has one of the better education systems in Latin America, and although Chile's productivity is still low compared to the developed world, it is higher than in most other Latin American countries (World Bank 2000a).

An FTA can lead to a relocation of economic activity, causing industries to expand in one country and contract in the other. Relocation of industries from the United States to Chile to produce manufactured goods for the U.S. market will not be very high as a result of a Chile-U.S. FTA. The benefits of relocation must be large enough to offset the costs of plant closure, including writing down the original investment and labor redundancies. In addition, the geographical distance to the U.S. market and transport costs will not make it worthwhile for most U.S. firms to relocate to Chile to serve the United States. Competitors in many potential manufacturing products tend to be either

Mexican or Canadian producers whose transportation costs to the U.S. market are lower than those of Chilean producers.

Wages in Chile are lower than in the United States and might encourage investment in labor-intensive exportable goods to the U.S. market, but labor productivity in Chile is also lower than in the United States. Besides, the quality, design, and presentation of many manufactured goods from Chile are not yet acceptable in the demanding U.S. market. Further, the stronger the conviction that multilateral trade liberalization and the FTAA process will proceed apace, the less the incentive to alter longer-term investment plans in response to current regional trade arrangements.

If labor-intensive industries intend to move abroad from the United States, they will move to Mexico. Feenstra and Hanson (1997) show evidence of relocation of manufacturing production from the United States to Mexico in which the latter has acted as a platform for FDI to serve the U.S. market. Mexico has a geographical advantage, about the same labor productivity as Chile, and enjoys the advantage of having been the first and so far the only Latin American country to sign an FTA with the United States.

The FTA might not lead to much industry relocation and Chile will not become a large base for manufactured goods destined for the North American market in general. However, investment will occur in sectors in which Chile has a comparative advantage to produce goods destined for the Northern Hemisphere. Chile's fruit industry has such strong comparative advantages, in particular the opposite growing season, that transport costs do not eliminate its competitiveness in the Northern Hemisphere. Chile also has strong comparative advantages in mining, vegetables, fishing, and forestry that are difficult to overcome by Canada and Mexico despite their geographic proximity.

Achieving Agglomeration Economies

An increase in FDI inflows can result in an agglomeration of activities and position Chile as an economic center. Puga and Venables (1997a) and Fujita, Krugman, and Venables (1999) argue that as economic centers begin to develop, cumulative

causation mechanisms come into effect, leading to the spatial clustering or agglomeration of FDI and extending the advantage of locations that have a head-start. Cumulative causation mechanisms can be classified into three groups (Marshall 1920). First, technology and knowledge spillovers make it attractive for firms to locate close to each other. Second, various labor market pooling effects encourage firms to locate where they can benefit from readily available labor skills – perhaps by attracting skilled labor away from existing firms. The third force arises from backward and forward linkages between buyers and sellers which create a positive interdependence between the location decisions of different firms. This in turn leads to an agglomeration of activities.

By generating backward and forward linkages with the host economy, FDI can play a crucial role in Chile's industrial development. Forward linkages are especially important for the Chilean economy and its second export stage. They create industries that produce higher value-added goods out of Chile's natural resources. An investment in a fruit plantation might result in a forward linkage and attract investment in food processing. Agglomeration of activities might lead to the positive effect that more U.S. firms would prefer to invest in a food processing factory in Chile than to import raw fruits and process them in the United States.

The argument that Chile's manufactured goods are of low quality will become obsolete with time as new investment flows into the country. Investment is an excellent way to transfer knowledge and know-how. Multinationals that plan to export to North America will bring with them the necessary technology to improve quality standards and the acceptance of its products in developed country markets.

Preferences alter the incentives facing firms, both located within the FTA and located outside, and the creation of the FTA influences direct investment flows of both. Firms located in third countries will also have an incentive to locate new production facilities in Chile so that they may take advantage of positive externalities such as technology spillovers and skilled labor resulting from other firms' activities in Chile. Foreign companies might not yet have a base in Latin America but with the FTA and given the preference of investors to cluster and locate together, they might choose Chile as their investment location. The increase in outside country investment may also reflect defensive moves to avoid the adverse effects of trade diversion.

Gains from Chile's Preferential Access to Markets in the Hemisphere

It is not enough for Chile to be a relatively efficient country with entrepreneurial skills, acquainted with the export business and with reliable rules concerning FDI. It is fundamental that there be a market where the firms to be established in the country can trade their products. Otherwise, Chile would continue to primarily attract foreign investors who exploit natural resources for subsequent processing in their home country. By providing a larger market through a binding commitment, the FTA with the United States will attract more diverse investors.

Chile has the advantage of enjoying ensured access to markets as important as those of NAFTA, Mercosur, and Andean Pact countries. Firms seeking to exploit new investment opportunities might use Chile as their production location and platform to distribute products across the continent and serve the region. Foreign firms are interested in a location which can cater to large markets (P. Wonnacott 1996). Chile could become the preferred location for investment in Latin America because investors can take advantage of the country's position as a hub in the region (Krugman 1993; Puga and Venables 1997b). An FTA with the United States would consolidate Chile's hub position. Firms will be able reach more markets tariff-free than from any of the other locations.

Access to a larger market raises the profitability of innovation, as fixed costs of R&D are spread and facilitates the exploitation of economies of scale and scope. The creation of a larger market in conjunction with an increase in competition will lower unit production costs and increase the incentive for investors to establish their production within Chile. The Chile-U.S. FTA might foster a redistribution of investment flows within Latin America towards Chile to take advantage of the expanded markets and a new factor mix.

Mexico is a good example for evidence that an FTA with a large market has succeeded in attracting FDI, although its position as a potential export platform to the United States is special. Studies on the investment effects of NAFTA conclude that Mexico's entry into NAFTA has so far been associated with an increase in FDI (Griffith-Jones 1995; Blomström and Kokko 1997). Flows into Mexico more than doubled in the year

following the launch of NAFTA. Blomström and Kokko (1997) argue that this increase was mainly by firms of non-NAFTA countries taking advantage of preferential access to the larger northern markets.

The link between integration with a major market and increased FDI is also present in agreements other than NAFTA. After Portugal and Spain joined the EC, FDI to those countries also increased significantly. However, it should be stressed that participation in a regional market alone is not a guarantee that the developing country member will attract FDI. After Greece joined the EC, it did not experience a large increase in FDI inflows (Griffith-Jones 1995).[67]

Investment Diversion

The analysis of welfare effects of changes in investment follows similar lines to that of changes in trade flows. If the investment comes about because of a higher real rate of return, arising out of trade creation or other enhanced economic efficiencies of the arrangement, it will improve welfare. If the primary motive for foreign investment decisions are exploitation of FTA preferences or incentives provided by rules of origin rather than enhanced economic efficiencies of a larger market, the risk is that some direct investment activity will be diverted from more efficient third markets. If investment is diverted from destinations that have a higher rate of return, global welfare will decrease (Winters 1997; Krueger 1995).

In an FTA between Chile and the United States, improved investment opportunities, combined with restrictive rules of origin, may divert some direct investment flows from non-members to Chile. Rules of origin require that a substantial share of the value of a good originate in member countries before the good qualifies for the FTA's trade preferences. This severely handicaps potential investors from outside the bloc who would, at least initially, wish to source considerable quantities of their inputs from their traditional (non-bloc) suppliers. Accordingly, the strict rules of origin give Chile a distinct advantage if investors look for preferential market access to the United

[67] Venables (1999) argues that Greece did not implement the necessary reforms after joining the EU.

States. If Chile is a less suitable location for FDI or as a less efficient producer than other Latin American countries, investment diversion might occur (Winters 1997).[68]

In conclusion, an FTA with the United States will give new momentum to inflows of foreign investment to Chile from non-members as well as from the United States. Great expectations are placed on the signing of the agreement since recent FDI trends in Chile raise questions about future FDI in the country. The FDI increase will occur not so much as a result of a relocation of existing firms from the United States to Chile, but as a result of investors choosing Chile as their location for new ventures in Latin America. The lowering of Chile's country risk rating, or at least of its perceived risk rating, the improved international image of the country, and its access to a large market, due to Chile's many FTAs in the Western Hemisphere, will attract investors. The impact of increased foreign investment and higher rates of return on Chile's economy will be large and at least as important for Chile's welfare as the potential benefits of increased trade flows.

4.3 Competitive Market Structures

Significant dynamic gains may also stem from increased competition spurred by an FTA. Competition strengthens the reliability of relative prices as indicators of product scarcities, leads to more efficient and transparent markets, and forces improvements in resource allocation. Even in the context of the oligopolistic and monopolistic market structures that tend to be associated with product differentiation and economies of scale, intensified competition within larger markets will limit costs associated with collusion and other abuses of market power (de la Torre and Kelly 1992).

Market integration changes the nature of competition by almost always reducing market power, enlarging the scope of each market, and removing some players' special privileges. This generates gains that are additional to the usual allocative ones. Helpman and Krugman (1985) integrate elements of monopolistic competition under

[68] For example, investments of U.S. auto producers in Mexico and of EU producers in Eastern Europe might be the result of investment diversion to FTA members from more efficient Japanese firms (Winters 1997).

increasing returns into trade theory. In this new trade theory, the positive effects of trade liberalization are even more pronounced as free trade leads to greater variety of products, increased competition, and lower costs, in addition to the gains from specialization. However, the welfare implications of imperfect competition are not clear-cut and remain an area of ongoing research.

An FTA with the United States can make a positive difference for Chile. In principle, it combines two markets, making it possible to reduce monopoly power as firms from the two countries are brought into more intense competition. This can lead to three types of gains. The first is the gain from increased competition. Firms are induced to cut prices and to expand sales, benefiting consumers as monopolistic distortion is reduced. The second source of gain arises as market enlargement allows firms to exploit economies of scale more fully. In a market of a given size there is a trade-off between scale economies and competition – if firms are larger, then there are fewer of them and the market is less competitive. Enlarging the market shifts this trade-off, as it becomes possible to have both larger firms and more competition (World Bank 2000c). The third source of gains comes from reductions in internal inefficiencies that firms are inclined to make. If the FTA increases the intensity of competition, it may induce firms to eliminate internal inefficiencies, so-called X-inefficiency, and raise productivity levels (Horn, Lang and Lundgren 1995).

If the FTA makes Chile's market more competitive, not only firms inside the agreement but also firms outside that export to Chile will feel the effect. The more intense the competition the more it may induce them to cut prices. This then will be a direct source of economic gain to purchasers in the FTA although the gain will come at a cost to those outside firms. The effects of FTAs on import prices are an under-researched area (World Bank 2000c), but there is some evidence about this effect, as Chang and Winters (1999) show.

Chang and Winters (1999) argue that Brazil's membership in Mercosur has been accompanied by a significant decline in the relative prices of imports from non-member countries. Chang and Winters (1999) use econometric techniques to investigate changes in the prices of U.S. and Argentine exports to Brazil. They observe a substantial decline in the relative price of U.S. goods for most of the period. Formal

econometric estimates suggest that these changes in relative prices occur because Brazil has reduced tariffs on Argentine exports but not on U.S. exports.

An additional test of this hypothesis is to observe what happened to U.S. prices on exports to Brazil relative to U.S. prices on exports to markets outside Mercosur. U.S. export prices in the Brazilian market declined in absolute as well as relative terms over the integration period. Chang and Winters (1999) show a similar experience for Korean exports to Mercosur. The sizable price reductions indicate that increased competition in Mercosur markets induced exporters to cut prices, thereby improving the terms of trade of Mercosur countries and their welfare.

Chang and Winters (1999) find that prices of exports to Brazil from the rest of the world fall even for products that Argentina does not export to Brazil, implying that the threat of increased competition may be enough to improve the terms of trade in Mercosur. The FTA with the United States might be able to improve Chile's terms of trade towards the rest of the world. The threat of competition from the United States might lead the EU and Japan to reduce their export prices to Chile, benefiting Chilean consumers.

In conclusion, through unilateral, multilateral, and bilateral trade liberalization Chile has been using increased import competition as a tool for inducing economic transformation. An FTA with the United States promises to open markets much further and induce more head-to-head competition from firms in North America. Indeed, an opening to the United States, given its size and competitive strength, has effects that parallel in some ways a market opening to the world economy. Technology and cost structures of Chilean firms will be forced to become more internationally competitive. Competition will spur corporate restructuring and industry rationalization as well as modernization through the adoption of superior technologies.

4.4 Economies of Scale

While economies of scale can be considered a static gain – by assuming unchanged stocks of capital, labor, and technology – their potential for generating dynamic gains needs to be emphasized (de la Torre and Kelly 1992). Economic integration expands markets and therefore provides domestic industries, which are confined by the size of their national market, an opportunity to gain from internal economies of scale. This improves production efficiency and engenders growth (Madani 1999).

Such gains from scale economies internal to the firm are lower costs and increased productivity, since companies previously operating at below minimum efficiency can now expand output and move down their cost curves (in static models) and their learning curves (in dynamic models). The larger market may also widen opportunities to achieve economy-wide or industry-wide economies of scale based on externalities, such as spillover effects, that may be strongest in high-technology sectors (de la Torre and Kelly 1992).

Orthodox CU theory assumes constant or increasing costs for each industry and is frequently criticized for failing to allow for economies of scale. Although both Viner (1950) and Meade (1955) suggested that gains from regional integration arrangements might be associated with scale economies, there has been a tendency in the CU literature to dismiss economies of scale as unimportant (Wonnacott and Wonnacott 1981). In their early work on North American free trade, Wonnacott and Wonnacott (1967) conclude that economies of scale were much more important than the triangular welfare gains identified by traditional theory.

Corden (1972) was first to set down a formal theory of their potential importance to trade and welfare under CUs. Increased production by firms gives rise to economic gains in member countries through cost reduction effects. This is not an orthodox trade creation effect since it is not the result of a movement to a cheaper source of supply but rather of the "cheapening" of an existing source of supply (Corden 1972: 467). In the face of economies of scale, what otherwise would be a costly trade diversion can eventually become a cost-reducing and welfare-enhancing effect. In a dynamic setting,

trade diversion could be a benefit to the extent it ultimately would contribute to lower costs, increased competitiveness, and further growth (Corden 1972).

The development by trade theorists of models incorporating imperfect competition opens new possibilities. Under imperfect competition, natural, technological, or policy-based barriers to market entry give rise to monopolistic profits. They occur often in the presence of increasing returns to scale and production of differentiated goods, rather than homogeneous ones, by competing firms. The theoretical literature on FTAs does not provide a unified treatment of imperfect competition, although imperfect competition has been assumed in some numerical simulations. These studies suggest that the welfare effects of an FTA may be many times larger if industries are imperfectly, rather than perfectly, competitive.

Many countries are too small to support separately industries that are subject to large economies of scale. This might be because insufficient quantities of specialized inputs are available, or because markets are too small to generate the sales necessary to cover costs. Chile's small domestic market makes it difficult to profitably produce goods that are subject to increasing returns to scale, in other words, declining average production costs. Even if production is profitable, scale economies mean that only one or a few producers can survive, typically with monopoly power, leading to high prices with low levels of sales. There is evidence pointing to the relatively small number of firms operating in most developing countries. Rodrik (1988) reports that measures of concentration and firms' market power in manufacturing sectors in developing countries are typically between 50% and 100% higher than in industrial countries.

A few studies have calculated the potential gains that might be expected from competition and scale effects. Studies of the effects of the CUSFTA and of the unified European market (Harris 1985; Baldwin 1990) conclude that scale economies and rationalization of production are key contributors to the gains from economic integration.[69] Hunter, Markusen and Rutherford (1992) construct a model of the U.S. and Mexican automobile industries and simulate the possible effects of NAFTA. They predict large increases in output for Mexico, increases in the scale of individual firms,

[69] For a survey of studies see Brown (1992) and Weintraub (1992).

and reductions in price-cost margins. A study for Mercosur (Flores 1997) based on a similar methodology suggests GDP gains of 1.8%, 1.1%, and 2.3% for Argentina, Brazil, and Uruguay, respectively. The larger economies gain less because they are already closer to reaping economies of scale. However, these estimates are rather predictions of what might be expected from an FTA rather than measures of what was actually achieved (Flores 1997).

The impact of scale effects for Chile resulting from access to the large U.S. market will be positively correlated with the importance of the manufacturing sector in the overall economy. It is this sector in which economies of scale exist and relatively higher U.S. trade barriers prevail. The impact will also be positively correlated with the scope of intraindustry trade: the wider this scope, the greater the potential for further rationalization effects and gains from specialization.

The competition, scale, and consequent efficiency effects outlined will be important sources of FTA's economic benefits for Chile. But an FTA does not necessarily ensure these gains. While lower tariffs are necessary, that factor alone is not sufficient to achieve the degree of competitiveness required to reap the potential benefits involved. There have been examples in the past where FTA member governments, under pressure from industry lobbies, have deliberately acted to stop markets from being fully opened to competition. In addition, firms often have no desire to compete more intensely with rivals in partner countries. They may seek to collude, tacitly if not explicitly agreeing not to supply each other's markets.

The implication is that markets will be left segmented rather than integrated into a unified market. In this case the gains outlined above will be only partially realized. This is one of the main arguments as to why it is in Chile's interest to pursue deeper integration. Implementing a deep range of measures such as removing anti-dumping and countervailing duty actions or differences in national product standards will force firms to compete directly and ensures that the above mentioned benefits are realized (World Bank 2000c).

In conclusion, in any given market there is a trade-off between competition, i.e., the number of competitors in a market, and the degree of scale, i.e., the average size of a firm. An FTA with the United States enlarges the markets and thus enables both more competition and a larger average scale. The achievement of these benefits, however, depends upon securing effective competition and economies of scale, both of which can be easily obstructed.

4.5 Technology Spillovers and Knowledge Transfer

A basic assumption of the new dynamic trade growth models relates to the large positive externality generated by the technology used by the industrial sector (Krugman 1990; Grossman and Helpman 1991). The more a country uses modern technology, the greater will be the increase in its ability to innovate in the future. Developed countries have a relative advantage in R&D. Less developed countries cannot allocate as many resources in R&D as industrial countries because of the heavy fixed costs involved (Labán and Meller 1997). Moreover, if they specialize in natural resources, this sector will attract all existing domestic human capital, and the few resources that these countries have spent on R&D will be crowded out by the natural resource sector. Thus, future innovation and technology adaptation in less developed countries will diminish, implying negative consequences for future growth (Grossman and Helpman 1991).

An FTA between a developed and a developing country can promote technology transfer of the high-income to the low-income member. The agreement increases the volume of spillovers between members – either as a consequence of increased trade volumes, investment or because of policies designed to encourage scientific interchange. International trade provides access to a large international market, to advanced technology, and to a greater scope of knowledge, leading to more innovations and faster growth. A country benefits from free trade with large economies and an advanced stock of knowledge, assuming that technological spillovers are absorbed (Grossman and Helpman 1990, 1991).

Benefits of North-South Trade

Coe and Helpman (1995) and Coe, Helpman and Hoffmaister (1997) provide empirical evidence for this argument, showing that the rate of return on R&D is not only high in the performing countries, but that significant benefits are also derived by their trading partners. Coe, Helpman and Hoffmaister (1997) seek to explain the rate of increase in total factor productivity across OECD and developing countries. They construct an index of total knowledge capital, measured by accumulated investment in R&D, in each country. They assume that trading partners get access to a country's stock of knowledge, measured by the accumulated investment in R&D, in proportion to their imports of machinery and transport equipment from that country. Coe, Helpman and Hoffmaister (1997) find that access to foreign knowledge is a statistically significant determinant of the rate of growth of total factor productivity across the OECD and developing countries.[70]

Coe, Helpman and Hoffmaister (1997) assume that less developed countries that do not invest in R&D themselves benefit from R&D that is performed in the industrial countries. Recent theories of international trade and economic growth have identified a number of channels through which productivity levels of countries are interrelated (Grossman and Helpman 1991). These channels include: (i) the availability of a larger variety of intermediate products and capital equipment imports which enhances productivity of own resources; (ii) channels of communication that stimulate cross-border learning of production methods, product design, organizational methods, and market conditions; and (iii) reverse engineering of imported goods. The theory thus describes two broad ways in which foreign trade boosts domestic productivity: by making available products that embody foreign knowledge, and by making available useful information that would otherwise be too costly to acquire. Both are particularly important for developing countries that lag behind in R&D and innovation (Venables 1999).

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[70] The conclusion has been challenged because the paper does not test but rather assumes that imports from industrial countries provide the correct weights with which to combine stocks of foreign knowledge in order to reflect importers' access to foreign knowledge. Keller (1998) has suggested that the results are little better than would be obtained from relating total factor productivity to a random weighting of foreign knowledge stock.

Coe, Helpman and Hoffmaister (1997) find that, in the case of developing countries, productivity growth is related to the interaction between the openness of the economy (imports relative to GDP) and access to foreign knowledge. An economy will benefit from foreign knowledge if (i) it is an open economy; and (ii) it is open to those countries that possess the largest stock of knowledge. They find that R&D spillovers from the industrial countries in the north to the less developed countries in the south are substantial. A developing country can boost its productivity level by trading with an industrial country with a large stock of knowledge (Fukase and Winters 1999).

Although the research by Coe, Helpman and Hoffmaister (1997) was not undertaken explicitly for FTAs, they conclude that an FTA promotes technology transfer via its effect on trade. Increasing trade with a country with a high stock of knowledge by forming a North-South FTA may lead to beneficial transfers of technology to Chile. FTAs among developing countries do not offer similarly beneficial prospects, particularly if they are relatively closed to external trade and cause trade diversion. An FTA between Chile and the United States will increase the productivity of Chilean companies by facilitating the acquisition of newer technology at lower prices and promoting knowledge flows between the two countries.

A further implication of the Coe, Helpman and Hoffmaister (1997) model is that any trade policy that switches a country's imports of machinery and equipment away from the United States and Japan, which have the highest stocks of knowledge, towards other less knowledge-intensive economies may be harmful to the rate of total factor productivity growth. If Chile's capital goods imports were diverted from the United States to Brazil, total factor productivity growth might be adversely affected (Winters 1997).

Madani (1999) also claims that from the viewpoint of technology and growth, an agreement with a large industrial country is superior to that with a developing country. She examines the effect of intermediate goods imports in three Andean Pact countries (Bolivia, Colombia, and Ecuador) from the early 1970s to 1994. Madani finds that imports of intermediate goods from the rest of the world (primarily industrial countries) tend to raise growth, while intrabloc imports do not have this effect. She also demonstrates that the share of extra-bloc imports in total trade fell, suggesting

trade diversion in capital goods occurred. This resulted in a reduction in production efficiency and a slowdown of technology transfer to these countries. It follows that Chile will gain more from integration with the United States than with countries in the region, taking advantage of the newest developments and larger variety of U.S. intermediate products.

Convergence of Income Levels

Economic theory suggests that in principle international trade has a role in promoting convergence among richer and poorer economies (Venables 1999). There is some empirical evidence that countries that trade heavily with each other converge (upwards) in terms of income per capita, i.e., the growth rates of poorer members increase (Ben-David 1993, 1996). Ben-David (1993) offers very striking evidence that after signing regional integration arrangements, the EC, EFTA, and the United States and Canada, each displayed a marked increase in trade among members and a dramatic fall in the standard deviation of incomes per capita across countries. Income differences narrowed mainly due to more rapid growth of lower-income countries.

Examples of convergence in the EU are the strong performances of Ireland, Spain, and Portugal, which have made substantial progress in closing the gap with richer members of the EU. Whereas in the mid-1980s the per capita incomes of these countries were, respectively, 61%, 49%, and 27% of the income of the large EU countries, the numbers rose to 91%, 67%, and 38% by the late 1990s.[71] This convergence did not take place in Greece, although it joined the EU earlier than Portugal and Spain, because Greece did not implement the necessary reforms after joining the EU. This suggests that even though integrating with a large and advanced region is potentially beneficial, economic reforms in the poorer country are needed to capture these benefits. While the European experience illustrates convergence, the experience of a number of developing country FTAs does not. There are some instances in which integration has promoted divergence such as the East African Community, CACM, and Economic Community of West Africa (Venables 1999).

[71] To determine the income of the large EU countries, Venables (1999) uses the average of France, Germany, Italy, and the United Kingdom.

The main conclusion of Venables (1999) is that FTAs with high-income members will lead to upward convergence for the low-income country rather than divergence of income levels. Developing countries will gain more from an FTA with a high-income country, where there are better prospects for convergence.[72] There is, therefore, sufficient reason for Chile to forge trade links with a high-income country like the United States to reap the benefits of convergence.

One force that can drive this convergence or divergence of income levels between members of the FTA is technology transfer. An FTA can promote technology spillovers from the high-income country to the lower-income member. Jovanovic and Lach (1990) argue that income inequality among countries is due to differences in the rate that countries implement new technologies. Varying speeds of technology diffusion can account for large variations in levels of GNP. The question, in this context, is what determines the rate of diffusion. Dollar, Wolff and Baumol (1988) suggest that there exists "strong circumstantial evidence that technology diffusion through trade in goods and international investment … [has] played an important role in the convergence of productivity levels" (Dollar, Wolff and Baumol 1988: 14).

An FTA between Chile and the United States can promote technology transfer via its effect on trade, especially through capital goods imports. At the same time, activity by multinationals and FDI are other channels for technology transfer. By encouraging multinationals to establish local production facilities, Chile will generate technological transfer to local firms. In the long term, an FTA between Chile and the United States may promote upward convergence of income levels.

Kokko (1994) argues that one of the main contributions of the presence of foreign firms comes from technology transfer and technology spillovers. For example, the Mexican economy has reached a level of development and skills where local firms are

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[72] Venables (1999) links the distribution of the benefits of an FTA to the comparative advantage of member countries – comparative advantage relative to each other and to the rest of the world. This leads to the strong result that FTAs between low-income countries will tend to cause divergence of their income levels, whereas FTAs between countries with high-income levels will lead to convergence. Besides comparative advantage, Venables argues that agglomeration forces which tend to lead to the spatial clustering of activities might amplify divergence forces in FTAs between low-income countries.

able to absorb some of the new technology that is imported and used by foreign multinationals. This means that the foreign-owned multinationals operating in Mexico may well act as catalysts in bringing about dynamic growth effects (Kokko 1994). Mexico's experience suggests that North-South integration may be greatly beneficial for the southern partner.

Keller (1996) suggests that the flow of advanced technology resulting from an FTA can increase the growth rate, but only by interacting with the country's absorptive capacity. He argues that technology can only be implemented if the labor force has built up the corresponding skills. His model implies that technological information flows freely across national borders and is available at sharply lower cost under an outward-oriented policy regime. However, he indicates that the complementary human capital remains immobile and needs to be provided domestically. Over the past twenty-five years, Chile achieved substantial progress in human capital accumulation. In 1999, 85% of the relevant age group was enrolled in secondary school, compared to 77% in Argentina and 66% in Brazil (World Bank 2000a). Chile's better-educated work force is thus more qualified to use the available technology and to take advantage of it.

In conclusion, trade liberalization with the United States will have far-reaching effects on Chile, including improved access to technology embodied in capital goods imports, greater educational attainment by workers, learning-by-doing, and knowledge spillovers. This in turn will lower costs, increase efficiency and productivity, and ensure competitiveness among firms. The ensuing result will be a rise in income, employment, and economic growth.

5 Reduced Uncertainty in Trade Relations

Many economists and policy analysts believe that the gains to a small developing country from an FTA with a large developed economy go well beyond the traditional static and dynamic welfare effects. The debate on regionalism initiated by NAFTA brought several new elements into the analysis of FTAs which are often referred to as non-traditional gains (Fernández 1997). These gains are particularly relevant for North-South agreements anchored by a credible developed country market (Ethier 1998). Beyond the direct gains from trade liberalization, an FTA can be beneficial by providing certainty about trade relations and market access, and enhancing credibility as to the direction of future economic policies.

5.1 Insurance against Future Access Restrictions

A wide range of considerations and motives need to be considered when Chile seeks to negotiate an FTA with the United States. One of the objectives, especially of a small country engaging in trade negotiations with a large country, is to obtain guaranteed access to the large market. The agreement serves as insurance against possible future adverse events in which the small country would be the main loser. If the partner turns protectionist in the future, the small country's access to the partner's market will be preserved (Whalley 1996).

Perroni and Whalley (1994) use a CGE model to study the role of small countries in recent FTAs. They claim that one of the main reasons small countries with little negotiating power join an FTA is to provide themselves with "safe havens" by securing access to larger country markets. An FTA between a small and large country can be seen as an insurance arrangement with a premium paid by the smaller country to the large one. The small country offers the larger one mostly non-trade benefits such as greater intellectual property protection and stricter labor and environmental regulation.

Flam (1995) suggests that Austria, Finland, and Sweden, which joined the EU in 1995, would benefit little from liberalized trade with their trading partner. In addition, they have to make significant net transfers to the EU budget. These countries already had free trade with the EU countries under the European Economic Area provisions. An insurance argument is one way that the decision of these countries to join the EU can be explained (Fernández 1997).

Guaranteed Market Access

To evaluate the benefits of an FTA with the United States it is not sufficient to consider only the level of existing barriers to its exports to the United States but also on what these barriers might be in the future. There is a possibility that the United States will become more protectionist. In the face of rapidly growing imports, pressures might emerge in the United States to raise trade barriers. Recent U.S. trade deficits and the economic problems of the manufacturing sector, which has been in long-term decline, have increased the propensity of U.S. authorities to accede to such pressures. The attraction of the FTA is to lock in the present relatively open trade polices of the United States with respect to Chile. The cost, in terms of opening Chile's own market preferentially to the United States, can be seen as the insurance premium against a possible loss of access to the U.S. market (Labán and Meller 1997).

The FTA gives the private sector reciprocal and legally binding market access which reduces the risks of trade and investment barriers emerging in the United States. This in turn increases private sector confidence. An example of the strong nature of reciprocal commitment occurred in Mexico during the peso crisis in 1995 when Mexico exempted NAFTA partners from an increase in tariffs on 5% of its total tariff lines (World Bank 2000c).[73] However, it can also be argued that Mexico would have had a difficult time to justify a tariff increase in response to a bailout by the United States.[74]

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[73] Bhagwati and Panagariya (1996b) see the tariff increase against non-NAFTA suppliers as diverting protectionst pressure. Winters (1997) argues that previous crises have witnessed far worse protectionism and thus, that NAFTA has induced restraint.

[74] The United States responded to Mexico's peso crisis with a US$15 billion loan as a rescue package, which was very different to previous U.S. behavior (World Bank 2000c).

The implementation of stable rules of access will be a strong stimulus for the development of the Chilean export sector. Stability in rules of access to the principal export market is critical to the process of export diversification. Large economies like the United States can unilaterally adjust access conditions to exports from small countries and stop imports for a substantial period of time. The delay in resolving these disputes can mean the end of otherwise profitable exports, particularly for perishable products. Chilean producers need safeguards against surprises in matters of barriers to their exports. If barriers arise, producers need direct channels to solve any resulting controversies. This is important because in the past whenever exporters to the United States became successful protectionist pressures were exerted against them.

In the United States, Chile's agricultural sector faces significant scrutiny, particularly from fruit producers who compete with the fast-growing Chilean fresh fruit industry. Agricultural and agroindustrial products are Chile's largest export sector to the United States, as Table 1 (p. 48) has illustrated. The United States is the largest market for Chilean fresh fruit exports. U.S. firms in the fruit industry are among the most vocal opponents of an FTA with Chile and their greatest concerns are Chilean canned fruit imports. Currently, most Chilean fruit exports are fresh, not canned, and because Chile's growing season occurs during the winter months in the United States, Chilean fruit imports tend to complement U.S. fresh fruit production. Crude estimates have been made for possible trade adjustment effects in the United States resulting from liberalizing Chilean canned fruit imports. Representatives of peach growers argue that Chilean canned peaches would directly displace U.S. peach production and could place thousands of U.S. jobs at risk. Accordingly, the United States might become more protectionist as a result of increased pressure and lobbying from U.S. farmers.

Generalized System of Preference versus a Free Trade Agreement

Through GSP, Chile, like most developing countries, has preferential access to the U.S. market. The major flaw of the GSP, however, is that it does not grant guaranteed access to the market. Its benefits may be withdrawn unilaterally in accordance with criteria decided upon by the donor country. The United States has frequently resorted to this prerogative to exclude either goods or countries from the system.

In some cases, exclusions have been related to specific goods, by virtue of the so-called competitive-need criterion, when exports of a good from a country come to represent a given proportion of total U.S. imports of this good. In other cases, the United States has also withdrawn products from the system due to pressures from national entrepreneurial groups. The United States has excluded a number of countries from the system by considering their economies competitive enough, for instance, some countries from Southeast Asia, or for not respecting the intellectual property rights of U.S. concerns such as Thailand for some time (UNCTAD 2000).

Chile was suspended from the system between 1988 and 1991 for intruding on the internationally acknowledged rights of Chile's workers. Chile was again incorporated as a GSP eligible country in February 1991 (UNCTAD 2000). The current authorization for the GSP is scheduled to expire on September 30, 2001. No steps have been taken by mid-2001 to secure congressional approval for a new authorization. Congress has sometimes allowed the program to expire and remain in limbo for months.[75] Although these renewals have all been retroactive, allowing importers to receive refunds for any GSP eligible product that they imported during the period of suspension, the uncertainty of the program is damaging to the interests of GSP beneficiary countries. The original intention of the GSP was to provide assurance that investments in developing countries would have secure and preferential access to the markets of industrialized countries, but this assurance is lost when the program itself is so unstable.

Even if Chile remains a beneficiary, particular products can be denied tariff preferences if the country is an important provider of those products and it no longer fulfills the competitive-need limit criteria. Chile has already lost GSP treatment for several products by reason of the GSP competitive-need limits, the market share or dollar value limit. They are intended to limit the value of benefits to specific countries, on the theory that a country would no longer need preferential treatment of any product in which it is a competitive exporter (VanGrasstek 2000). Chile has lost GSP

[75] The GSP has repeatedly gone through the same cycle: the program will expire, go through a period of suspension that lasts for weeks or months, and Congress will renew it for another period of a year or so. The renewal proposals are usually not acted upon until some time after the expiration of the most recent authorization.

treatment for several products by reason of the competitive-need limits, i.e., for onion sets, globe artichokes, refined copper cathodes, and copper ores and concentrates.

Products that are imported in excess of these limits can continue to receive GSP treatment if the United States can be convinced to grant waivers. There are two different types of waivers: de minimis waivers offer a temporary solution for one year at a time, while competitive-need limit waivers provide permanent protection. De minimis waivers can be granted for certain products that exceed the 50 percent limit, provided that total U.S. imports of a product (i.e., the combined imports from Chile and all other sources) are below a certain dollar value (US$15 million in 2000). Several Chilean products have received de minimis waivers at various times. In the most recent GSP review, for example, the United States granted de minimis waivers for prepared or preserved mackerel, molybdenum oxides and hydroxides, and unwrought rhenium and rhenium powders. However, Chile cannot rely upon them as a means of retaining GSP eligibility for products. It has often happened that an apparently "safe" product that received these temporary waivers year after year eventually lost GSP eligibility because total U.S. imports exceeded the limit (Van-Grasstek 2000).

A competitive-need limit waiver secures protection for a product as long as GSP status is granted.[76] Chile has successfully sought competitive-need limit waivers for such products as frozen raspberries, frozen blackberries, mulberries, red or white currants, lithium carbonates, refined copper billets, and unwrought copper articles. Perhaps the single biggest barrier to obtaining a competitive-need limit waiver is the position taken by U.S. producers. As a general rule, the U.S. officials will not grant a petition for a competitive-need limit waiver if the domestic producers of that product formally oppose it. That is certainly what happened in the recent case of Chilean methanol for which Chile unsuccessfully sought a competitive-need limit waiver (VanGrasstek 2000).

[76] This is a more difficult undertaking than obtaining a de minimis waiver and requires the submission of a detailed petition. These petitions are then subject to a year-long review by the GSP Subcommittee of the Trade Policy Staff Committee (an inter-agency body).

GSP extends a substantial margin of preference to only a few Chilean export products and is of limited significance for most other products. Given its limitations, its relatively slight impact on Chilean exports to the United States, its non-contractual character, and the unwillingness of the United States to improve the system, the GSP is not an efficient tool for guaranteeing Chilean exporters access to the U.S. market. Moreover, as Figure 19 (p. 118) has illustrated, the average tariff rates granted to GSP eligible countries are significantly higher than those for NAFTA countries.

In conclusion, GSP has only very limited scope and is no substitute for a reciprocal trade agreement. An FTA with the United States will guarantee Chile duty-free access for its products, whereas GSP cannot. Even if the United States is currently generally open and grants unilateral preferential access, imports of particular products, some of which are precisely those in which trading partners are more competitive, are affected by U.S. protectionism. The reciprocal lock-in effect of an FTA reduces the uncertainty and risks of market access, which provides an important motivation for Chile to sign an FTA with the United States.

5.2 Shelter from Administered and Contingent Protection

Trade with the United States is already relatively free due to low average tariffs and the fact that some products enjoy duty-free access under the GSP. The market access negotiations will focus on three issues. First, as discussed previously, Chile will negotiate duty-free access for products and sectors that face relatively high tariff and non-tariff barriers and it will make sure that it will have the same preferential market access as its competitors, Canada and Mexico. Second, Chile will attempt to discipline, beyond what is available under WTO rules, the use in North America of trade-distorting measures and trade remedies, particularly anti-dumping and countervailing duties. And third, Chile will support the establishment of a predictable rules-based framework through a dispute settlement mechanism to ensure enforcement of stable access to the U.S. market. The following sections focus on latter two issues.

Partly as a result of the Uruguay Round, the average tariff of industrialized countries, including the United States, has fallen and most quantitative restrictions have

disappeared (WTO 1999b). Currently, the major remaining policy instruments affecting trade are technical barriers, sanitary and phytosanitary measures, i.e., administered protection, as well as safeguards, anti-dumping, and countervailing duty mechanisms, i.e., contingent protection. Consequently, trade negotiations are paying attention to these administered and contingent protection instruments.

Chile's desire to sign an FTA with the United States is increasingly motivated by avoiding hidden protectionist practices in the U.S. market. The aim is not only to obtain duty-free access to the newly integrated market but also to eliminate the threat of administered and contingent protection. In general, this incentive is positively related to the importance of the U.S. market as an export outlet and to the strength of prevailing protectionist tides. Its value depends on how much insurance against procedural or other forms of protectionism an agreement can effectively provide (Bouzas and Ros 1994).

Sanitary and phytosanitary regulations are becoming preferred instruments used by the United States to block the entry of imports. Administered protection has significantly reduced Chilean exports or has curtailed them altogether to the United States, and has built such uncertainty into exports that they have had a negative effect on investment. Phytosanitary measures applied to tomatoes from Chile have reduced its exports of tomatoes over the last couple of years, even though this is a product in which Chile has a strong natural comparative advantage. In 2000, Chile had basically lost its market share in the United States, whereas Mexico and Canada captured 64.3% and 25.1% of the market, respectively (USITC 2001). Fishing products exported to the United States, such as shrimps, lobsters, oysters, and albacore, are subject to rigorous quality controls on the part of the U.S. Food and Drug Administration and to non-tariff barriers of sanitary type. Controls usually become stricter if there is over-supply of fish in the U.S. market.

Signing an FTA can help to protect Chile from administered protection in the United States. The FTA will contribute to solving problems related to sanitary barriers by establishing clear standards as how to meet the norms and requirements. It results in less chance of discretionary, and sometimes arbitrary, use of quality controls, sanitary regulations, and other forms of administered protection.

Since the 1980s protectionism has also often manifested itself in the form of anti-dumping and countervailing duty petitions by the United States. Import-competing U.S. industries, finding it difficult to secure more traditional forms of protection, such as tariffs and quotas, have turned to anti-dumping and countervailing duty laws for help. Politically, anti-dumping and countervailing duty actions against foreign competitors are more easily justified because they can be portrayed as counteracting unfair foreign competition, rather than protecting inefficient and uncompetitive domestic industries.

The number of anti-dumping and countervailing duty petitions has been fluctuating over the last two decades. After a decrease in petitions in the first half of the 1990s anti-dumping petitions have increased again towards the end of the 1990s. Countervailing duty case initiations have become less frequent which is mainly a result of the less use of subsidies by exporting countries after the completion of the Uruguay Round in 1994.[77]. In total, between 1980 and 1999 788 anti-dumping and 315 countervailing duty investigations were initiated in the United States against many different countries. Of both anti-dumping and countervailing duty cases, some 44% resulted in final affirmative determination and led to the imposition of final anti-dumping and countervailing duties. However, provisional anti-dumping duties were applied in some three-quarters of the investigations (ITA 2001).

During the period from 1980 to mid-2001, the United States initiated seven anti-dumping investigations and three countervailing duty investigations against principal Chilean exports. The Chilean products affected by U.S. petitions have tended to come from one of three broad sectors: natural resources, fruits and vegetables, and fish. These are the sectors in which many U.S. producers have been at a comparative disadvantage relative to their foreign competitors, including Chile.

[77] Developing countries, with the exception of least-developed countries and developing countries with less than US$1,000 per capita GNP, are given until 2003 to eliminate their export subsidies. Least-developed countries must eliminate import-substitution subsidies, i.e., subsidies designed to help domestic production and avoid importing, by 2003, while for other developing countries the deadline was 2000 (WTO 2001).

The products affected by anti-dumping petitions have been sodium nitrate (1982), fresh cut flowers (standard carnations, 1986), steel wire rope (1990), fresh Atlantic salmon (1997), preserved mushrooms (1998), fresh grapes (2001), and frozen raspberries (2001). At the end of July, 2001 two anti-dumping duty orders, the one for fresh Atlantic salmon and preserved mushrooms, were still in effect and no final determination has been made for the latest anti-dumping claim on frozen raspberries (ITA 2001). The products affected by countervailing duty petitions have been fresh cut flowers (standard carnations, 1986), fresh Atlantic salmon (1997), and frozen raspberries (2001). The first was finally revoked in 1999 after thirteen years in place, and for the second a duty order was never issued after a long decision period. The outcome of the latest petition is not yet known.

The fishing sector has been the target of several U.S. protests, one resulting in the imposition of anti-dumping duties on fresh salmon. Representatives of salmon producers have expressed concern over the growth of salmon imports, which represent Chile's fastest growing fish export. In 1998, Chile exported US$32.2 million worth of fresh Atlantic salmon to the United States, 11 % of total U.S. salmon imports. In 1999, its exports dropped to US$13 million, equaling 4% of U.S. imports (USITC 2000). Chile lost nearly two-thirds of its market share due to the anti-dumping duty and the winner was Canada, which significantly increased its market share.

U.S. salmon growers oppose an FTA with Chile, arguing that newly established salmon fishing industries in the northeast would be unable to compete with cheaper Chilean salmon until their farms were allowed to mature. In addition, Chile is accused of periodically placing large quantities of fish on the market, causing highly de-stabilizing effects on the price of fish.

The anti-dumping duties imposed on preserved mushrooms amount to 149%, preventing Chile from competing in the U.S. market and reducing its market share. From 1998 to 2000, exports of preserved mushrooms dropped from US$6.3 million to nearly zero. The review of these duties is set for November 2003 (USITC 2001).

In the first half of 2001, two anti-dumping claims have been brought up against Chilean export products. In the first one, in April 2001, grape growers in California

and Arizona started a court case claiming dumping by their Chilean counterparts. In 2000, Chile sent table grapes worth more than US$388.1 million to the United States, accounting for more than 60% of total Chilean production (USITC 2001). U.S. competitors claim that the fruits exported between April 1 and June 30 were unrealistically priced, and have called on the U.S. Department of Commerce to impose a special duty of up to 99% on Chilean grapes (ITA 2001).

The fact that exporters are accused of dumping grapes during that specific time period is not accidental. Table grapes imported between April 1 and June 30 face no tariff, whereas grapes imported from February 15 to March 31 pay a specific tariff of US$1.13/$m^3$ and those imported between July 1 and February 14 pay US$1.8/$m^3$ (USITC 2001). The U.S. International Trade Commission (ITC) ruled against the accusation of U.S. producers at the beginning of June 2001 and the anti-dumping investigation was dropped (ITA 2001).

In May 2001, U.S. producers of raspberries in the states of Washington and Oregon initiated a court case against Chilean exporters of frozen raspberries, accusing them of dumping and using subsidies. The ITC ruled in mid-July 2001 that the U.S. Department of Commerce should continue dumping and subsidy investigations against Chilean frozen raspberry producers. U.S. producers have asked the Department of Commerce to impose a duty of 60%. Chilean raspberries have been entering the United States duty-free due to GSP. The U.S. Department of Commerce has initiated two parallel investigations. The first one is to determine if the Chilean raspberry industry is subsidized, which would lead to the imposition of countervailing duties, and the second is to examine if U.S. exporters are involved in dumping practices and need to pay anti-dumping duties (ITA 2001).

Although the United States initiated only seven anti-dumping investigations against Chile, the number of trade-weighted investigations is higher than those against other Latin American countries. The trade-weighted number of investigations is defined as the number of U.S. investigations per billion dollars of a country's exports to the United States. The frequency of U.S. anti-dumping actions against Chile is cause for concern, especially for the future. Protectionist sentiments in the United States show no significant sign of abating.

Contingent protection provides a major barrier to trade, not only when actually applied to trade flows, but also because its existence has a "chilling" effect on trade. The threat of initiation of anti-dumping or countervailing duty actions can lead to a market loss for exporters since importers seek to avoid the costs of uncertainty while the investigation is ongoing and switch to other suppliers. Each anti-dumping or countervailing duty case that is initiated also involves very expensive legal court fees for Chilean exporters.

Until now, only very few regional integration arrangements have eschewed anti-dumping: the EU and the FTAs between Iceland and the EU, between Australia and New Zealand, and between Canada and Chile. The last includes precedent-setting trade remedy provisions. The commitment by Canada and Chile to stop using anti-dumping and countervailing duty investigations against each other's exports in their bilateral trade pact is part of their broader strategy, aimed at achieving a similar trade deal with the United States.

Removing contingent protection would be one of the largest benefits for Chile with respect to the FTA with the United States. The application of anti-dumping duties and countervailing duties by the United States has been one of Chile's major grievances during the FTA negotiations. Chile will attempt to gain a blanket exception from U.S. trade remedy laws, but at the same time it knows that this will be difficult to obtain.[78] One of Canada's objectives was to receive this exemption in its negotiations with the United States, but it failed in its attempt. Thus, it is unlikely that Chile will be exempt from the contingent protectionism prevailing in the United States.

The anti-dumping legislation of the United States is also an obstacle to free trade in the hemisphere. Brazilian President Cardoso threatened during the Summit of the Americas in Quebec in April 2001 that if Washington does not amend its anti-dumping

[78] Chile has to consider that its exports to the United States are about fourteen times the value of its exports to Canada. In 2000, exports to Canada only accounted for 1.3% of total exports, whereas the United States accounted for 18.1% (Banco Central de Chile 2001). Thus, removing anti-dumping actions in an FTA with Canada can hardly be compared with removing anti-dumping with Chile's largest trading partner, the United States.

legislation, it would be difficult to get the thirty-four countries of the FTAA to ratify the pact by December 2005.

However, up to now, no country has managed to get the United States to modify its legislation in this regard. The most significant progress that has been made is that these decisions can be appealed before a bilateral panel. Neither Canada nor Mexico are exempt from U.S. anti-dumping cases, but the NAFTA Chapter 19 on dispute settlement provides a more efficient procedure than lengthy court challenges for resolving disputes regarding alleged problems in the administration of anti-dumping laws in each country.

Chile will make a considerable effort to negotiate an efficient dispute settlement mechanism that will in particular reduce Chile's exposure to the use of anti-dumping and countervailing duties by the United States. NAFTA Chapter 19 on dispute settlement for anti-dumping and countervailing duty cases will be the model for the FTA between Chile and the United States. Its binational panel provisions will provide Chile with some level of protection from spurious U.S. anti-dumping and countervailing duty actions. In this way, the disputes can be handled expeditiously and objectively (Bergsten and Schott 1997).

In conclusion, one of the main benefits of an FTA with the United States is to obtain some sort of protection against the frequent U.S. anti-dumping and countervailing duty measures. Chile, like Canada and Mexico, views an FTA with the United States as a means of circumventing increased U.S. protectionism. It hopes that the FTA will restrain the United States from using administered and contingent protection. Escaping anti-dumping and countervailing duties by the United States would give Chile a clear advantage over its competitors. The presumption is that by having clearer rules and established procedures in the FTA regarding the resolution of disputes, there might be less uncertainty with respect to unilateral action affecting exports from Chile.

5.3 Strengthening the Institutional Framework

An FTA with the United States gives Chile the opportunity to strengthen domestic institutions and improve rules-based procedures. Chile will be locked into binding commitments across an array of economic, regulatory, and legal principles (Labán and Meller 1997). The FTA will include rules for intellectual property rights, competition policy, investment codes, and dispute settlement, which will require Chile to improve its institutional framework.

As trade between countries expands, a number of complicated trade issues arise. To resolve such issues efficiently and at low costs for both parties, dispute settlement mechanisms need to be in place. NAFTA provides an innovative dispute resolution process. The same dispute settlement chapters will likely be included in an FTA between Chile and the United States. Chapter 11 is designed to deal with investment issues and sets a clear, rules-based framework. The mechanism for the settlement of investment disputes ensures both equal treatment among investors of the parties and due process before an impartial tribunal. A NAFTA investor who alleges that the host government has breached its investment obligations can either have recourse to a third-party arbitration tribunal or choose the remedies available in the host country's domestic courts. The international response has been unambiguous. Investors from outside the region now perceive Mexico as a much more attractive investment location than before NAFTA (Blomström and Kokko 1997).

Chapter 19 of NAFTA on anti-dumping and countervailing duty dispute settlement procedures establishes a review process for anti-dumping actions based on binational panels. As discussed in the previous chapter, the establishment of such a mechanism is one of the main Chilean benefits of an agreement with the United States. NAFTA Chapter 20 includes provisions on the settlement of all disputes regarding the interpretation or application of the agreement, except for the matters mentioned above. It gives the complaining party the right to have a dispute resolved either through the NAFTA dispute mechanism or through the WTO.[79] When general disputes concerning

[79] While parties are free to make the initial choice of forum – NAFTA or WTO – once dispute settlement procedures are initiated in one forum, they cannot be switched to another.

NAFTA are not resolved through consultation within a specified period of time, the matter can be referred at the request of either party to an arbitral panel.

The NAFTA side agreements on environment and labor, which will be in some form part of the agreement between Chile and the United States, contain dispute settlement procedures for the enforcement of the parties' environmental and labor laws. Any non-governmental organization or individual can submit a complaint alleging a party's failure to effectively enforce its national environmental laws. However, only NAFTA parties – the United States, Canada, and Mexico – can initiate a dispute settlement proceeding. If in the consultation between the two NAFTA parties the matter cannot be resolved, an arbitration panel can be established which can impose a fine. The ultimate remedy offered is suspension of NAFTA tariff benefits, i.e., trade sanctions, by an amount equal to the fine. Trade sanctions, however, can be used only if previously imposed monetary sanctions are not respected (Levy and Srinivasan 1996).

The implementation of the NAFTA dispute settlement mechanisms will induce reforms that deepen Chile's institutional framework. Significant benefits will result from institutional upgrading and legislative and judicial reforms. They involve better law enforcement through stronger court administration, better judicial training, streamlining of procedural codes, use of alternative dispute resolution mechanisms, and better information systems and infrastructure.

By raising dispute settlement decisions from the national to the international level, the agreement creates a more predictable policy environment for foreign investors who might otherwise fear that purely national reform efforts are temporary and that various kinds of restrictions may be reintroduced when the political situation changes. Including dispute settlement procedures in the agreement increases the international community's confidence in the Chilean economy.

However, for an FTA to work as a commitment mechanism, two conditions should be satisfied. The first is that Chile, which seeks a lock-in effect, must care about a suspension of benefits that the United States might impose after a dispute settlement process. This condition is met. The United States is Chile's largest trading partner. It accounts for such a high proportion of Chile's trade that its actions will certainly

impact Chile. As a consequence, the threat of sanctions will be powerful. The second condition is that the United States has the incentive to enforce the agreement rather than let violations go without response. This condition seems to be met, too. Although the United States would not be very much affected by a policy reversal or even instability in the small, distant developing country, the United States has strong reasons to enforce the agreement. One reason is the reputation of the United States itself. Another reason is the creation of the FTAA. The effectiveness of the hemispheric agreement will be damaged by failure to enforce the FTA with Chile. This is also an argument to design the agreement in a way that makes the commitments to reform and the sanctions, which a policy reversal entails, explicit (World Bank 2000c).

In conclusion, the dispute settlement provisions will be a major benefit of a trade agreement with the United States. With the reduction of tariff and non-tariff barriers, other forms of protection, such as the use of anti-dumping and countervailing duties, might emerge. Access to an expeditious and impartial dispute settlement mechanism will enable Chile to resolve any disputes efficiently. It will reduce Chile's exposure to the use of antidumping and countervailing duties by the United States. The recognition by the international community that Chile is committed to strengthening its institutional framework will be another significant benefit. The institutional reforms will reduce the perceived risk to investors, increase Chile’s attractiveness, and spur interest in Chilean economic activity, with a consequent positive impact on growth.

5.4 Credibility and Lock-in of Domestic Policies

Contemporary FTAs go beyond shallow integration in terms of liberalization of trade and services among members, and involve deeper integration such as coordination, if not complete harmonization, of other policies. The FTA between Chile and the United States will also include a broad array of issues. The result is that the two governments have to agree to a much greater degree of integration than in the case of a simple removal of border barriers. The requirements for transparency and predictability with respect to the rules of the game will be much more exacting than in the previous trade agreements signed by Chile.

Chile has already signed FTAs with NAFTA members Mexico and Canada, but an agreement with the United States offers Chile benefits no other agreement is able to offer. An FTA with its largest trading partner and the world's most powerful economy has a significant impact on the credibility of Chile's economic policies (Ethier 1998). The FTA represents foreign community recognition of Chile's successful macro-economic management, its growth achievements, and its commitment to market liberalization. The FTA is also based on the stability of Chile's democratic institutions. The agreement is not an isolated event, but the culmination of two and half decades of continuous movement toward economic liberalization and commercial integration.

The agreement will enhance the prospects for locking in domestic trade policy reforms and fostering an environment conducive to the maintenance of macroeconomic stabilization. The FTA raises the cost and thereby reduces the likelihood of policy reversal (Fernández 1997). If Chile reneges on the trade preferences it has granted, the United States will respond by canceling the preferential access it grants. By binding a country to an international trade treaty, any future reversal of domestic policy reform becomes more difficult to implement. A liberalizing government can ensure that future administrations will not easily be able to revert to protectionism.

The best test of an agreement is how it works in bad times. The case of Mexico shows how NAFTA worked as a commitment mechanism. What NAFTA did was to lock in Mexico's trade and economic reforms. Shortly after the NAFTA agreement in 1994 the Mexican peso crisis occurred. NAFTA was evidently unable to prevent the run on the currency. However, it was instrumental in determining the policy response of both the Mexican and U.S. governments.

NAFTA prevented Mexico from resorting to the standard solutions of developing countries in crisis: imposing import barriers, restricting capital movements, and limiting economic activity. In fact, this was precisely Mexico's response to its previous financial crisis in 1982. Then, Mexico closed its market by raising import duties to 100% and requiring import licenses for virtually everything. U.S. exports were consequently cut by more than 50%, a blow from which it took U.S. exporters six years to recover. Based on this experience, without NAFTA, in the wake of the peso

crisis in 1995, U.S. exporters could have faced a tremendous plunge in sales to Mexico that would have involved a lengthy recovery period (World Bank 2000c).

Indeed, NAFTA has provided a steadying hand for U.S.-Mexican bilateral trade. Instead of retreating into protectionism, Mexico actually cut its tariffs on U.S. products in January 1995 in accordance with NAFTA provisions, maintained existing NAFTA tariff cuts, and implemented reforms. An FTA deters abrupt policy reversals and helps the government to withstand the protectionist demands of its domestic lobbies. However, it has to be stressed that Mexico's response to the peso crisis would not have been possible without the bailout by the United States.[80]

In conclusion, the FTA will help Chile to anchor the policy reforms it has undertaken which might otherwise be more easily reversed. Chile's binding commitment to free trade with the United States, supported by increasingly harmonized policies and regulations, will lead to reduced uncertainty among investors. The agreement is a powerful external commitment, which in some cases will be costly to comply with. In return, Chile gets a good housekeeping seal of approval from the world's most powerful economy that will increase Chile's attractiveness as location for FDI.

[80] The U.S. rescue package in turn was not only delivered because of the strong links through NAFTA but also because of the danger of contagion from its neighbor and principal trading partner. Despite an FTA with Chile, in the case of an economic crisis in Chile the United States might not offer the same amount of help.

6 Environmental and Labor Issues

Environmental and labor provisions – in particular, environmental and labor trade distortions and law enforcement – will be important issues in the negotiations since the Chile-U.S. FTA will most likely cut the template for the FTAA envisioned by the year 2005. The ability to deal with these issues in the future will depend largely upon the groundwork that is laid now. Assuming that environmental and labor standards will be included in an FTA between Chile and the United States, the issue during the negotiations will be whether to include them in the main trade agreement or in a side agreement. The FTA between Jordan and the United States signed in 2001 is the first U.S. trade initiative to include labor and environmental standards as part of the main agreement, putting the rights of workers and the duty of companies not to pollute on par with tariffs.[81]

In general, in trade arrangements between large developed countries and small developing countries, the former will extract an admission price for the small developing country's participation, largely in the form of non-trade concessions. The admission price or entry fee to engage in an FTA can be explained in two ways. First, it can be seen as a reparation payment for the unequal distribution of benefits and costs among partners of different sizes. To the extent that the large country's prices will dominate the post-integration structure of relative prices, the small partner stands to benefit more from the effects of improved resource allocation and terms of trade. This will lead the larger partner to demand additional concessions to enter into an agreement (Dixit 1987). Second, the admission price can be viewed as compensation to avoid the costs of exclusion on the part of those left behind. As far as the latter are concerned, it is clear that entry fees will tend to increase with the costs of exclusion and the intensity of defensive motivations.

The inclusion of a brand-new set of issues that go beyond trade in services, investment regulations, and intellectual property rights in the NAFTA treaty is indicative of the

[81] The Bush administration and Republicans in Congress were concerned about the precedent that an FTA with labor and environmental provisions at its core might have on future trade agreements. It is not yet clear how the United States wants to deal with these issues.

superior bargaining position that the United States had over Mexico in their negotiations. The brand-new issues included were concerns for environmental, labor, and sanitary and phytosanitary standards, all of which now occupy a prominent role in trade negotiations and debates. Chile's admission price to the U.S. market will include the acceptance of stronger intellectual property rights, unrestricted capital repatriation, U.S. sanitary and phytosanitary standards, and environmental and labor provisions as part of the agreement.

The California Farm Bureau Federation, one of the largest farm organizations in the United States, supports opening markets through free trade. However, it argues that an agreement should be based on principles of fairness. It urges a slow and cautious approach to a Chile-U.S. FTA since Chile is not bound by U.S. standards for food safety, environmental and worker protection. It is clear from a fruit and vegetable standpoint that Chile stands to gain more from an FTA than the United States or California. The United States has allowed and encouraged the flow of wintertime shipments of Chilean fruits and vegetables. The volume has increased dramatically.

In such circumstances, environmental and labor concerns easily become a political issue, as NAFTA has shown. This strengthens the hand of local lobbies that can demand costly environmental and social measures from Chile. The pressure of interest groups might force Chile to increase its environmental and labor standards and harmonize them in the long run with those of the United States.

6.1 Fair Trade and Policy Harmonization

With the deepening of integration processes, harmonization of standards has become one of the most controversial issues. The coordination of economic policies is regarded more and more as an essential complement to trade liberalization and as a means of ensuring fair trade by equalizing the conditions of competition. The narrowing and thinning of comparative advantages between countries has contributed enormously to the demand of fair trade as a precondition of free trade. Producers in developed countries claim that developing country trade partners have unfair advantages in exporting products (Corden 1995; Bhagwati 1996).

An FTA with Chile will raise complaints from U.S. producers about unfair Chilean competition. Chile may be required to change certain domestic policies to satisfy these complaints. The question is whether altering its domestic economic polices is in the interest of Chile.

Any country has a pattern of government interventions in its economy, including subsidies (direct and indirect) to particular industries or regions. There are regulations of various kinds covering, for example, the environment or working conditions. Some are the results of pressures from interest groups, of historical and now irrelevant factors, or of unsound theories. Others can be described as optimal from a national point of view using standard economic criteria, or at least can be regarded as having moved the economy closer to an optimum. If joining the FTA leads Chile to give up non-optimal interventions – perhaps interventions which the government may have wished to remove but was unable to do so because of strong interest groups – then the FTA is beneficial. Similarly, joining an FTA can lead to new interventions, for example, to protect the environment, which are optimal, in which case there is again a benefit. On the other hand, Chile may be required to give up interventions that are optimal, in which case there is a net loss (Corden 1995).

The obvious question is who decides what is optimal, and if an intervention is non-optimal, why it has not been removed. If one takes the view that the existing pattern of interventions, whether subsidies to particular industries or lack of environmental controls, must be optimal just because it is what the Chilean government has chosen, one would regard the pressures applied by the U.S. negotiators in the interest of fairness as perceived by the U.S. pressure groups as necessarily harmful. But if the view is taken that pressures can sometimes have a beneficial effect, for example, if they lead to the "abandonment of subsidies that were not justifiable on purely (national interest) economic grounds, or if they lead to environmental measures that take external diseconomies appropriately into account, the U.S. pressure can be beneficial" (Corden 1995: 23).

Concern has centered on two types of standards: those related to the environment and labor. Critics of free trade argue that producers in some countries, largely the developed countries, must comply with higher environmental and labor standards than

those prevailing in developing countries. Developed countries, therefore, face higher costs, and hence do not compete on equal terms. Since even a small cost advantage enjoyed by a competitor abroad can be fatal to the home country's business, the home country looks abroad to see if there are any differences in domestic institutions or policies that give the competitor that extra cost advantage.

Bhagwati (1998) argues that trade cannot be considered unfair because of differences in cost burdens due to differences in environmental and labor standards. For example, accepting the polluter pays principle, there is no reason why the payment for a unit of carcinogen should be same in Chile as in the United States. If clean air and clean water are both highly priced, Chile may well choose to devote its resources and energies to getting clean water first and clean air next as a suitable priority, whereas the United States may well choose to go the other route. In each case, the cost burden will differ for some industries across countries.

Many environmental, consumer, and labor interest groups fear that moving towards free trade could also lead to an erosion of national standards in the developed world (Hoekman, Schiff and Winters 1998). Developed countries might be tempted to lower their standards or not to enforce them as a means of cutting costs. There is a worry about a race to the bottom, in which a high-standards country forces its own standards down to retain or attract investment that would otherwise move to low-standards countries. The lowering of environmental standards is known as ecological dumping and that of labor standards as social dumping.

Available empirical evidence, however, shows that this theoretically correct fear is of little relevance. Foreign investment is not highly responsive to lower environmental and labor standards. There is not much evidence that governments actually lower standards to attract investment. Rather, the race to the bottom occurs typically on the fiscal dimension and developing countries competitively offer cheaper land, subsidized inputs, tax holidays, and tax breaks to attract investment (Bhagwati 1998).

Bhagwati (1994, 1996) and Lawrence (1995) argue that it is not necessary to harmonize standards and demand compliance for international trade to be mutually profitable for participating countries. On the contrary, the diversity of domestic

policies, institutions, and standards allows free trade to benefit all. This approach argues that differences in salaries and social conditions reflect productivity differences and social preferences, and that the latter are endogenous variables of a country's economic and development level (Fields 1990; Steil 1994).

The desirability of harmonizing certain policies is tricky in the context of North-South regional integration arrangements. The pressure in such schemes is on the southern country to bring its standards up to those of the northern country. Because the optimal standard for the southern country is different from that for the northern country, such harmonization could end up becoming an instrument of protection for the northern country. In addition, even if the southern country's standards are below the optimum, they are likely to conform to those in other southern countries. If the southern country adopts standards of the northern country, it will be placed at a disadvantage vis-à-vis its southern competitors (Panagariya 1996a).

The issue of fair trade, mainly in regards to environmental and labor standards, is one of the most complex and controversial issues of the FTA negotiations between Chile and the United States, as it was in the case of NAFTA. U.S. critics complained about lax labor and environmental regulations as well as low wages in Mexico. Unlike Mexico, Chile does not share a common border with the United States and is a much smaller trading partner. Consequently, there are fewer conflicting issues with regard to the environment and labor. The potential for ecological and social dumping as well as industry flight is diminished by the geographic distance and transportation costs. Nevertheless, opponents will use Chile's environmental and labor standards as a counter-argument for an FTA with the United States.

6.2 Environmental Impact of the FTA

Many environmental groups in the United States continue to oppose free trade. As in the original debate over NAFTA, they fear that the strengthening of commercial ties with less developed countries like Chile will result in ecological dumping. Environmentalists question both the adequacy of the legal structure in place and the willingness of Chile to enforce its regulations.

Free trade opponents refer to different and controversial hypotheses about the relationship between free trade and environment. First, free trade has negative effects on the environment because the opening of the economy increases the production of those goods and services in Chile that adversely affect the environment. Second, since Chile has more permissive regulations with regard to pollution, it would have a cost advantage with respect to the production and export of goods produced with contaminating production processes. Third, there could be a shift in investment to Chile which might finally lead to a race to the bottom in regards to standards.

The first argument mentioned above is that a greater degree of trade liberalization leads to higher production in the most polluting industries. Along the same line, in nations with a relative abundance of natural resources, trade liberalization will cause overexploitation of those resources and could even cause the collapse of this source of wealth. The assertion that more trade and more economic activity must necessarily degrade the environment does not hold up under close scrutiny. Trade liberalization not only increases economic activity, it also changes its composition by shifting resources away from inefficient uses. If trade barriers served to protect polluting inefficient industries, allowing their output to be higher than would otherwise have been the case, then their removal will reduce output and pollution in those industries. Another counter-argument is that the exploitation of goods that are common property should be contained through appropriate regulations and assignment of rights of ownership rather than rejecting the advantages of international trade.

The second and third arguments refer to Chile's lower standards in environmental regulation and thus a potential shift of investment to Chile. There is widespread fear that the tendency of trade liberalization to encourage firms to migrate south will be enhanced by lax environmental and labor standards. From a theoretical standpoint, it is obvious that each region has different capacities to absorb contaminating emissions, depending on the socioeconomic characteristics of each. Acceptable contamination levels differ from one country to another. A higher level of emissions does not always lead to a higher level of pollution, nor does a higher accepted level of contamination necessarily mean that ecological dumping is taking place. Different values are placed on certain environmental conditions (Butelmann and Meller 1995).

From an empirical perspective, an increase in costs due to environmental regulations has not been enough to justify the relocation of factories (Harrison 1993). In fact, no such exodus has occurred in the United States upon the implementation of environmental and labor regulations. Harrison (1993) reviews evidence suggesting that environmental compliance costs tend to be a small component of total costs in virtually all sectors and thus cannot play an important role in location decisions.

Many environmentalists fear that an FTA with a developing country would force the United States to relax its standards in order to prevent polluting firms from leaving and taking jobs with them. There is much talk not merely about convergence of standards, but about convergence at the lower developing country level – the so-called race to the bottom. Again, this argument does not hold up under close scrutiny. In recent years, the United States has been raising its standards rather than lowering them. Instead of the cost advantages of different levels of regulations, factors such as the quality and cost of labor, and the political risks of operating in a given country tend to control location decisions.

Opponents also argue that developing countries might have no incentive to increase their environmental standards and control mechanisms in an FTA since doing so would reduce their competitiveness and ability to attract foreign investment (Emerson and Collinge 1993). A contrasting point of view is that developing countries will actually increase their environmental standards as a result of free trade in order to obtain access to the markets of the industrialized countries (Grossman and Krueger 1993). Moreover, the higher economic growth that will occur in developing countries as a consequence of free trade will increase the demand for a cleaner environment. Many economists have pointed out that the demand for environmental quality is income sensitive (Grossman and Krueger 1993).

Chile's environmentalism vindicates to some degree the theory that trade which promotes economic development and more wealth fosters environmental consciousness. Environmental action groups are proliferating in Chile, a development that was unheard a decade ago and which reflects the increased disposable income of Chile's middle class. Hence, if the FTA raises living standards even further in Chile, it will raise Chile's ability to afford a cleaner environment and increase demand of environ-

mental protection. Freer trade and the resulting trade expansion can promote environmental objectives more effectively than continued protection (Arndt 1996).

Another fear is that FTAs will inhibit the freedom of nations to impose regulations to protect their environments. This fear seems to be unfounded, given that FTAs tend to adopt the obligations of the Codes of Standards of the WTO which allow for regulations that protect the environment as long as these measures accomplish the desired objective with minimal impact on trade flows and do not discriminate against external producers (Butelmann and Meller 1995).

As discussed earlier, one of the main benefits of an FTA with the United States will be an increase in the flow of foreign investment to Chile. Certain interest groups see this increase in investment as a threat to Chile's environment and fear invasion by polluting industries. Evidence, however, shows that foreign companies tend to comply with their home country environmental standards, which are generally more stringent than those in Chile. Multinationals typically seem to use the more environmentally friendly technology even when not required (Butelmann and Meller 1995). Investors believe it is best to install environmentally safe production technology at the beginning of their project rather than to make costly changes when the recipient nation decides to adopt stricter regulations and their project is already underway.

The many theoretical and empirical arguments that detract from the environmentalist's objections to free trade are insufficient to eliminate the environmental issue from the agenda of trade negotiations. Thus, environmental issues will also play an important role in the FTA negotiations between Chile and the United States, especially since the agreement is likely to provide the pattern for the FTAA.

6.3 Labor Impact of the FTA

Some of the issues arising again and again in connection with free and fair trade are the impact of differences in wage levels, social security, workers' protection, and safety standards between trading partners with different levels of economic and social development. The fair trade argument, as discussed earlier, states that producers in

developed countries are not competing on equal terms with developing countries because they have to comply with more demanding labor standards than their counterparts in developing countries. Producers in developing countries are thus "subsidized" and can practice what is called social dumping.

Critics argue that firms in developed countries might be forced to lower labor standards and social protection as a way to enhance their ability to compete in international markets and to encourage inflows of capital. Otherwise, investors might shift their investments to developing countries. Social dumping is used to explain the deterioration in labor conditions in the developed countries as a result of this kind of race to the bottom. Critics also fear that free trade with developing countries will tend to lower the real wages of unskilled workers in developed countries (Bhagwati 1996).

There are several arguments questioning the concept of social dumping. The accusation of social dumping involves an intrinsic error, since dumping means the placing of products on foreign markets "at less than the normal value of products" (Article VI of GATT). The "normal value" is generally defined in terms of the value on the domestic market. Consequently, it would not be possible to speak of dumping if a product is exported at a value corresponding to its domestic cost (Bhagwati 1996).

Working conditions are endogenous to development processes and depend on the internal characteristics of markets. Countries should respect a certain set of minimum standards, but differences in factor endowments mean that firms use technologies that differ not only in their capital-labor ratios, but also in terms of working conditions and the level of risk associated with them (Bhagwati 1996). In this sense, differences in working conditions between countries are not exogenous or merely political phenomena, they also relate to different productive factor endowments. Bhagwati (1996) further argues that the interests of workers in countries with unequal levels of economic and social development do not necessarily coincide. The argument of social dumping is often used as a means of protectionism by developed countries which fear foreign competition and capital flight.

In a simple neoclassical trade model, the prediction is that increased trade causes resource reallocation and production specialization in those sectors that use intensively

the country's most abundant factor. Factor prices are interpreted according to the traditional Stolper-Samuelson theorem.[82] Changes in relative prices of goods caused by tariff abatement generate reallocation of resources towards more profitable sectors and affect relative prices of factors, given initial factor intensities and substitution possibilities. When dealing with developing countries, which presumably are endowed with a relative abundance of low-skilled labor, the described theory concludes that increased trade will shift output towards low-skilled labor-intensive goods (Frohmann and Romaguera 1998).

According to this trade model, increased access to the U.S. market will induce Chile to specialize in low-skilled labor and natural resource intensive sectors, increasing remuneration of these factors and raising their remuneration relative to the other factors' rewards. Trade liberalization with the United States thus has a less positive impact on high-skilled labor in Chile, while it increases low-skilled workers' wages.

Bussolo, Mizala and Romaguera (1998) use a CGE model to study the linkages between trade and labor markets in Chile under conditions of perfect and imperfect labor markets. Using 1992 data, they show that in the presence of labor market imperfections, the standard trade theory predictions, such as the widening earning gap, may not hold. For instance, when imperfections such as minimum wage restrictions or the imperfect bargaining process between unions and employers are taken into account, trade liberalization with NAFTA increases the wages of skilled rather than unskilled workers.

Nevertheless, U.S. opponents to the FTA with Chile will argue that trade liberalization with developing countries will drive American wages down towards the levels of developing countries. They argue that according to standard trade theory, the United States should increasingly specialize in sectors intensive in high-skilled labor, widening the gap between unskilled and skilled relative wages (Bussolo, Mizala and Romaguera 1998). Liberalizing trade between the United States and a developing country like Chile should accelerate wage convergence, with the wages of unskilled

[82] The Stolper-Samuelson theorem states that a small increase in the relative price of the relatively capital-intensive product will increase (reduce) the return to capital (labor) in terms of both products and vice versa.

workers rising in the Chile and falling in the United States. This is the issue that has already caused the greatest concern in the U.S. NAFTA debate. Hinojosa and Robinson (1992) analyze different studies that examine the effects of NAFTA on wages and they find that nearly all of them predict the amount of wage convergence induced by NAFTA to be small.

Some economists dismiss the scenario of downward pressure on U.S. wages due to NAFTA on grounds that the relative sizes of the two economies ensure that factor price convergence takes place near U.S. rather than Mexican levels (Leamer 1993). In the short term, disparities in labor costs can be large. However, in the medium and long term, with increasingly integrated Mexican and U.S. economies, free trade makes it possible for the wage levels of Mexico to draw closer to those of the United States. Leamer (1993) discusses evidence that real wages in Spain and Ireland, as well as Portugal and Greece, converged toward those in high wage EU partner countries.

There is no doubt that concerns about the FTA's impact on U.S. jobs will focus on Chile's low labor costs. However, the United States is already facing competition from low wage countries, with or without free trade with Chile. It is unable to escape from the increasing ability of developing countries to produce manufactured goods at highly competitive prices. In any event, the United States can turn the situation to its advantage by gaining access to new markets. Several factors support the assertion that an FTA with Chile will not be detrimental but rather beneficial. First, the size of the Chilean economy is so small compared with that of the United States that increased trade with Chile can hardly lower the overall wage level of unskilled workers in the United States. This does not mean that wage pressures will not occur in the United States, but they will be localized and specific.

Second, the argument of cheap labor in Chile makes no allowance for differences in worker productivity. The evidence suggests that Chilean wages relative to the United States have been, in general, in line with productivity differences, implying that the productivity-adjusted wage differential will not be large enough to generate a job flight (Bussolo, Mizala and Romaguera 1998). Third, the United States has a very open economy. Competition from abroad is a reality. Protection continues in only a few sectors and Chile already enjoys a privileged position as a result of the GSP. These

conditions reduce the extra impact of U.S. trade liberalization with Chile to a few sectors and to a negligible total on wages, aggregate employment, and output.

6.4 Environmental and Labor Standards in Chile

NAFTA was the first comprehensive trade agreement accompanied by agreements on environmental and labor issues, the North American Agreement on Environmental Cooperation (NAAEC) and the North American Agreement on Labor Cooperation (NAALC). These provisions ensure that expanded trade supports the improvement of environmental and labor conditions and the enforcement of domestic environmental and labor laws. The agreements entail neither environmental or labor law harmonization nor free labor mobility. Appendix 10 discusses the labor and environmental provisions in the NAFTA side agreements.

Environmental and labor side agreements were added to the treaty Chile signed with Canada. They are similar to those signed by the NAFTA countries with the important difference that the provisions provide for monetary fines rather than trade sanctions as an ultimate means for punishment. Imposing fines instead of trade sanctions is more attractive to developing countries and their firms. Any penalties would be paid by whichever government was found in violation of the FTA. However, most environmental and labor activists argue that trade sanctions should be used to punish governments with lax standards.

In the U.S. negotiations, the Chilean government would like to deal with environmental protection and safeguarding workers' rights outside of trade negotiations, in separate agreements. However, there is pressure from environmental and labor movements to include them in the main agreement. More importantly, Chile's government rejects the use of trade sanctions to redress a perceived lack of compliance with environmental or labor laws. President Lagos stated that Chile opposes trade sanctions as a consequence of non-enforcement of its environmental and labor standards, but he has signaled a willingness to entertain the ideas of monetary fines as the ultimate remedy, similar to the provisions in the side agreements of the FTA between Chile and Canada.[83]

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[83] Interview with Mario Matus (Direcon), October 2000.

Environmental Standards in Chile

According to the NAFTA environmental side agreement, commercial sanctions can be imposed on countries that do not fulfill their legal environmental standards for products and production methods. The norms go beyond those in the WTO and the topic is very sensitive for Chile. Environmental protection in Chile gives rise to concerns since there is little emphasis on enforcement of environmental laws in the country. Increased costs for Chile's economy as well as potential benefits can result from the enforced compliance with environmental standards.

Two types of environmental standards exist: one for the products and one for the process and production methods. Product standards define characteristics that the final good must have, for example, the residual content of pesticides or the ability of the packaging material to be recycled. Process and production method standards, however, stipulate how goods should be made, for example, the amount of water and air pollution that may be caused by the production activity. This distinction is important, since the WTO in general has supported trade sanctions based on product standards, justified directly in terms of a possible damage to consumers in the importing country, but has not backed sanctions based on environmental criteria related to the process and production method. The WTO does not favor the extra-territorial application of national laws. The United States tried to prohibit Mexican tuna imports because Mexico's fishing techniques endangered the dolphin population. The case was carried out in front of a WTO panel and was lost by the United States with the argument that it tried to apply a national law extra-territorially.

In general, it has been observed that exporting countries adapt rapidly to product standards. One reason is that fulfillment of standards has often become a prerequisite for entering industrial country markets. Production standards, however, vary significantly among developing and developed countries. Since the final good says nothing about the process and production method standards, many export producers pay little attention to their enforcement. In addition, most actions of environmental dumping brought to the WTO dispute settlement process have not gone through. The NAFTA environmental side agreement, however, allows trade sanctions to be imposed if environmental standards for production processes are not enforced. The issue is

especially sensitive for Chile's natural resource exporters, since Chile lacks adequate environmental controls on the exploitation of most natural resources.

Industrial mining activity has been historically associated with damage to the environment and undesirable aesthetic effects. Most harmful are its contaminating processes, such as sulfur dioxide emissions into the atmosphere and its liquid and solid waste. The areas in Chile that are saturated with atmospheric contamination are located in mining districts, usually close to foundries. However, it must be admitted that technological developments have improved these conditions significantly during the last decade and private and public mining companies have made large investments to combat contamination generated by their production and process methods.

The increased exploitation of comparative advantages as a result of an FTA will lead to higher exports of natural resources. One of the objectives of Chile's environmental policies must be to control exploitation of Chile's natural resources. The opening of the U.S. market will benefit the Chilean fishing sector, but it is necessary to have internal policies to avoid excess fishing and investment in aquaculture which could destruct the environmentally significant flora and fauna. However, appropriate regulations are lacking, and the result is overexploitation. The U.S. salmon industry has already raised specific concerns that the lack of environmental regulation for Chilean salmon farming puts U.S. producers at a disadvantage.

In addition to mining and fishing, Chile relies on another ecologically damaging industry, namely forestry. It not only faces environmental pressures from export competitors but also from environmental groups worldwide. The debate over the future of Chile's native forests and thus, to a certain degree, about the world's ecological system has become one of the most contentious issues in the debate over sustainable development in Chile. Wood chip exports to industrialized countries – particularly to Japan and the United States – have become one of Chile's largest export products and are responsible for large environmental hazards.

CONAF (Corporación Nacional Forestal), Chile's state forestry service, which is responsible for supervision of the Chilean forestry sector, has problems in controlling the origin of forestry products but has shown attempts to regulate the timber industry

more effectively. It must be one of Chile's priorities to enforce its signed international treaties such as the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)[84].

Chile's agricultural sector warrants mentioning as well. Agroindustry uses toxic chemicals and pesticides and generates large amounts of liquid industrial waste which causes water contamination. However, water pollution is a problem of process and production method standards, and thus it cannot be used as a valid argument for trade sanctions in accordance with the WTO. But according to the NAFTA environmental side agreement, each country has to control compliance with its environmental norms and also its norms with respect to production processes. If it fails to exercise that control, pressure can be exerted and trade sanctions can be imposed. It is thus important that environmental control mechanisms become more effective in Chile to respond to these demands.

A World Bank study (1994) analyzes environmental issues for Chilean agriculture under a scenario of FTA negotiations with the United States. It concludes that the principal concerns with respect to Chilean agriculture are centered on the process and production method standards and include: (i) weak supervision and enforcement of legislation; (ii) inadequate information on the effects of toxic substances on the environment and finished products; and (iii) inadequate legislation regarding run-off of agricultural residues. According to the World Bank (1994), the greatest problem is not the content of environmental regulation with respect to agricultural production, but deficiency in supervision. The bottom line is that more government and private sector resources need to be allocated to this task, increasing local production costs.

The Chilean government has responded to this challenge by placing greater emphasis on environmental regulation. In 1994, it passed the Environmental Framework Law, which provides both legal and institutional structures to institute and implement comprehensive environmental policies. Among others bodies, the law established the National Environmental Commission (CONAMA) and the Regional Environmental Commissions (COREMAs), whose duties are to coordinate environmental policies

[84] Entered into force on 1 July 1975 and was ratified by Chile in that year.

among different governmental agencies; to facilitate dialogue among businesses, academics, and the private sector; and to assess and promote policies on issues related to the conservation and protection of the environment. Solutions are being developed, but Chile's lack of resources and experience in this area poses significant obstacles. The process remains fragmented, decentralized, and without enough resources, but the creation of CONAMA has been a step forward (CONAMA 2001).

Another substantial step brought about by the Environmental Framework Law has been the requirement of environmental impact assessment studies before any investment project by the public and private sector is approved.[85] The law also creates substantive standards on environmental policy, including the polluter pays principle, the pollution prevention approach, and emissions quality rules (CONAMA 2001).

The environmental provisions of NAFTA and its supplemental agreement ensure that parties enforce their environmental laws, but not that parties have adequate, or indeed any environmental laws to enforce. Thus, Chile is under pressure from the United States to implement new and stricter regulations with regard to activities harmful to the environment and to proceed with changes more quickly than most companies would like. Chile will face, to a certain extent, a trade-off between growth and solving the problem of poverty on the one hand and improved environmental quality on the other one.

Even though new environmental regulations and their enforcement will require large public and private expenditures accompanied by increased production costs, they will be beneficial and pay back in the long run. Environmental provisions have positive externalities. They will help preserve Chile's environment and foster sustainable development. Stricter environmental law enforcement would have to be adopted sooner or later by Chilean exporters since consumers in developed countries prefer to buy products that are produced with environmentally sound techniques. Compliance

[85] The purpose of the environmental impact assessment studies (EIAS) is to ensure the environmental sustainability of projects. A set of procedures is designed to identify and evaluate the positive and the negative environmental impact generated by a given project or activity. The EIAS will then assist in defining measures aimed at abating the negative impact and enhancing any positive effects (CONAMA 2001).

with environmental standards and implementation of new laws will improve the country's image and avoid discrimination of Chilean exports by consumers in other developed markets such as Japan and the EU.

Labor Standards in Chile

U.S. concerns about labor standards in developing countries are rising. The GSP and the U.S. Section 301 of the 1974 Trade Act already include measures providing for unilateral protection against unfair trade.[86] Concerns about labor standards were also expressed very forcibly in the NAFTA debate. Most arguments, however, used by labor groups to oppose Mexico's entry into NAFTA are inapplicable in the case of Chile. It is difficult to argue cogently that U.S. jobs would be threatened or that U.S. companies would relocate manufacturing facilities to Chile. The distance between Chile and the United States also means that illegal immigration will be far less of a problem than it is with Mexico. But nevertheless, U.S. labor groups are calling for an analysis of Chile's labor code and enforcement efforts to discern how well the country protects labor rights, monitors working conditions, provides decent wages, and ensures that social benefits reach most of the population.

American trade unions that oppose free trade out of concern for labor conditions do not need to fear an FTA with Chile. It has the capability to meet internationally recognized labor standards. Chile respects workers' rights to organize and strike and has banned sweatshops and child labor (de la Balze 2001). In addition, President Lagos stated his intention to reform Chile's labor codes to strengthen trade unions in accordance with international standards. He also plans the introduction of more flexible labor legislation that would help Chile remain competitive.[87]

Mizala and Romaguera (1997) assess to what degree Chile's labor legislation is enforced in the mining, fruit growing, salmon farming, and forestry industries. The aim is to establish whether there are situations that could be used to justify trade restrictions on labor-related grounds. The data show that deficiencies and certain labor

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[86] Section 301 may be used to impose unilateral trade sanctions against countries whose trade practices are found by the USTR to be unfair.
[87] Interview with Pablo Lazo (Labor Ministry), October 2000.

problems exist in these export-oriented sectors, which have given rise to allegations from abroad and which could become a controversial issue in FTA negotiations. Concerns exist because the legislation is not enforced, workers' rights are not adequately protected, or weaknesses exist relative to workers' health and safety standards.

Indeed, these are precisely the issues on which pressure from the United States has focused, unlike in Mexico where disputes were related to freedom of union affiliation and collective bargaining. The problems arise from (i) legal loopholes; (ii) less protection for seasonal workers; (iii) enforcement problems in isolated areas such as in salmon farming and forestry production sites; and (iv) pushing flexibility norms to the limit such as introducing special work periods in mining.

Labor conditions in fruit export production and agribusinesses have been called into question not only by the United States but also at the international level. The press has drawn attention to the dark side of the export fruit growing boom in terms of scant regulation and poor working conditions.[88] Serious accusations relate to the use of highly toxic pesticides that are prohibited in developed countries and their possible effects on workers' health. Other common allegations relate to a lack of protective material, working days that are longer than the legislation allows, and child labor.

Even if exports are not banned now because of goods produced under low labor standards, there is a risk that these problems will damage Chile's image and will be used in the future as an argument for restricting Chilean exports. For example, labor law infringements expose Chile's fruit industry to the risk of complaints from importing countries and have the potential to affect their consumers' behavior. International trade and negotiations of FTAs have raised the profile of labor issues that had generally been confined to the domestic sphere of the countries. However, if this greater concern for labor standards and their enforcement leads to trade restrictions that slow down growth in developing countries, it would imply lower standards and worse living conditions for workers in those countries.

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[88] "Chile: What Help for the Temporeras?", The Economist, February 17, 2001.

Mizala and Romaguera (1997) analyze labor disputes that have arisen within the NAFTA labor side agreement and conclude that the agreement could theoretically be used as a tool of potential protection and trade restrictions. However, the cases analyzed in NAFTA suggest that the agreement is used more as a tool for improving domestic enforcement of labor legislation than as a tool for protecting domestic industries.

The inclusion of labor provisions in the FTA with the United States involves not only costs but also positive externalities for Chile's economy. Chile will be required to enforce its laws and to reform the conditions in its export sectors, improving its image in the world and ensuring consumer loyalty in developed countries' markets. Another positive externality will be the adoption of socially desirable labor standards. Pressure of the FTA to ensure enforcement of labor legislation could turn out to be more effective than that exerted by Labor Ministry inspection. With the backing of a trade treaty, the government increases its bargaining power vis-à-vis powerful interest groups that might oppose the establishment of certain standards.

Conclusion

The payment of environmental and labor provisions as an admission price not only gives Chile entry to U.S. markets, but also generates positive externalities. Despite the costs of adopting stricter environmental and labor standards, there is an awareness in Chile that the developed world will be increasingly demanding with regard to working conditions and methods used in the production of imported goods. Consumers may reject products made with technology harmful to the environment or under poor working conditions. Changes in environmental and labor regulations should not be seen as a requirement for achieving an FTA with the United States, but as a pre-requisite to improving international standing and the quality of life in Chile. The FTA offers a good opportunity to resolve controversies over environmental and labor regulations in Chile. The environmental and labor provisions will set in motion a process of long-run harmonization in the standards and trigger an improvement in the enforcement mechanisms in Chile.

Conclusion

The United States is a very attractive integration partner for Chile, among others, because of its market size, its bilateral trade and investment pattern, and the stability of its macroeconomic environment. It has been Chile's largest export market and principal source of imports and foreign investment for the last several decades. In an ex ante analysis, this thesis identifies several benefits and a few possible drawbacks for Chile's economy as a result of an FTA between Chile and the United States.

Based on the trade theory of economic integration as applied to the Chilean case, the study evaluates the impact on Chile's economy of an FTA with the United States. The analysis is corroborated by data on Chile' foreign trade and investment pattern and statistics on U.S. market access barriers. Empirical studies on the impact of other FTAs on their member economies are used for a comparative analysis. In particular, comparisons to NAFTA and Mexico's experience support the analysis of the benefits and costs for Chile's economy of a NAFTA-type FTA. In addition, the findings of this thesis are substantiated by evidence from interviews with academics, government officials, and trade experts.

This thesis is a contribution to the research on preferential trade liberalization of the North-South type. It fills research gaps in the economic impact analysis for the southern member country. The analysis goes beyond traditional concepts and includes topics that have been less extensively researched, such as dynamic effects, issues that are specific to economic integration between a developed and a developing country, and the impact of environmental and labor issues. The approach in this thesis allows considering several aspects on how the FTA will impact Chile's economy and does not limit itself to traditional economic variables.

Previous research on free trade between Chile and the United States dates back to the mid-1990s and was based in most cases on a NAFTA accession scenario, while this analysis considers Chile's current economic structure and objectives and focuses on a bilateral FTA with the United States. The analysis of the Chilean case, a situation similar to that of other Latin American countries, contributes to research on Latin

American trade issues in general. This is an area that has received little focus despite the fact that the FTAA soon might become reality and have an impact on worldwide trade patterns.

The analysis in this thesis concludes that an FTA with the United States promises Chile substantial benefits, which will accelerate its economic development. Benefits will evolve over an extended period of time, while costs will be concentrated at the initiation of the process. If the FTA is successfully implemented, these costs should be more than outweighed in the longer term by positive economic effects that generate growth and realize other economic and social objectives.

From the standpoint of trade creation and trade diversion alone, the FTA with the United States will have only moderate effects. If lower trade barriers vis-à-vis the United States shift previously high cost production from Chile to the United States, the FTA improves welfare through trade creation. However, its impact is predicted to be small. Chile has pursued a unilateral trade liberalization policy for the last two-and-a-half decades. Since Chilean import duties are already relatively low and uniform, at 8% in 2001, there should be no serious concern about Chile being flooded with U.S. goods and services. Chile has already incurred most of the economic adjustment costs and the majority of its economic sectors have been exposed to competition. However, the reduction and possible elimination of the protectionist price-band system will result in adjustments for traditional agricultural producers of basic grains and oilseeds.

The agreement may also lead to production shifts from low cost producers outside the FTA to higher cost producers in the United States. If trade diversion occurs, a welfare loss may result. An 8% margin of preference may cause some trade diversion, though it will be small since the relatively low tariff rate will be reduced further by one percentage point each year to reach 6% in 2003. In addition, given the relatively low tariffs and competitive conditions in the United States, import cost differences between the United States and third country sources for similar goods are small, further reducing the risk of trade diversion.

The potential for trade diversion also depends on the stringency of the FTA's rules of origin. They can be used to maintain protection of inefficient U.S. producers from

Chilean competition. Strict rules might harm Chile's international competitiveness by making it very costly for Chilean companies to produce goods since they are required to use U.S. inputs in order to qualify for preferential access. These rules also impose an element of discrimination towards third party producers of intermediate goods. Moreover, the administrative costs of documenting compliance with the rules of origin can offset the benefits of preferential access.

The import liberalization will result in tariff revenue losses for the Chilean government. Compared to other developing countries, Chile is less dependent on trade taxes. Nevertheless, the government needs to make sure that alternative fiscal instruments are in place or existing ones are broadened. This in turn will have the positive effect of accelerating fiscal reform.

Earlier estimates of Chile's benefits from accession to NAFTA show only small gains from the elimination of tariff and non-tariff barriers. These results are not surprising, considering that previous studies focused mainly on improved resource allocation and based their market access analysis on the level of U.S. protection for current Chilean exports. This approach, however, fails to capture the potential increase in exports of products that are currently not exported because of high trade barriers. Taking into account Chile's export potential, the effects resulting from reciprocal market opening will yield principal gains and are one of the main reasons why Chile should attempt to obtain tariff-free market access to the United States.

The main goal of Chile's trade policy is to raise the value-added of its natural resource exports, through which it could enter various niche markets. Chile would like to move toward exporting processed natural resources that require the use of high-level technology in order to be less dependent on fluctuating prices of natural resources, to benefit from positive externalities, and enhance growth rates in the long run. The U.S. tariff schedule, however, is characterized by tariff escalation as products undergo processing, hurting the exports of goods with higher value-added.

The U.S. tariff escalation does not impede exports of all types of processed goods, but certainly affects some export products in which Chile has a natural comparative advantage. As a developing country in an FTA with an industrial nation, Chile can

exploit its comparative advantages such as different growing seasons for agricultural products than the Northern Hemisphere, rich mineral deposits, large forest and fish stock, and relatively cheap labor. The FTA will enable Chile to consolidate its second export stage which has been its objective for the last decade.

In addition, preferential market access to a large trading partner like the United States will improve the terms of trade of a small country like Chile. Since prices observed in the large partner country will not change as a result of preferential trade liberalization with a small country, Chile will be able to sell its exports at the tariff-inclusive price without paying the tariff and thus receive a higher export price than prior to the FTA. This positive terms of trade effect enables Chile to increase its export supply to the U.S. market.

The absence of preferential market access to its most importing trading partner will tend to reinforce Chile's present export specialization pattern, making it more difficult for Chile to compete in the U.S. market with other Latin American countries that have preferential access, such as Mexico and the Andean Pact and Caribbean countries. Chile has a strong interest in signing an FTA with the United States to avoid further costs of NAFTA exclusion. Preferences granted to Canada and Mexico erode existing preferences granted by the U.S. Generalized System of Preferences (GSP) and have resulted in a loss of competitiveness of previously dominant export products.

Export expansion, static efficiency, and resource allocation arguments do not account for the whole picture and do not play the major role in the overall balance of Chile's benefits from the FTA. Indeed, the more relevant effects of economic integration are dynamic, namely those producing a sustained increase in the rate of economic growth. Trade liberalization with the United States causes positive dynamic effects through a variety of channels, such as increased foreign direct investment, enhanced market competition, economies of scale, technological spillovers, and knowledge transfers.

Economies of scale may lower costs and increase efficiency. Stronger competition stimulates searches for productivity gains. Foreign investment and increased trade volumes with a developed country encourage cooperation in R&D and promote positive spillover effects to domestic industries, technical training, and learning-by-

doing. Trade with the United States provides access to a large market with advanced technology and a .broad scope of knowledge, which facilitates technology and knowledge transfers and will lead to more innovations, international competitiveness, and faster economic growth.

An FTA with the United States will increase the attractiveness of Chile as an investment location. Chile has signed FTAs with most countries in the Western Hemisphere, positioning it as a regional hub that can be used as an export platform with preferential access to markets in the region. The U.S. commitment to free trade with Chile will provide the country with a seal of approval. Policy stability and institutional reliability will be more effectively guaranteed by a contractual agreement with an influential partner such as the United States. The FTA will send a positive signal of Chile's commitment to free trade and a market economy to the international business community and investors, reducing the risk premium demanded by investors. Chile will improve its perception in international financial markets and attract investment in a time of strong competition among Latin American countries.

Indirect economic effects will accompany the direct economic effects of increased trade and investment flows. The reduction of uncertainty in the trade relations with the United States is one of the major benefits of the FTA. The accord will restrain the United States from the use of anti-dumping and countervailing duty actions against Chile. Although the United States will unlikely agree to a mutual exemption from the application of anti-dumping and countervailing duties, the establishment of an efficient dispute settlement mechanism such as in NAFTA will provide a more expeditious procedure than lengthy court challenges for resolving associated disputes.

Effective dispute settlement procedures will reduce transaction costs and diminish the power of lobby groups who might feel threatened by the increase in Chilean exports and press for more non-tariff barriers. To have a rules-based framework in place is important for Chile, since the mere threat of U.S. protection can lead to a market loss for exporters. The FTA allows Chile to secure adequate and stable access conditions to its most important export market.

Beyond tariff and non-tariff barrier reductions, an FTA with the United States will require regulation of government procurement, non-discriminatory treatment of services, elimination of restrictions on foreign investment, and protection of intellectual property rights. Chile already complied or is in the process of complying with most of these requirements. Nevertheless, it will be necessary to make institutional changes to achieve greater levels of transparency, predictability, and regulation. The reduction of uncertainty, derived from strengthened institutions and stable trade relations with the United States, will enhance confidence and increase trade and investment flows, the positive impact of which will be greater than that generated by a more efficient allocation of resources.

While the FTA provides significant benefits for Chile, it also has its costs. The FTA creates new interdependencies that may erode autonomy to some degree. Some will be appreciated and others may not. One can expect that Chile will be under the commercial influence of the United States to a greater extent. The interdependency will provide benefits like a policy lock-in, investment inflows, or greater formal capacity to influence U.S. trade policy, but it will also be accompanied by more U.S. commercial vigilance and exposure to policies in areas such as labor and the environment.

The U.S. government has stated firmly that an FTA must include environmental and labor provisions, either in the main treaty or in a side agreement. Chile will face pressure from the United States to implement stricter regulations and control the enforcement of its environmental and labor laws. It will have to proceed with these improvements more quickly than the business community would prefer. The agreement will bring to the fore environmental and labor conflicts in Chile that might not otherwise have surfaced. Issues like the environmental conditions in public mining operations or the situation of temporary workers in the fruit industry will receive increased attention.

While strengthened environmental and labor laws and their enforcement will increase Chile's production costs, they will also have positive effects, not only for its environment and labor force but also for its economy in the long term. Enforcement of these laws will ensure future access for Chilean products to other developed country

markets, such as the EU and Japan, whose consumers are even more conscious of environmental and labor situations in the producing countries than are U.S. consumers.

Recent critiques of integration have focused on the structural adjustment costs in traditional agriculture. This sector will be affected adversely since it has been heavily protected by the price-band mechanism that Chile will have to relinquish or phase out over some time period. However, these costs will not be incurred solely as the result of the FTA with the United States. Much adjustment in the traditional agricultural sector is already occurring as a result of Chile's FTAs with Mercosur and Canada. Adjustments costs in the agricultural sector will be part of the price Chile has to pay for the agreement with the United States, which has its benefits for other economic sectors. While there will be a drop in employment in the agricultural import sector, expansion will occur in the agroindustrial export sector.

It is important to be vigilant about the costs involved in the FTA to minimize and mitigate an expected increase in the unemployment rate. A compensatory mechanism may help to remedy trade liberalization shocks by providing income support during the transition period into other sectors. Chile should design plans for reintegrating the unemployed into the workforce and redesign its policies towards labor training and education. Since the economic downturn in 1998-99, Chile's unemployment rate has been persistently high compared to levels in the earlier 1990s. The IMF has criticized Chile for its weak job creation capacity. The FTA with the United States might aggravate the difficult situation. Therefore it is important that Chile improves its labor market flexibility and policies.

The potential benefits and associated costs discussed highlight some of the economic and political trade-offs that will confront Chile in an FTA with the United States. Except for agriculture, no real opposition has emerged in Chile to a zero duty tariff rate for U.S. imports. The most important business associations favor the FTA and have been lobbying for it in the United States. Labor also does not seem to be opposed. Chilean workers have already paid the cost of liberalizing the economy, and increased trade and investment would bring about new and better jobs.

The FTA with the United States should be pursued by Chile for its value as a strategic development tool. It cannot be denied that the FTA will involve some costs. However, much of the public attention has focused on the short-term costs that are part of any major transformation. An FTA is an initiative with a long-run horizon in which a country accepts short-term costs in order to capture some of the long-term benefits. The costs to be assumed by Chile, mainly related to short-term frictions during the early period of structural change and adjustment, must be measured against the economic benefits derived over an extended time frame. The bulk of these are expected in the medium to long term through the dynamic impact on growth and development. However, even if initial adjustments are more than compensated for later on by the dynamic effects of integration, Chile has to make sure that assistance is in place that will reduce immediate costs for negatively affected sectors.

How benefits and costs actually evolve will also depend on the negotiated architecture of the FTA and the time path of its implementation. They will depend upon the interface between domestic economic policies and the FTA as well as the play of exogenous factors in the world economy. The central focus on negotiations must be to ensure that the U.S. market is fully opened for Chilean exports and remains open. This implies a removal of tariff escalation, U.S. restraint from administered and contingent protection, not too stringent rules of origin, and avoidance of too many exemptions, loopholes, and safeguards. While the transition period for Chile's tariff-free access to the United States should be rather short, Chile should use some of its bargaining power to negotiate the phase out of its tariffs for traditional agricultural imports over a longer period of time.

As the analysis in this thesis shows, overall, free trade between the North and the South is beneficial. A trade agreement between countries of different economic levels benefits not only the large and rich countries in the North but also the developing countries. Greater openness to trade and investment and more complete integration among economies of developed and developing countries are effective tools for achieving higher levels of development and upward convergence of income levels. Free trade between a developed and a developing economy enables the latter to purchase production inputs at lower prices, opens new export markets, improves the competitiveness of the economy, and attracts new investment and technology which in

turn will generate greater employment and higher income. Unilateral preferences such as the GSP, CBI, and ATPA are not sufficient to secure market access to the United States in the long term and do not provide the same benefits as a reciprocal agreement.

The results of this analysis support the FTAA process and indicate that the Latin American countries will overall benefit from the expansion of free trade. An FTA between Chile and the United States is an important step towards the larger goal of a free trade zone encompassing the Western Hemisphere. A successful completion of the FTA negotiations will have a catalytic effect upon the establishment of the FTAA by showing the U.S. commitment to free trade with the Latin American economies. The hemisphere contains regional FTAs and customs unions, reflecting a diversity of objectives largely uninfluenced by the United States. By signing an FTA with Chile, the United States will make sure that NAFTA sets the template for the FTAA.

This analysis of the economic impact upon Chile of an FTA with the United States can be used as a framework for the analysis of other FTAs, in particular for those between a developing country and a developed country, such as an FTA between another Latin American country and the United States. The issues analyzed are relevant for any North-South trade agreement. The approach in this study also serves for further research on the economic effects of the FTAA. Only few studies of its impact on Latin American economies have been carried out although it might become reality as early as 2005. New FTA initiatives between developing and developed countries are likely to emerge also in other parts of the world. The 1990s have seen a proliferation of FTAs in all regions, and this trend is expected to continue in this decade. Since difficulties in opening a new WTO negotiation round persist, regionalism is widely regarded as an alternative path to trade liberalization.

Appendix

Appendix 1: Integration Movements in the Western Hemisphere

Name and Membership	Effective Date	Objective
LATIN AMERICAN INTEGRATION ASSOCIATION (ALADI): Argentina, Bolivia, Brazil, Chile, Colombia, Ecuador, Mexico, Paraguay, Peru, Uruguay, and Venezuela.	1980	– Gradual elimination of intraregional trade impediments. – Established as a result of the failure to achieve the objectives set by the Latin American Free Trade Association (LAFTA) in 1960. – Liberalization is carried out on a sectoral basis through two mechanisms: (i) regional scope agreements, covering all members of ALADI, which give preferential treatment on a regional basis; and (ii) partial scope agreements, concluded by subgroups of ALADI members, which offer preferences to signatories only (bilateral economic complementation agreements, and/or trade promoting agreements).
CACM (CENTRAL AMERICAN COMMON MARKET): Costa Rica, El Salvador, Guatemala, Honduras, and Nicaragua.	1960	– Customs union to promote and coordinate industrial development. – Establishment of a common external tariff. – In 1993, the CACM reactivated its objectives and established a customs union in 1993.
ANDEAN PACT:[1] Bolivia, Colombia, Ecuador, Peru, Chile (until 1976), and Venezuela.	1969	– Customs union to promote harmonious development of member countries through economic integration. – Establishment of a common external tariff by 1980, but the original timetable was not met. – By the late 1980s, the Andean Pact had shown little success of promoting internal tariff reduction and intraregional trade. – In 1994, members agreed on a four-tier external tariff structure of 5, 10, 15, and 20%, which came into in effect in 1995.
CARICOM (CARIBBEAN COMMUNITY): Jamaica, Bahamas, Belize, St. Kitts and Nevis, Antigua and Barbuda, Montserrat, Dominica, St. Lucia, Barbados, St. Vincent and the Grenadines, Grenada, Trinidad and Tobago, and Guyana.	1973	– Customs union to strengthen, coordinate, and regulate trade and economic relations among members. – Establishment of a common external tariff, but the original timetable was not met. – Common external tariff is not uniformly applied.

Name and Membership	Effective Date	Objective
GROUP OF THREE (G3): Colombia, Venezuela, and Mexico.	1995	– Economic cooperation and establishment of a free trade area.
NAFTA (NORTH AMERICAN FREE TRADE AGREEMENT): Canada, Mexico, and the United States.	1994	– Free trade agreement with the elimination of tariffs in five, ten, and fifteen years depending on the type of product. – Agreement contains precedent-setting rights and obligations regarding intellectual property rights, services, trade, and investment. – Environmental and labor side agreements.
MERCOSUR (SOUTHERN COMMON MARKET): Argentina, Brazil, Paraguay, and Uruguay.	1995	– Customs union with a common external tariff. – Macroeconomic policy coordination. – Sectoral agreements.

Note: [1] Chile was a member of the Andean Pact from its creation in 1969 until 1976. The unilateral and liberal economic reforms led Chile to withdraw from the Andean Pact in October 1976 since the obligations of Chile under the Pact would have otherwise restricted and even prevented the introduction of economic reforms such as a reduction in import duties and liberal and non-discriminatory rules for investment.

Source: Based on Bouzas and Ros (1994) and WTO (1995).

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Appendix 2: Free Trade Area of the Americas

In 1990, former President George Bush announced the Enterprise for the Americas Initiative in response to Latin America's economic troubles. In the short run, the program called for debt relief and trade and investment liberalization. In the long run, George Bush envisaged free trade within the Americas. As part of their move toward market economies, countries in Latin America had realized they could spur economic growth by reducing trade barriers with their neighbors. They strongly supported Bush's call for a free trade zone stretching from Alaska to Argentina.

At the first Summit of the Americas in Miami in December 1994, the thirty-four heads of state of the Western Hemisphere committed themselves to the creation of a Free Trade Area of the Americas (FTAA) by the year 2005.[89] In fact, the Miami signatories had designated the year 2005 as a deadline for concluding the FTAA negotiations, with implementation to follow in subsequent years. Two options were put forward for achieving hemispheric free trade: either the accession of all countries to NAFTA or the ratification of agreements between the separate groupings of the hemisphere (Weintraub 1995).

To achieve unanimity, the choice between these two alternatives was left vague at the Miami Summit. While the United States favored the NAFTA accession option because of its desire to have an agreement covering all critical substantive issues, Brazil supported ratification by separate groupings, which could keep Mercosur intact. The latter is the second most important subregional economic integration group in the hemisphere after NAFTA. As there can be no FTAA without the consent of the United States and Brazil, it has been deemed preferable to leave the issue for later discussions (Weintraub 1995).

In the Declaration of the 1994 Summit of the Americas, the hemisphere's leaders issued a basic set of principles, among which were the commitment to consistency with the rules of the WTO and a promise not to erect trade barriers to third countries.

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[89] Cuba was the only country, which was not invited and is not allowed to participate since the FTAA is limited to democratic countries in the Western Hemisphere.

They agreed to maximize market openness through each of the disciplines outlined for free trade negotiations. The disciplines were basically those included in NAFTA: market access for goods, services, investment, government procurement, sanitary and phytosanitary (animal and plant health) standards, intellectual property rights, standards-related measures, general dispute settlement procedures, anti-dumping and countervailing duty matters, and competition policy (Shapiro 1996).

The thirty-four countries participating in the FTAA process formally launched negotiations for the establishment of a hemisphere-wide FTA at the second Summit of the Americas, held in Santiago de Chile in April 1998 as a follow-up to the 1994 Miami Summit. Nine negotiating groups were established covering the disciplines agreed upon at the 1994 summit. Since then, negotiations have been conducted among the various countries and subregions in the hemisphere. At the third Summit of the Americas, held in Quebec in April 2001, the thirty-four countries agreed to complete the FTAA negotiations by 2005.

The successful completion of the FTAA negotiations will depend on if the United States and the influential Latin American countries are able to agree. Absent US commitment in structuring a trade liberalization process, the balance of interest and commitment in Latin America could well start to shift away from the United States to other regions of the world such as the EU. By promoting trade with Latin America, the United States ensures that US exporters, service providers, and workers get a fair stake in one of the world’s fastest growing markets. It has a strong economic interest in moving forward with an ambitious and timely trade agreement agenda in the Western Hemisphere (Hinojosa-Ojeda, Lewis and Robinson 1997).

The United States has pursued a two-part strategy to shape the critical elements of the FTAA and pursue the hemispheric agenda (Shapiro 1996). The first element of the U.S. strategy has been to build stronger trade relationships with all the countries in the hemisphere. To achieve the 1994 Miami Summit's goal of free trade across the Americas, trade ministerial meetings have been held annually. These meetings review the progress of the nine working groups which cover the disciplines agreed upon at the 1994 Miami Summit. NAFTA expansion, the second element of the original U.S. strategy in the hemisphere, has not occurred due to the lack of fast-track authority. The

United States intended to use the NAFTA accession process to lead the hemisphere toward an FTAA with strong disciplines and broad market opening measures.

Different agendas between the United States and Brazil lurk behind the façade of a shared objective of free trade in the Americas. Brazil is the dominant economy in Latin America and the moving force behind Mercosur. In effect, there can be no FTAA without the merging of NAFTA and Mercosur. A number of outstanding trade issues are still pending between the United States and Brazil, in particular several intellectual property and anti-dumping cases. Brazil is reluctant to merge into a bloc in which its country would not be the dominant member, and it has continuously decelerated the process. Delays in the FTAA also permit Brazil to explore other arrangements, such as a treaty with the EU, that might presumably preclude any agreement whatsoever with the United States. Were the United States to take a more aggressive stance and work more quickly with other countries, Brazil would find it difficult to restrain other countries such as Argentina, which are anxious to sign trade deals with the United States.

Reaching a Western Hemisphere FTA will be a laborious and time-consuming process. Nevertheless, it remains an objective in the hemisphere. Once operational, the FTAA would represent the largest market in the world, with a GDP of more than US$11 trillion, roughly a third of world economic output, and a population of about 800 million in 2000 (World Bank 2000b). The commitment of the leaders of the Americas at the 2001 Quebec Summit, coupled with clear signs of gathering momentum in the negotiations, have brought the FTAA closer to becoming a reality.

Appendix 3: Selected Topics in Chile-U.S. Free Trade Negotiations

As the analysis of the FTA between Chile and the United States reveals, some topics are bound to complicate negotiations and will require some adjustments in Chile's regulations. They include Chile's price-band mechanism, excise tax on distilled liquor, strict sanitary and phytosanitary measures, regulations for investment and trade in services, government procurement, and intellectual property rights. The following discusses these issues and the necessary changes in Chile's regulatory system which will be required by the United States for the reciprocal market opening (USTR 2000).

Discriminatory Tariffs and Taxes

In the FTA negotiations, the United States will exert pressure on Chile to lift its price-band mechanism which is basically an import barrier that protects traditional agricultural goods such as wheat, flour, edible oil, and sugar from transitory fluctuations in international prices. When import prices of these agricultural products are below a set threshold, surtaxes are levied on top of the across-the-board 8% tariff to bring import prices up to an average of prices over previous years. Chile, however, will try to avoid the complete elimination of the current protection provided to its traditional agricultural sector.[90] This issue is one of the most important topics in Chile's FTA negotiations since the treatment of the price-band mechanism will be critical to the impact of the FTA on the Chilean economy.

Because of low international wheat and sugar prices since 1998 this price-band system has imposed import duties as high as 90%, well above Chile's WTO-bound rate of 31.5%. In September 1999, the Chilean government initiated a safeguard investigation on these agricultural products governed by the price-band mechanism. This led to the imposition of provisional safeguard duties in November 1999, which mirrored the duties already applied under the price-band system and legalized their lack of compliance with the WTO bound tariff rate. In January 2000, the Chilean government found a threat of serious injury to the products under evaluation in the safeguard

[90] Interview with Mario Matus (Direcon), October 2000.

investigation and decreed that the provisional duties be formalized. In November 2000, the safeguard measures were extended for another year (USTR 2000).

The United States criticizes Chile's recent use of its safeguard measures for its agricultural goods protected under the price-band system. In the FTA negotiations, it may ask Chile not only to eliminate its price-band system, but also to exempt the United States from future safeguards as part of the FTA. Chile's safeguard measures are not applicable to imports of sugar and edible oil from Canada, Mexico, and Peru as well as to imports of wheat and wheat flour from Mexico and Peru. These exceptions are granted because of the FTAs with these countries (Direcon 2000a).

In the FTA negotiations, the United States will also demand that Chile eliminates the discriminatory taxation on imported U.S. whiskey and other distilled spirits. This excise tax discourages imports of liquor that compete with domestically produced liquors, especially with the Chilean grape brandy of high alcoholic grade called pisco. The EU won a WTO panel appeal over Chile's discriminatory liquor taxation where the United States was a third party. In late 1997, Chile passed a law to gradually modify, but not eliminate, the discriminatory taxation faced by imported liquors. But it has pledged to bring its tax regime on distilled spirit in full compliance with its WTO obligations (USTR 2000). Chile is reluctant to eliminate protection for its liquor industry since it will incur adjustment costs due to increased competition from imports of U.S. products.

The United States will ask Chile to eliminate its import surcharges on luxury goods, such as articles of gold, platinum, and ivory; precious jewels; fine furs; high quality rugs and tapestries; yachts; and home trailers. Chile does not apply its uniform tariff to automobile imports that have a CIF value over US$15,000. It imposes a luxury tax of 85% on the value of the vehicle over US$15,000. The United States will attempt to negotiate the elimination of this discriminatory tax (EIU 2001b).

Investment Regulations

Another point of contention will be certain provisions in Chile's investment regulations. Although the Chilean regime regulating foreign investment is among the most

liberal and non-discriminatory in the world, Chile must modify some provisions to comply fully with those in NAFTA and those that the United States will require. Two legal bodies support foreign investment in Chile: Decree Law (DL) 600 and Chapter XIV of the central bank's foreign exchange regulations. DL 600 sets an identical standard for foreign and Chilean investors. Foreign investors using DL 600 sign a contract with the government's Foreign Investment Committee guaranteeing the terms and tax treatment of their investments. Chapter XIV mainly applies to foreign capital inflows in the form of stocks, bonds, most lending, and bank deposits (Foreign Investment Committee 2001).

Chile's DL 600 legislation does not allow for the repatriation of the original capital until one year following the actual investment. Profits, however, may be repatriated immediately. This regulation has drawn criticism from the United States. In addition, at present, the Foreign Investment Committee has the power to reject foreign investment projects. While approval is generally routine, the Foreign Investment Committee has rejected some speculative investments.[91] Even though the Committee has rarely exercised this right, the United States will argue that it is necessary to regulate its use, as well as the time limit within which it may be exerted, because it introduces a degree of uncertainty in the approval process (Foreign Investment Committee 2001).

Until August 1998, investors were required under Chapter XIV to deposit 30% of the value of capital inflows for one year in a non-interest bearing central bank account, the *encaje*. Responding to increasing risk premiums charged by creditors and fear of substantial decline in foreign financial capital flows as a result of the global financial crisis, the central bank reduced the capital reserve requirement to zero in August 1998. The reserve requirement was intended to limit speculative flows, thus helping stabilize the Chilean peso. But as the deposits earned no interest and allowed the central bank to buy foreign money market instruments, the reserve requirement effectively functioned as a tax on short-term capital inflows (Edwards 1998). Although this capital reserve requirement was reduced to zero percent in mid-1998, it has not been eliminated from the exchange regulations and could be reversed at any time. At the beginning of his

[91] In late 1997, the government modified its DL 600 to cover only projects worth more than US$1 million. In addition, projects of more than US$15 million are now routinely examined by the central bank to identify possible speculative flows (Foreign Investment Committee 2001).

term in 2000, President Lagos promised to eliminate the *encaje* permanently. The United States has already expressed its concern about the reintroduction of a capital reserve requirement and may insist on its complete removal during the FTA negotiations.

Trade in Services

A major area of innovation in NAFTA is the liberalization of both trade in goods and services. In regard to trade in services, NAFTA has made substantial progress using a negative list system. It applies national treatment to all service sectors unless they are specifically exempted. A separate chapter exists for services in the telecommunications market (Chapter 13) and for financial services (Chapter 14).

Chile's relatively open trade and investment regime stands in contrast to its relatively limited GATS commitments. In particular, Chile maintains limitations, applying to all sectors in Chile's GATS schedule, under which authorization for foreign investment in services industries may be contingent on a number of factors including employment generation, use of local inputs, and competition.

Chile made WTO commitments on basic telecommunication services, adopting the WTO Reference Paper on Regulatory Principles and ratifying the GATS Fourth Protocol in 1997, i.e., in the same year in which the negotiations were completed. Nonetheless, U.S. companies occasionally complain of regulatory delays (USTR 2000).

During the 1997 WTO financial services negotiations, which were completed in December of that year, Chile made commitments in all banking services together with securities and other financial services. However, Chile did not make commitments for asset management services, including the management of mutual funds or pension funds nor for financial information services. Chile also reserved the right to apply economic needs and national interest tests when licensing foreign financial service suppliers. In practice, Chile has allowed foreign banks to establish branches or subsidiaries and to provide the same range of services that domestic banks offer. Providers of securities and asset management services, including pension funds and

mutual fund management services, have been allowed to establish wholly owned subsidiaries in Chile (USTR 2000).

While Chile is generally open, an FTA with Chile based on the NAFTA treaty would still benefit the U.S. financial services industry by providing guaranteed access. The guarantee would go beyond that provided in the WTO. For example, an interesting growth area in Chile has been managing Chile's privatized pension system. U.S. firms are major players in that market, but Chile did not make any WTO market access commitments in that area. In the FTA negotiations, the United States will require Chile to further open up its service sector.

Government Procurement

Chile will not need to introduce any great changes in government purchases since its public acquisitions are guided by the principle of minimizing costs rather than protecting domestic industry. However, this principle should be explicitly incorporated into legislation and appeal mechanisms should be created to deal with cases of discrimination in assigning public tenders.

The signing and implementation of the WTO Agreement on Government Procurement, which was concluded in 1994, would constitute an important step toward stability and transparency in allocations in this sector. The Agreement on Government Procurement (GPA) is a plurilateral agreement in the WTO framework with only twenty-three WTO members as parties to it. Plurilateral means that the signing of the agreement is optional for WTO members.

Intellectual Property Rights

NAFTA establishes a high level of obligations with respect to intellectual property protection. Each country must provide adequate and effective protection, treat foreign applicants the same as their nationals, and provide effective enforcement of their rights. The Agreement sets out specific commitments regarding the protection of patents, trademarks, trade secrets, copyrights, plant breeder rights, industrial designs, and designs of integrated circuits.

NAFTA protects patents for a minimum of twenty years and will provide protection for patents in the approval process. In addition, NAFTA limits the countries' ability to impose compulsory licensing on patent holders. Initial registration of a trademark is for ten years, renewable for successive terms of not less than ten years. No country may limit the duration of protection for trade secrets. NAFTA protects literary works for fifty years and treats computer programs as literary works. It also gives copyright owners the right to prohibit the rental of their products.

While Chile's law on intellectual property rights fulfills TRIPS standards to a great extent, deficiencies exist. A distinction must be made between substantive law or rules and enforcement. While the level of substantive protection on trademarks and copyrights is satisfactory in general, there are some problems with compliance in all categories of intellectual property rights. The main problem is the low level of sanctions. During the FTA negotiations Chile will be under pressure to improve enforcement of its regulations.

Among the revisions that have to be made in Chilean legislation with respect to patents are the safeguards afforded for pharmaceutical products and processes. There is a lack of full pipeline protection for pharmaceutical products patented in other countries prior to the time product patent protection became available in Chile. Although Chile's trademark law is generally consistent with international standards, some U.S. trademark holders have complained of inadequate enforcement of trademark rights and inadequate industrial design protection. Chile's copyright law protection also has certain shortcomings. The Chilean law does not clearly protect computer software as a literary work, does not provide clear rental and import rights, and provides inadequate penalties. Despite active enforcement efforts, piracy of computer software and video recordings remain significant but among the lowest in Latin America (USTR 2000).

In late 1999, the Chilean government submitted an intellectual property rights bill to Congress to make Chilean intellectual property laws fully compliant with its WTO TRIPS commitments. However, this legislation was not passed prior to January 1, 2000, when Chile's TRIPS obligations came into effect. By mid-2001, the legislation was still not approved by the Chilean Chamber of Deputies. Chile belongs to the World Intellectual Property Organization (WIPO).

In conclusion, the Chilean government has made an effort to make Chilean intellectual property laws compliant with its WTO TRIPS commitments. However, deficiencies in intellectual property rights have kept Chile on the USTR Special 301 watch list since 1989. The United States explicitly asks Chile to strengthen its protection of intellectual property, both for U.S. pharmaceuticals and software. Chile has to make an effort to reduce video, music, and software piracy. There is concern on the U.S. side that penalties for convicted violators are too weak.

Appendix 4: Chile's Economic Situation and its Policies

Chile has attracted a great deal of attention for its successful economic performance in the 1990s. Chile has managed to consolidate its democracy after a peaceful transition from seventeen years of military rule in 1990. It has achieved the highest economic growth rates in Latin America and is regarded as the most stable and solid economy in the region. In 1999, GDP per capita reached US$4,505 at market exchange rates, or US$8,379 at purchasing power parity rates. Among Latin American countries, Chile has the highest per capita income except for Argentina and Uruguay (Foreign Investment Committee 2001). Today, Chile has not only one of the most open and strongest economies in Latin America but also one of the best social indicators. It has made progress in increasing education for its population and reducing poverty (World Bank 2000b).

The Chilean example is noteworthy. First, economic liberalization preceded political liberalization by more than a decade. In this respect, Chile was like Korea, Taiwan, or Thailand. By contrast, economic liberalization coincided with or was even led by political liberalization in other Latin American countries. Second, Chile has been a pioneer in advocating free trade and unilateral liberalization although it has not been a full member of any trade group.

Macroeconomic policy has contributed to Chile's fast and sustainable growth. From 1990 to 1998, the government continually achieved a fiscal surplus, which has been an important pillar in the solid image that the economy enjoys in world markets. The downturn of 1999 temporarily interrupted this trend, giving way to a fiscal deficit of 1.5% of GDP. But the government restored fiscal equilibrium by achieving a surplus of 0.1% in 2000 and forecasts a deficit of about 0.5% of GDP for 2001. A high savings rate, averaging 21.4% of GDP in the 1995-99 period, as well as high investment rates and fast productivity growth have also contributed to Chile's strong growth (Banco Central de Chile 2001).

Chile's central bank has developed a sound monetary policy by targeting real interest and exchange rates. In September of 1999, the independent central bank dropped its exchange rate band and moved to a freely floating exchange rate system. This is a major change from the previous policy that sought to keep the peso/dollar rate within

pre-set parameters. The central bank maintains its policy of balancing growth and inflation via short-term interest rate manipulation and intervention in the currency markets, but has pledged to use those tools sparingly.

Inflation has fallen consistently for the past ten years, declining from 27.3% in 1990 to 2.3% in 1999. In October 1994, for the first time over three decades, the Chilean economy achieved a single-digit inflation rate of 9%. Price stability has been achieved thanks to the rigorous monetary policy applied by the central bank, as well as by disciplined and balanced fiscal management. The continuous downward trend in inflation was interrupted in 2000 – when the consumer price index rose 4.5% – primarily as a result of the sharp increase in the international oil price. Nevertheless, the central bank estimates that inflation will fall to 3.4% in 2001, to 2.9% in 2002, and in the following years it should remain within the 2-4% range that constitutes the bank's medium-term target for consumer price changes (Banco Central de Chile 2001).

Chile's financial system is strong and has low levels of risk. The strength and solvency of its capital markets are important features of Chile's economic stability. The growth of Chile's capital markets and savings levels has been due, to a large extent, to the privatization of the national pension system. The traditional system managed by the government was replaced with a privately managed system of individual capitalization starting in 1981.[92] As a result, the national level of savings has increased significantly, adding depth to Chile's capital markets and favoring a more efficient allocation of resources for investment and savings. Chile showed pioneering commitment to the privatization of the pension system and led Latin America's movement toward comprehensive privatization.

From 1987 to 1999 the workforce grew at an annual average rate of 2.4%. Over the same period, the annual growth of employment was even higher and reached 2.5%, contributing to a persistent fall in unemployment from 9.8% in 1987 to 6.2% in 1998. As a consequence of the economic slowdown and of productivity-enhancing measures

[92] Each affiliated citizen has his own personal account. Private administration companies administer the funds. The benefactor elects his administrator company and can transfer from one company to another at any point in time after a minimum of six months with a company. The companies that manage these pension funds compete for savings deposits. After a mandatory minimum deposit of a certain percentage of their salaries, workers can decide for themselves what percentage of their income they wish to place in pension funds.

taken by many firms to offset the impact of the sharp contraction in domestic demand, unemployment rose to 9.7% in 1999. With the resumption of growth, it declined to an average of 9.4% in 2000 and is estimated to remain about the same in 2001. The rapid expansion of employment in the 1990s and the simultaneous and persistent fall of inflation contributed to a 40% increase in real wages between 1990 and 1999. Because labor productivity grew some 51.5% during this period, the rise in real wages did not generate any inflationary pressures (Banco Central de Chile 2001).

In 2001, Chile was ranked thirteenth out of 155 countries in terms of economic freedom in the index of economic freedom published by the Heritage Foundation (Heritage Foundation 2001). Argentina, Peru, Mexico, and Brazil were ranked between twenty-first and thirty-first place. In 2001, Chile was also the least corrupt country in Latin America, and its standards on this score were better than those of countries such as Japan, Spain, and France, according to the 2001 corruption perception index of Transparency International (Transparency International 2001).[93] Chile has simple and transparent regulatory systems for trade and investment. The transparency of these regulations and the predictability of its decision-makers contribute to its economy's strength and attractiveness. Chile has employed a strong rule of law to create an enabling environment for businesses. Prudent economic policy-making has secured long-term stability unknown elsewhere in Latin America

In conclusion, Chile has solid macroeconomic data, but still needs to fully recover from the 1999 recession. Economic growth has resumed, while unemployment remains at a high level. Argentina's economic crisis and the worldwide economic slowdown in 2001 have also affected Chile, but to a lesser extent than the other countries in the region. Chile’s socioeconomic performance has improved over the last decade and Chile is among the best in Latin America in fostering human development, combining economic achievements with education and health standards, and improving equity in income distribution.

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[93] Chile ranks eighteenth among the ninety-one economies evaluated in the 2001 corruption perception index, maintaining the same position it held in the year 2000 index. Among emerging economies, the country was ranked in third place after Singapore and Hong Kong. Transparency International’s corruption perception index ranks countries in terms of the degree to which corruption is perceived to exist among public officials and politicians. Each country’s score is an average of results from surveys carried out among business people, think-tanks, and country-risk analysts (Transparency International 2001).

Appendix 5: Association versus Accession to Mercosur

Mercosur, the Southern Cone Common Market, was created as a CU in March 1991 with an agreement between Argentina, Brazil, Paraguay, and Uruguay. The four countries agreed on (i) a schedule to eliminate tariffs and non-tariff barriers among the four member countries; (ii) establishment of a CET; (iii) harmonization of norms and legal frameworks related to foreign trade; and (iv) a coordination of sector and macroeconomic policies. The CU became effective on January 1, 1995.

Since the possibility of NAFTA accession became very remote after the mid-1990s, Chile explored other options for expanding exports. One possibility was to join Mercosur as a full member. Membership in Mercosur was very attractive for Chile because of the common market's economic size, its proximity, the bilateral trade pattern, its high and escalated tariff structure, and large number of non-tariff trade barriers. Although joining Mercosur would have allowed Chile to take full advantage of these benefits, there are several reasons why Chilean authorities hesitated to join Mercosur as a full member.

First, these countries have not been able to attain macroeconomic stability. For Chile, macroeconomic stability is an established economic goal, and any trade arrangement should ensure that macroeconomic stability is not at risk. The economic problems in Argentina in 2001 and their effect on Brazil have proven the instability of the participating economies. Second, Mercosur countries have agreed to have a CET with a higher maximum rate than Chile's uniform tariff level. Chile experienced the costs of deep structural changes when it began to open to international markets in the 1970s and is not willing to face a drastic change in either relative prices or long-run incentives. A change in tariffs towards third countries would cause structural adjustment costs. Furthermore, adopting the CET would eliminate Chile's trade policy independence towards third countries. It would make it impossible for Chile to negotiate a bilateral FTA with other countries such as with the United States. Full accession to Mercosur would leave no tool for reducing trade diversion in the event that it exceeds anticipated levels in the integration process with Mercosur (Labán and Meller 1997).

Despite the disadvantages and problems associated with joining Mercosur, the enormous possibilities the market offers cannot be disregarded. Argentina and Brazil are the main destinations for Chilean exports within Latin America, and these countries impose higher levels of protection than the United States. However, in 2000, exports to Brazil and Argentina accounted for only 5.3% and 3.5% of Chile's total exports, respectively, as illustrated in Figure 5 (p. 38). But the two countries are important export destinations because of the type of products they import. Mercosur constitutes the main export market for Chilean manufactured products. Chilean supply capabilities are more in line with the quality requirements of these markets than of those of developed countries, and proximity to markets is also a factor in favor of exports from Chile. However, trade barriers, poor transport links, and almost non-existent infrastructure have prevented the emergence of more significant trade flows among the countries in the region. But once trade barriers begin to come down, investments in infrastructure improvements between Chile and Mercosur might occur and trade flows would increase.

Given the trade potential with Mercosur, it has been important for Chile to design a strategy that takes full advantage of the markets of Argentina and Brazil and, simultaneously, minimizes the costs mentioned earlier. The central issue was to achieve preferential access to these markets without having to adopt the CET. The issue was solved by signing an economic complementation agreement with Mercosur in June 1996, which became effective in October of the same year.

The agreement with Mercosur foresees the creation of a free trade zone by eliminating tariff and non-tariff restrictions affecting reciprocal trade. Both sides gradually eliminate tariffs on imports, with some exceptions, over a period of eight years. Sensitive products such as some manufactured goods, including textiles and metal products, have a phased-in, ten-year tariff reduction with no changes in the first four years. Chile's main concern during the negotiations was to protect its traditional farming sector. It wanted farm goods, such as wheat, meat, and dairy products, to be permanently excluded, but it eventually agreed to a tariff phase-out period of eighteen years. The tariff elimination program will thus be completed by 2014. The agreement also covers aspects related to investment, services, intellectual property, and scientific and technological cooperation.

The FTA with Mercosur is an important component of Chile's export strategy, oriented toward increasing the value-added of its natural resources. The agreement, in which Chile maintains its independence vis-à-vis its trade policy, ensures a greater degree of diversification, both in terms of markets as well as products. Besides increase in foreign trade, the FTA has accelerated the flow of foreign investment in the industrial and service sector from the region, especially from Argentina.

Chilean President Lagos has reconsidered a full integration into the Mercosur at the beginning of 2000. However, the macroeconomic problems within Mercosur, Argentina's continuing recession in 2001, the uncertainty of the future of the CU, and the unwillingness of its member countries to accept the exceptions Chile asks for, make it unlikely that Chile will decide to become a full member of the CU.

Appendix 6: Bilateral and Regional Trade Agreements Signed by Chile

Country / Trading Bloc	Status	Type of Agreement
Mexico	Signed in September 1991. In force since January 1992.	Economic complementation agreement.
Venezuela	Signed in April 1993. In force since July 1993.	Economic complementation agreement (covers trade in goods). By 2000, it had liberalized 99.4% of Chilean exports to Venezuela.
Bolivia	In force since July 1993.	Partial scope agreement covering a specific number of products.
APEC	Member of APEC since November 1993. Consists of twenty-one members, developing and industrial countries of Asia, the Pacific region, and the Western Hemisphere.	Institutional arrangement with an agenda for economic cooperation and trade liberalization in a WTO-consistent way.
Colombia	Signed in December 1993. In force since January 1994.	Economic complementation agreement (covers trade in goods). By 2000, it had liberalized 97.3% of Chilean exports to Colombia.
Ecuador	In force since January 1995.	Economic complementation agreement (covers trade in goods). In 2000, it allowed 93.5% of Chilean goods to enter Ecuador tariff-free.
European Union	Framework Agreement on Economic Association, Political Dialogue and Cooperation signed with the European Union in June 1996.	Framework agreement to prepare for gradual and reciprocal trade liberalization.
Mercosur	Signed in June 1996. In force since October 1996. Tariff elimination programs under way: process will be completed in 2014 for the most sensitive products.	Associate member of Mercosur. Other associate member is Bolivia. Trade in goods. Covers aspects related to services, investment, intellectual property, and scientific and technological cooperation.
Canada	Signed in November 1996. In force since July 1997. Tariff elimination programs under way: process will be completed in 2014 for the most sensitive products.	Based on NAFTA. Trade in goods and services, investment, and establishment of a dispute settlement system. Environmental and labor side agreements.

Country / Trading Bloc	Status	Type of Agreement
Peru	In force since July 1998.	Economic complementation agreement (covers trade in goods). By 2000, it had liberalized 47.7% of Chilean exports.
Mexico	In force since August 1999. Replaced the 1992 Economic Complementation Agreement.	Based on NAFTA. Trade in goods and services, investment, establishment of dispute settlement system, intellectual property rights, technical standards, sanitary and phytosanitary measures.
CACM	Signed with countries of Central American Common Market in October 1999. Approved by the Chilean Chamber of Deputies in March 2001 and by the Senate in August 2001.	Based on NAFTA. All trade issues, notably market access, technical obstacles to trade, investment, and services.

Source: Based on INTAL (1999); Direcon (2000a).

Appendix 7: Chile's Principal Export Sectors

Chile's main export sectors are mining, agriculture and agroindustry, fishing, and forestry. Together they accounted for 85.9% of Chile's total exports in 1999. Mining was the dominant export sector with a share of 43.1% in total exports and 10% of GDP, while that of copper alone was 37%. In 1970, copper even accounted for 78.8% of exports, while non-copper mining accounted for 9.9%. Since 1979, copper's relative market share has been in decline (Banco Central de Chile 2001). Other important mining exports are gold, nitrates, molybdenum, iron, and silver. The following table illustrates the sectoral composition of total Chilean exports.

Table 4: Sectoral Composition of Chilean Exports (1996-1999)

(In Percentages)		**1996**	**1997**	**1998**	**1999**
Mining	Copper	39.2	40.2	36.2	37.0
	Others	7.0	8.3	5.2	6.1
	Total mining	46.2	48.5	41.4	43.1
Agriculture[1]		18.7	16.7	20.9	19.5
Forestry[2]		10.9	10.5	10.8	12.1
Fishing[3]		11.4	10.9	11.4	11.2
Industry[4]		12.1	12.9	14.9	13.5
Others		0.7	0.5	0.6	0.6
Total Exports		100.0	100.0	100.0	100.0

Note : [1] Includes agroindustrial products.
[2] Includes processed derivatives such as wood pulp.
[3] Includes processed fishing products such as fishmeal.
[4] Other industrial products such as chemicals and plastics.
Source: Based on data from Direcon (2000a).

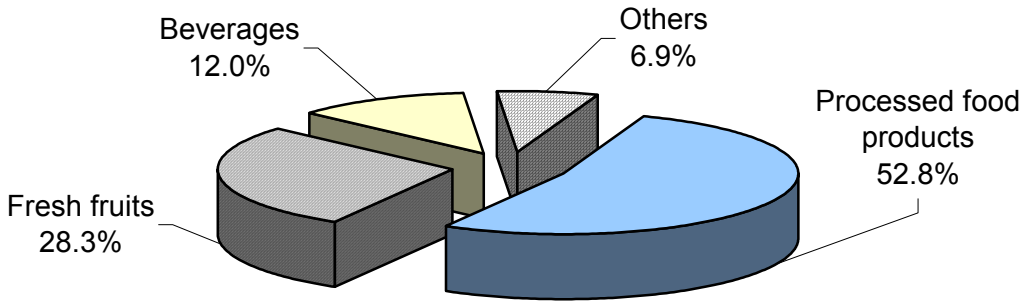
Despite progress in export diversification, the share of copper has stopped decreasing in the 1990s, reversing a decade-long trend. The reversal of this trend is due partly to the introduction of new technological processes which have increased output. As a result, Chile's share of world copper output has been growing. In 1999, Chile produced 35.4% of the world's copper supply and is the world's leading supplier (ProChile 2001). Copper will continue to play a major role in generating export

earnings. However, copper exports have been subject to high fluctuations in international copper prices.

The recession at the end of 1998 and in 1999 highlighted Chile's extreme sensitivity to fluctuations in the international copper price. Although the copper stabilization fund has proven to be a useful mechanism for mitigating the effect of copper price fluctuations, its impact is limited.[94] Sluggish demand for copper in Asia, Chile's top export destination for copper, contributed to copper prices reaching a thirty-year low in 1999. At this time, copper was worth only half of its 1989 value (Banco Central de Chile 2000).

Agriculture is Chile's second most important export sector, accounting for 19.5% of total exports in 1999. Fresh fruits, especially grapes and apples, are Chile's second largest export products behind copper. Chile also produces high quality vegetables that are exported around the world, with garlic and asparagus leading the way (ProChile 2001). The country's geographic position allows it to offer fruit and vegetable products to the Northern Hemisphere when their own period of harvest is over. The following figure breaks down the composition of Chile's agricultural and agro-industrial exports.

Figure 20: Composition of Chilean Agricultural Exports (1999)



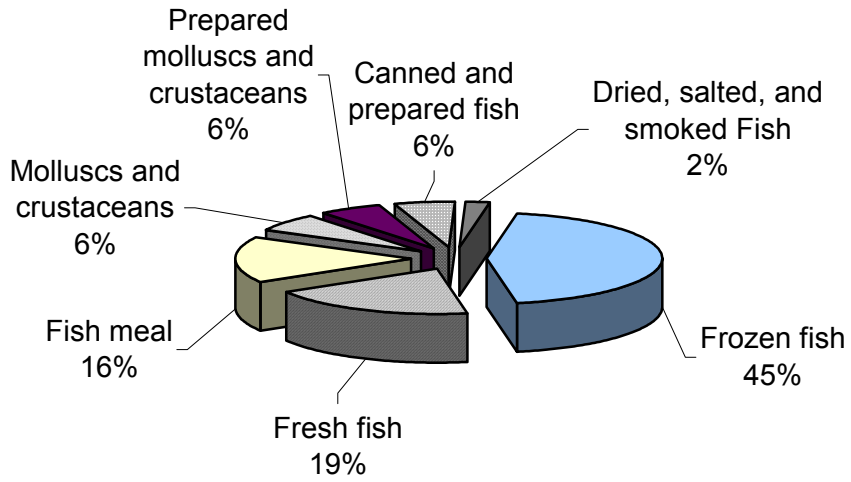
Source: Based on data from ProChile (2001).

[94] Chile's copper stabilization fund aims primarily at stabilizing fiscal revenues. At the beginning of each year the budget office sets a reference price. Withdrawals or deposits are made quarterly as a step function of the deviation between actual and reference prices. The largest yearly net deposit to the fund occurred in 1995 and amounted to 5% of fiscal revenues when the price of copper exceeded its average of the 1985-99 period by 22%. The largest yearly net withdrawal occurred in 1998 and amounted to around 1.5% of fiscal revenues when the copper price was 36% below the average (Caballero 2000).

Besides fresh fruits and vegetables, Chile's agricultural exports are composed of processed food products, in particular canned fruits and vegetables. Twenty years ago, the processed food product industry in Chile was a minor contributor to total economic activity. In 1999, it accounted for more than half of all agricultural exports (ProChile 2001).

The Chilean *fishing sector* was one of the big beneficiaries of Chile's economic policies in the 1970 and 1980s which encouraged investment. Chile's fish and seafood exports represented 11.2% of total exports in 1999. Chile has become the world's second largest producer of salmon, behind Norway. In 1999, salmon sales accounted for 3.9% of the country's total exports and 34.8% of fishing industry export revenue. Virtually all of Chile's total fish exports are frozen or fresh salmon. Chile is also the world's second largest producer of trout and the world's principal exporter of fishmeal (Direcon 2000a). The figure below shows the composition of Chile's fishing export sector.

Figure 21: Composition of Chilean Fishing Sector Exports (1999)



Source: Based on data from ProChile (2001).

Forestry exports have also expanded in recent years and accounted for 12.1% of total exports in 1999. Chile's largest forestry export to the world is chemical wood pulp. Other important forestry exports include lumber, wood chips, wood fiberboard, newsprint, and wooden furniture parts (Direcon 2000a).

The overview of Chile's principal export sectors illustrates that until recently, most of Chile's exports were based on mining. Over the past few years, the composition of Chilean exports has shifted. The rate of increase in processed natural resource exports has been much higher than that of unprocessed natural resources. Chile has high export growth potential in agroindustrial goods, fishing, and forestry products.

Appendix 8: Rules of Origin under NAFTA

NAFTA provides preferential treatment to originating products, i.e., to products that meet the NAFTA rules of origin. Chapter 4 of the agreement establishes the rules for determining which goods originate in NAFTA countries, and are therefore eligible for duty-free treatment. There are four ways to qualify for such preferential treatment (Senti 1996: 49-53):

1. **Goods wholly NAFTA-produced**. A product will qualify for NAFTA origin if it is wholly obtained or produced in a NAFTA country, or produced in a NAFTA country exclusively from originating materials. Such products include animals, minerals, vegetables, and marine life from North America and products made in North America exclusively from such products.

2. **Goods which incorporate non-NAFTA components**.
   - A product that uses materials imported from a non-NAFTA country may qualify for NAFTA benefits if the imported materials are sufficiently processed in North America and undergo a change in tariff classification. The change of tariff classification rule requires that each of the non-originating materials, which are used to make a product claiming NAFTA preference, must satisfy a specified change in tariff classification as a result of production occurring entirely in a NAFTA country.
   - In cases in which no change in tariff classification occurs because a tariff category covers a finished good and its parts or because an imported assembly is classified as a finished good, a product may nevertheless qualify for a NAFTA treatment provided that a minimum regional value content rule is satisfied, i.e., either 50% of the net cost or 60% of the transaction value of the finished product.
   - The value of all non-NAFTA materials used in the production is not more than 7% of the value of the product.

If a producer processes a non-originating material into an intermediate material and the processing at that stage is sufficient to qualify the good as originating, the full value of

the intermediate material is treated as an originating good when estimating the regional value content of the downstream good by another producer. This rule permits the "roll up" of non-NAFTA contents into domestically made products and equalizes the treatment of integrated and non-integrated producers (Senti 1996).

The NAFTA rules of origin impose stricter conditions than those prevailing under CUSFTA. The required regional content is higher and the calculation procedures have been changed to ensure that certain critical inputs in the manufacturing process are made in North America in order for the final product to qualify for duty-free treatment. The NAFTA rules of origin generally require greater use of North American materials and production and greater processing on non-NAFTA materials and components than the CUSFTA rules do.

Appendix 9: Top Fifty U.S. Imports from Chile

Table 5: Top Fifty U.S. Imports from Chile (1999 and 2000 Year-to-Date)

U.S. imports for consumption from Chile, customs value, in thousands of U.S. dollars and percentages of total U.S. imports from all sources.

HS Number and Description	2000 Tariff Rate	U.S. Imports from Chile Full-Year 1999 (US$1000)	Chile's Share of Total U.S. Imports	U.S. Imports from Chile Jan.-July 2000 (US$1000)	Chile's Share of Total U.S. Imports
Duty-Free on MFN Basis	–	1,371,401	–	877,734	–
0304.10.40 Fillets and other meat portions of other fish, fresh or chilled	Free	200,768	48.5%	161,632	51.6%
7402.00.00 Unrefined copper; copper anodes for electrolytic refining	Free	160,198	35.1%	74,494	30.5%
4409.10.40 Standard wood moldings of pine continuously shaped	Free	153,001	37.2%	86,172	37.0%
4407.10.00 Coniferous wood sawn or chipped lengthwise, sliced or peeled, of a thickness exceeding 6 mm	Free	142,935	1.9%	88,095	2.1%
7108.12.10 Gold, nonmonetary	Free	68,306	3.4%	47,795	4.4%
0304.20.60 Frozen fillets of fresh-water fish, flat fish, etc.,	Free	60,225	10.7%	41,024	10.8%
1005.10.00 Seed corn (maize)	Free	58,566	47.9%	81,899	60.6%
7106.91.10 Silver bullion and dore	Free	57,723	10.8%	11,938	2.7%
2801.20.00 Iodine	Free	54,227	65.9%	28,675	71.6%
2009.70.00 Apple juice, concentrated or not concentrated	Free	46,879	20.6%	18,892	10.8%
0809.30.40 Peaches, including nectarines, fresh, if entered December 1 to May 31	Free	41,736	99.6%	30,133	98.7%
0806.10.40 Grapes, fresh, entered during April 1 to June 30	Free	41,305	17.0%	45,766	24.4%
0808.10.00 Apples, fresh	Free	28,666	25.7%	22,251	30.3%
0302.69.40 Fish, excl. fillets, livers and roes, fresh or chilled	Free	25,563	15.5%	15,089	13.4%

HS Number and Description	2000 Tariff Rate	U.S. Imports from Chile Full-Year 1999 (US$1000)	Chile's Share of Total U.S. Imports	U.S. Imports from Chile Jan.-July 2000 (US$1000)	Chile's Share of Total U.S. Imports
0809.40.20 Plums, prunes and sloes, fresh, entered January 1 to May 31	Free	25,174	99.7%	20,125	97.6%
4411.29.30 Fiberboard of a density 0.5-0.8 g/cm 3, for construction uses	Free	23,071	79.0%	7,805	62.6%
8001.10.00 Tin (other than alloy), unwrought	Free	21,144	8.4%	9,894	6.4%
2501.00.00 Salt & pure sodium chloride, whether or not in aqueous solution or cont. added anticaking or free-flowing agents	Free	20,595	15.1%	10,187	14.2%
9403.90.70 Parts of furniture (other than seats or other than of 9402), of wood	Free	18,944	4.0%	14,883	4.6%
0810.50.00 Kiwi fruit, fresh	Free	18,770	47.6%	11,534	48.7%
3102.50.00 Sodium nitrate	Free	18,310	97.4%	10,747	97.6%
9403.60.80 Furniture of wood (other than bentwood)	Free	13,822	0.5%	5,660	0.3%
0302.12.00 Pacific, Atlantic and Danube salmon, fresh or chilled, excluding fillets, other meat portions, livers and roes	Free	12,993	4.1%	7,837	4.3%
0302.69.20 Smelts, cusk, hake, etc. excl. fillets, livers & roes, fresh or chilled	Free	12,947	16.6%	7,885	14.9%
0808.20.20 Pears and quinces, fresh, entered during April 1 to June 30	Free	10,031	31.4%	4,649	23.6%
9403.50.90 Furniture (other than seats) of wood, used in the bedroom & not designed for motor vehicle use	Free	9,251	0.8%	7,014	0.9%
6809.11.00 Panels, boards, sheets, tiles and similar articles of plaster	Free	9,006	3.1%	769	0.9%
7404.00.60 Copper, waste and scrap containing 94% or more copper	Free	8,855	10.9%	564	1.0%
0303.79.40 Fish, frozen, excluding fillets, other meat portions, livers and roes	Free	8,390	7.6%	4,326	6.9%

HS Number and Description	2000 Tariff Rate	U.S. Imports from Chile Full-Year 1999 (US$1000)	Chile's Share of Total U.S. Imports	U.S. Imports from Chile Jan.-July 2000 (US$1000)	Chile's Share of Total U.S. Imports
Dutiable, GSP-Eligible	–	205,087	–	142,896	–
7403.19.00 Refined copper, unwrought articles*	1.0%	49,474	47.5%	28,086	44.5%
2905.11.20 Methanol not for direct use as a fuel**	10.5%	44,900	17.5%	48,081	20.4%
4418.90.40 Builders' joinery and carpentry of wood, including cellular wood panels	3.2%	24,056	2.8%	5,805	1.3%
2836.91.00 Lithium carbonates*	3.7%	18,736	90.2%	12,656	89.3%
4011.10.10 New pneumatic radial tires, of rubber, used on motor cars	4.0%	14,443	0.8%	6,687	0.5%
4412.19.40 Plywood of wood sheets, n/o 6 mm thick, outer plies of coniferous wood	8.0%	13,083	15.2%	4,830	14.1%
4418.20.80 Doors of wood, other than French doors	4.8%	11,937	4.1%	9,676	4.8%
8112.91.50 Rhenium, unwrought; rhenium, powders***	3.0%	11,185	80.1%	8,352	93.4%
1209.91.80 Vegetable seeds, of a kind used for sowing	0.1%	9,220	12.6%	13,666	30.8%
6910.90.00 Ceramic sinks, wash-basins, baths, bidets, water closet bowls, etc.	5.7%	8,053	4.2%	5,057	4.5%
Dutiable, Not Designated for GSP	–	460,040	–	361,178	–
0806.10.60 Grapes, fresh, entered during July 1 to February 14	0.3%	178,551	90.7%	124,832	94.2%
2204.21.50 Wine not over 14% alcohol, in containers not over 2 liters	1.30%	113,760	7.8%	73,032	8.1%
0806.10.20 Grapes, fresh, if entered during February 15 to March 31	0.30%	84,880	86.1%	144,332	92.7%
0804.40.00 Avocados, fresh or dried	8.50%	38,546	53.2%	715	4.1%
2002.90.80 Tomatoes prepared or preserved not by vinegar or acetic acid	11.60%	26,067	42.6%	248	3.0%

HS Number and Description	2000 Tariff Rate	U.S. Imports from Chile Full-Year 1999 (US$1000)	Chile's Share of Total U.S. Imports	U.S. Imports from Chile Jan.-July 2000 (US$1000)	Chile's Share of Total U.S. Imports
0808.20.40 Pears and quinces, fresh, entered during July 1 to March 31	0.30%	10,246	22.2%	12,746	26.9%
0806.20.10 Raisins, made from dried seedless grapes	1.50%	7,990	28.5%	5,273	49.5%
Dutiable, Chile Excluded from GSP	–	215,646	–	195,776	–
7403.11.00 Refined copper cathodes and sections of cathodes	1.00%	180,102	14.9%	195,776	20.6%
2603.00.00 Copper ores and concentrates	[special case]	35,544	43.3%	0	0.0%
Special Transactions	–	92,452	–	71,246	–
9801.00.10 U.S. goods returned without having been advanced in value or improved in condition while abroad	–	80,392	0.3%	63,148	0.3%
9999.95.00 Informal entries under $1251	–	12,060	0.1%	8,098	0.1%
Subtotal:		2,344,624		1,648,829	
All Other:		478,698		342,761	
Total:		2,823,322		1,991,590	

Notes: Tariff rates shown in underline are the ad valorem equivalents for products that are subject to specific tariffs.

* : Product for which Chile has a competitive-need waiver.

** : Product for which Chile unsuccessfully sought a competitive-need waiver.

*** : Product for which Chile has previously received de minimis waivers.

Sources: Own calculations from USITC data (2000).

Appendix 10: Environmental and Labor Provisions in NAFTA

1. Environmental Provisions

Concern was expressed that NAFTA might result in environmental degradation due to the inadequate enforcement of environmental regulations in Mexico and to the possible shift of investment to Mexico to avoid the more stringent and costly regulations in the United States and Canada. The pressure of environmentalists forced the governments to include environmental provisions. NAFTA is the first international trade agreement that includes explicit provisions with respect to the environment. The objective of the NAFTA package – the NAFTA agreement and the side agreement – is to control the potential distortions to trade flows that can be caused by disparate levels of environmental protection and law enforcement. The aim of the environmental provisions is also to include environmental protection within the list of goals that should be advanced by trade liberalization efforts.

(a) Environmental Provisions in the Principal Text of NAFTA

The agreement states that each member country is responsible for reviewing its existing environmental legislation and controlling its implementation. NAFTA does not contain provisions to upgrade the enforcement of existing standards or to adopt enhanced standards.

The preamble to the treaty declares that the treaty is based on the principle of increasing the competitiveness of Mexican, Canadian, and U.S. companies in a way that is consistent with the protection and conservation of the environment. It commits the three signatories to promoting sustainable development and strengthening the development and enforcement of environmental laws and regulations. In addition, the principal text explicitly addresses environmental issues in four chapters (NAFTA Secretariat 1993).

Chapter 1 states that obligations resulting from international environmental treaties previously signed precede obligations from NAFTA. They make it possible to impose

commercial sanctions on those countries that do not comply with them. The following five treaties are specifically mentioned:

- Montréal Protocol on Substances that Deplete the Ozone Layer (1987)
- Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal (1989)
- Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES, 1973)
- Environmental Agreement between the United States and Canada (1986)
- Environmental Agreement between the United States and Mexico (1983)

NAFTA Chapters 7 and 9 concern sanitary, phytosanitary and general standards with which NAFTA pursues the objective of protecting the life and health of humans, animals and plants. Each NAFTA country has the right to determine its own level of protection which it considers appropriate within its territory. Thus, NAFTA respects the environmental preferences of each country and permits a country to ban all non-conforming imports, as long as the country's standards are non-discriminatory and respect both the national treatment and the MFN principles, i.e., the standards are applied equally to national products or other imports and are not implemented solely to give domestic producers a commercial advantage. NAFTA states that the parties can enact standards stricter than those at the international level. This intends to prevent pressures to harmonize standards towards the bottom. Thus, NAFTA gives privilege to the decisions of each country.

U.S. critics of NAFTA, particularly organized labor, have long claimed that the agreement will encourage U.S. and Canadian companies to move south to take advantage of Mexico's lax environmental regulations and enforcement practices. Responding to this fear, NAFTA Chapter 11 on investment states that the parties recognize that it is inappropriate to encourage investment by relaxing domestic health, safety, or environmental measures (Hufbauer und Schott 1993).

Although the inclusion of environmental provisions into NAFTA is a unique feature of this trade agreement, environmental groups questioned the effectiveness of these measures. The main point of criticism was that NAFTA contained no provisions to

address lax enforcement of domestic environmental laws. NAFTA's dispute resolution mechanism in Chapter 20 does not provide for any sanctions or punishment in the case of an environmental dispute. As a result, the North American Agreement on Environmental Cooperation (NAAEC) was negotiated one year later independently of NAFTA.

(b) North American Agreement on Environmental Cooperation (NAAEC)

The NAAEC obliges member countries to enforce their environmental laws and to fulfill certain environmental tasks, such as releasing pertinent information relative to the environmental status or promoting the use of environmentally sound instruments. These are all promises but not obligations, which means that the enforcement depends on political pressures. The NAAEC states that a country can denounce another member country that does not comply systematically with its own domestic process standards (NAFTA Secretariat 1993).

The agreement established a Commission for Environmental Cooperation consisting of a council, a secretariat and consultative working groups. Any organization or individual can make a complaint, known as a submission, to the secretariat alleging a party's failure to effectively enforce its national environmental laws. Submissions can be raised on a wide variety of issues, including process standards, but the alleged failure must be trade-related or involve competing goods or services. A violation of standards is ultimately defined as a persistent pattern of failure to effectively enforce domestic environmental law. If the consultation between two parties remains unresolved, the complaining party can request a meeting of the council. If the council cannot resolve a dispute, an arbitration panel can be established by ministerial decision of two countries out of three. Penalties can be imposed on an offending party only by an arbitration panel and only after a lengthy and cumbersome quasi-legal process.[95] The panel will determine a fine and if the party does not pay the fine assessed by the dispute panel, trade sanctions will be applied (NAFTA Secretariat 1993).

[95] Bergsten and Schott (1997) argue that the dispute settlement process in the environmental and labor side agreements is deliberately convoluted. Mexico and Canada resisted the incorporation of dispute provisions in the side pacts and only accepted a compromise process that was long on consultation and short on adjudication.

2. Labor Provisions

Special fears in the United States and Canada concerning NAFTA included a possible fall in wages, welfare losses from significant reallocation of labor from labor-intensive to capital-intensive sectors, and possible capital relocation to Mexico due to lower wages and more lax labor standards.

Although the initial NAFTA treaty did not address labor issues, they were introduced in the labor side agreement known as the North American Agreement on Labor Cooperation (NAALC). This side agreement was negotiated in response to concerns of unions and worker organizations that NAFTA itself did little or nothing to protect workers or to enforce labor regulation.

The basic objective of the NAALC is to encourage compliance with labor laws and settle labor disputes between the partner countries. The NAALC recognizes that each NAFTA country has autonomous and distinct labor legislation, but the agreement requires each country to enforce its own regulations. The strengthening of legislation is aimed first at the tradable goods production sectors, as non-compliance with standards in this sector might affect trade flows between member countries. Second, it relates specifically to three types of labor regulations: minimum wages, child labor, and labor health and safety standards. Action can be taken only when there is evidence that some of these mutually recognized standards are persistently being abused. Disputes have to be resolved in accordance with a strict and lengthy procedure. If it is not possible to resolve disputes through discussion and consultation, an arbitration panel can be convened. Fines are imposed on governments (not firms) for non-compliance with national standards. The possibility of suspending NAFTA tariff benefits, by an amount equal to the fine, is contemplated only if monetary sanctions are not respected (NAFTA Secretariat 1993).

The signing of the NAALC makes member countries commit themselves to promoting a set of labor principles such as the freedom of association, the right to bargain collectively, the right to strike, prohibition of forced labor, labor protection for children, minimum employment standards, elimination of employment discrimination, equal pay for women and men, prevention of occupational injuries and illnesses and compensation if they occur, and protection of migrant workers.

The institutional framework on which the agreement rests consists of a tri-national commission known as the Commission for Labor Cooperation, consisting of a council of ministers and a secretariat assisted by groups of national experts. In addition, each country set up a national administrative office that is responsible for collecting domestic information and conveying it to the other two NAFTA parties (NAFTA Secretariat 1993).

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