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CHILE'S TRADE POLICY: AN ASSESSMENT

Maurice Schiff
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Resumen

Este trabajo revisa algunos de los principales hallazgos de la investigación reciente sobre aspectos de la política, economía y economía política de la integración regional, y examina las políticas comerciales y de integración regional de Chile. Se concluye que i) Chile debe probablemente obtener beneficios estáticos y dinámicos de un Acuerdo de Libre Comercio (ALC) con EE.UU., aunque dichos dependen fundamentalmente de la medida en que su acceso de mercado a los EE.UU. mejore, del costo de implementar acuerdos de derechos de propiedad intelectual, y del costo de las reglas de origen; ii) los beneficios son más dudosos respecto a ALCs con el MERCOSUR, el Pacto Andino y países centroamericanos; iii) Chile está negociando con la Unión Europea y debería empezar también a negociar ALCs con países asiáticos; iv) Chile debería bajar todos sus aranceles fijados en la OMC a la tasa uniforme NMF aplicada (igual a 6% en 2003); y v) el arancel uniforme NMF debería ser reducido por debajo del 6% después del año 2003.

Abstract

This paper reviews some of the main findings of recent research on the politics, economics and political economy of regional integration, and assesses Chile's trade and regional integration policies. It concludes that i) Chile is likely to obtain static and dynamic benefits from a FTA with the US, though the benefits depend crucially on the extent to which its market access to the US improves, and on the cost of implementing the intellectual property rights agreement and on the cost of the rules of origin; ii) benefits are more doubtful with respect to FTAs with MERCOSUR and Andean Pact and Central American countries; iii) Chile is negotiating with the EU and should start negotiating FTAs with Asian countries; iv) it should bind all its tariffs at the WTO at the applied MFN uniform tariff rate; and v) the uniform MFN tariff should be reduced below 6% after 2003.

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1. Introduction

The world has witnessed a veritable explosion of regional integration agreements (RIAs) in the last fifteen years. More than half of world trade now occurs within actual or prospective trading blocs. And nearly every country in the world is either a member of—or discussing/negotiating participation in—one or more RIAs.

The field of international trade has a number of standard theorems. On the other hand, because regionalism entails second-best type policies, no general theorems exist, and it is not possible to state *a priori* whether a RIA is beneficial or not. Answering such a question requires detailed empirical analysis. Nevertheless, some recent research (including World Bank, 2000; Schiff and Winters, forthcoming) has led to general recommendations on how to maximize gains or minimize losses, and on issues that policy-makers need to keep in mind when considering joining or forming a RIA.¹

The recent proliferation of RIAs differs from that of the earlier wave (following the formation of the European Economic Community or EEC) in two ways. First, it has been undertaken in a global environment that is more liberal, with many developing countries liberalizing their trade policies unilaterally before or together with forming or joining an RIA. Second, past RIAs were either of the South-South or North-North type, while the recent wave of agreements also includes North-South (and East-West) RIAs.

Chile started the process of opening up its economy through unilateral trade liberalization (UTL) in the 1970s. It proceeded to negotiate a number of regional--both bilateral and plurilateral--agreements in the 1990s. It has also participated in the

¹ Also, in order to assess the costs and benefits of RIAs, one needs to specify the counterfactual situation, or what Europeans refer to as the *anti-monde*. For instance, the situation under a RIA can be compared to i) the status quo ante, ii) a situation where all variables follow their pre-RIA trend, iii) unilateral liberalization, iv)

multilateral trade liberalization (MTL) process, and in groups with common interests at the WTO such as the CAIRNS group. This paper examines Chile's various trade policy options in the light of recent analytical and empirical findings.

The paper has four sections. Section 2 presents general findings on the theory and evidence of regional integration agreements (RIAs). Section 3 examines Chile's trade policy options in light of the findings of Section 2, and Section 4 concludes.²

2. Regional Integration Agreements: A Selective Overview

This section examines a number of economic, political and political economy issues associated with regional integration agreements (RIAs).

2.1. Politics

Though RIAs have important economic (welfare) implications, they are typically created to attain political benefits (including nation building, security and democracy) or as the result of political economy forces (i.e., satisfying powerful interest groups).

RIAs have played an important role in nation-building, especially in the 19th century in Europe. This includes the Italian customs union which led to the formation of Italy in 1861, the Zollverein (customs union), a precursor to the formation of Germany in 1871, and the customs union between Moldova and Wallachia which resulted in the formation of Romania in 1881.

A RIA can also contribute to security. By increasing trade between the member countries, a RIA increases contacts and familiarity between their peoples. It also results in a

the formation of another RIA, and more. The assessment of an RIA will of course vary depending on the counterfactual one has in mind.

² The focus here is essentially on trade in goods. For an analysis of trade in services, see Hoekman and Primo Braga (1997).

higher degree of economic interdependency, which raises the cost of conflict. And it removes a potential source of tension, namely, uncertainty over access to the partner countries' strategic raw materials.³ Though a RIA is typically a second-best solution, it can be shown to be a first best (Pareto optimum) when trade between neighbors generates a positive externality by raising the level of security between them (Schiff and Winters, 1998).⁴ It can also be shown that the optimal tariffs with respect to imports from the rest of the world (ROW) decline over time (as has occurred in the EU) and following deep integration. Thus, tensions among neighbors may provide a reason for a RIA, but with declining barriers and increased openness over time.⁵

The classic example of regional integration whose motivation was political is that of European integration, as is clear from the writings of (founding fathers) Jean Monnet and Robert Schuman, and of the texts of the treaties of the 1951 ECSC (European Coal and Steel Community) and of the 1957 EEC. The objective was to eliminate Franco-German wars once and for all.⁶ Security also seems to have played a role in the formation of MERCOSUR. Rubens Ricupero, former Minister of Finance of Brazil, confirmed the importance of MERCOSUR's security aspects (World Bank, 2000), stating that as Argentina and Brazil were emerging from a period of military governments during which considerable tension had characterized the bilateral relationship, it was essential to start with economic agreements--such as the bilateral economic agreements in the area of capital

³ Polachek (1992) finds that conflict between countries is inversely related to the level of bilateral trade between them.

⁴ The first best solution is an optimal subsidy on trade between member countries. However, the same relative price configuration can be obtained with equivalent tariffs on imports from the ROW (and equivalent domestic taxes).

⁵ This hypothesis is testable. Politicians may claim that their motivation for forming a RIA is related to politics and/or security. This claim is more credible if, *ceteris paribus*, external trade barriers decline over time.

goods and automobiles in 1986--in order to create a more positive environment and replace rivalry by integration. And security issues, associated with tensions between Malaysia and Indonesia, may also have contributed to the formation of ASEAN (Association of South East Asian Nations).⁷

RIAs may also contribute to the quality of governance. A requirement in the Europe (accession) Agreements between the EU and Central and Eastern European countries (CEECs) is the CEECs' "full integration into the community of democratic nations." And by joining the EU after turning to democracy, Greece, Spain and Portugal raised the cost of backsliding and made it less likely. Finally, in 1996, a rumored coup in Paraguay is said to have been stifled by a joint declaration by MERCOSUR's four Presidents that democracy was a necessary condition of membership in the bloc.

However, if motivations differ, a RIA may also worsen security, especially if it entails large transfers. This issue is examined below in Section 2.3.3.

2.2. Political Economy

RIAs are as open to capture by special interests as are other policy interventions. One of the main results on the political economy of RIAs (Hirschman, 1981; Grossman and Helpman, 1994, 1995) is that politically sustainable RIAs tend to be trade-diverting. In other words, politically successful RIAs may very well be economically harmful.

⁶ Monnet argued that, while Britain, the US and the USSR could withdraw into their own spheres, France and Germany were inextricably linked and had no alternative than to solve the "European problem".

⁷ For some RIAs, the political impetus seems to have been the need for security against an external threat. The Gulf Cooperation Council (GCC) was created in 1981 partly as a response to a perceived threat from regional powers such as Iran and Iraq (Kechichian, 1985). And Central and Eastern European countries decided in part to join the EU because of the perceived threat of Russia.

The reason is as follows. Assume that a member country—referred to as the “home country” or “HC”—has an inefficient sector that has survived through protection. If the same sector in the partner country is efficient, a RIA could give rise to beneficial trade creation whereby the inefficient production in HC is replaced by efficient partner output (and economies of scale might possibly be achieved as well; see Section 2.3.4). But this is precisely the type of change that is politically most painful for the sector in HC, and it will resist—and lobby against—intra-bloc liberalization. Consequently, HC is likely to negotiate an exception, or a very long transition period, for that sector. On the other hand, trade diversion implies that the partner is not as efficient as the rest of the world (ROW), and total imports to HC remain unchanged (increased imports from the partner are accompanied by a decrease in imports from the ROW). Thus, trade diversion is less threatening to HC and it is therefore less likely to be resisted.

On the other hand, a RIA might be a first step in a program of liberalization where interest groups are unwilling to compete against the ROW right away. This has been argued in the case of Morocco with respect to its FTA with the EU (Abouyoub, 1998). And in the case of Mexico, it may be argued that the unilateral reforms of the 1980s were undertaken in part to make NAFTA more palatable to the US Congress.

If the economic size of the member countries differs, the determination of the specific conditions of the RIA is likely to be dominated by the lobbies of the larger members. The EU requires any country negotiating accession to accept the entire “acquis communautaire,” i.e., all its existing rules, regulations, norms and institutions.⁸ And developing countries have little bargaining power in their negotiations of FTAs with the US and the EU. This issue is further examined in Section 3 dealing with Chile’s policy options.

In the case of MERCOSUR, Olarreaga and Soloaga (1998) examined the influence of political economy variables on the determination of its common external tariff (CET).⁹ They find that the CET can be explained by a weighted sum of the political economy variables of the four partner countries, or equivalently by those of Brazil, but not by a weighted sum of the political economy variables of Argentina, Uruguay and Paraguay. In other words, and not surprisingly, Brazil's lobbies were found to dominate the decision-making process with respect to the CET.

The order in which countries join a RIA may be important. Other things equal, two countries that form a RIA are likely to do better than the third country that joins, and the third one is likely to do better than the fourth, and so on. The reason is that RIAs generate trade diversion, and each country that joins creates additional losses for the excluded countries. Consequently, these will be willing to pay more in order to join, and they will therefore be worse off than the early joiners. The result is a "domino" effect, i.e., the incentive to join is greater for late joiners, and they thus are more likely to join (Baldwin, 1995).¹⁰

2.3. Economic Statics

2.3.1. South-South RIAs are Likely to Lower Bloc Welfare

A number of developing countries have formed South-South and North-South RIAs in recent years or have revived old ones. South-South RIAs include MERCOSUR, the Andean Pact and the CACM in Latin America, CARICOM and the OECS in the Caribbean,

⁸ On a political economy analysis of protection in the EU, see Winters (1994).

⁹ They also examined each member's deviations from the CET and from internal free trade.

¹⁰ Baldwin's analysis only holds if the RIA is open in the sense that every country that wants to join can. This is not the way RIAs expand in reality. An analysis of the optimal and equilibrium size of regional groupings under various behavioral rules by the member countries is provided in Andriamananjara and Schiff (2000).

AFTA and SAARC in Asia, and CEMAC, SADC and UEMOA in Sub-Saharan Africa (see Appendix 1 for definitions). These RIAs also include a large number of bilateral FTAs in Latin America, a phenomenon which has been described as a “spaghetti bowl.” North-South RIAs include NAFTA and the Canada-Chile FTA, the Euro-Med Agreements, the Europe Agreements, and the EU-South Africa and EU-Mexico FTAs.

The static welfare analysis of RIAs is ripe with confusion, and an important one is between effects on an individual member country and effects on the bloc as a whole. The impact of a RIA on the bloc’s welfare depends on the extent of trade creation and trade diversion (Viner, 1950). These concepts have also been used to examine the welfare impact of a RIA on an individual member country. However, for an individual member country, the incentive effects of preferential tariff reductions (which matter for the bloc’s welfare) are likely to be dominated by *transfer* effects: positive as exporters are exempted from tariffs in partner countries and negative as own tariffs are eliminated on imports from partners.

As several studies have concluded, a South-South RIA that provides preferential access to its member states, but keeps its external trade policy with respect to the excluded countries or ROW unchanged, is likely to lower welfare for the bloc as a whole (Bhagwati and Panagariya 1996, Panagariya, 1997; Schiff, 1997; World Bank, 2000). Some member countries may also gain at the expense of others and I return to this below.

The reason South-South RIAs are likely to result in a welfare loss for the bloc as a whole is as follows. Assume first that markets are competitive and imports are homogeneous. As long as members of South-South RIAs continue to import from the ROW after the formation of the RIA (as found by Amjadi and Winters, 1999, for MERCOSUR),

prices cannot fall since domestic prices continue to be equal to the world price plus the tariff on imports from the ROW. Since prices are unchanged following the formation of the RIA, output, consumption and imports are unchanged as well. Since total imports do not increase, there can be no trade creation.¹¹ However, imports from partner countries in the RIA increase after removal of intra-bloc trade barriers, and this occurs at the expense of cheaper imports from excluded countries. This trade diversion lowers the welfare of the bloc as a whole.¹²

Liberalizing trade with the rest of the world (ROW) can turn harmful RIAs into beneficial ones if liberalization is deep enough. Thus, the best way to insure that South-South RIAs are beneficial is for member countries to liberalize their trade regime with respect to the ROW.

If imported goods are heterogeneous, say because the quality of goods differs by country of origin, then the price of the partner countries' imports is likely to fall under competition, with an ambiguous impact on welfare. The welfare impact is ambiguous because, though the price reduction on imports from partner countries results in a (triangle) welfare gain, the home country suffers a (rectangular) loss of tariff revenues because of the reduction in imports from the ROW. Moreover, if exports to the small member states by larger member countries are made under non-competitive conditions, then the exporting countries may appropriate all or most of the rent created by the removal of tariffs on intra-bloc trade and small states are likely to lose. The welfare consequences of RIAs in the case of heterogeneous goods and non-competitive conditions is further examined in Section

¹¹ Trade creation means that the home country increases its imports from its partner(s) without reducing imports from the ROW, so that total imports increase.

¹² One example of a South-South RIA with huge amounts of trade diversion is the Central American Common Market (CACM) where in the 1960s the share of manufactures in GDP rose from less than 5% to over 20%

2.3.5 dealing with terms of trade, where it is argued that large South-South RIAs may benefit from gains in their terms of trade.

2.3.2. Terms of Trade

As was discussed earlier, trade creation can only take place if prices fall following the formation of the RIA. As long as goods are homogeneous, markets competitive, and member countries continue to import from the ROW after RIA formation, prices remain unchanged, and the only effect is trade diversion. On the other hand, under heterogeneity where goods differ according to country of origin, economies of scale, and Bertrand competition, RIAs will affect prices.

This is more likely to be quantitatively important for large than for small South-South RIAs, as has been found in the case of MERCOSUR. Chang and Winters (1999) find that Brazil's reduction of its preferential tariffs on imports from Argentina was accompanied by a significant decline in the price of its imports from the ROW. Schiff and Chang (2000) found that even if Argentina does not export to Brazil, a mere increase in the threat of exports--because of Brazil's reduction of its tariff on imports from Argentina--is enough to reduce prices on Brazil's imports from the US.

2.3.3. Asymmetric Effects in South-South RIAs

Larger and more developed member countries are likely to benefit at the expense of the smaller and less developed ones, and not just because of greater bargaining power. Such asymmetric distribution of gains and losses is reflected, for instance, in the fact that the larger and more developed economies of CARICOM (Barbados, Jamaica, Trinidad and Tobago) welcomed the decision to finalize a CARICOM "Single Market and Economy" by

(all sold within the bloc and none exportable to the ROW), and which collapsed after the CACM stopped

early 2003, while the smaller and economically weaker ones expressed doubts over whether they would benefit because of their less competitive tradable goods and services sector (Oxford Analytica, July 31, 2001).

One reason larger and more developed member countries typically expect to gain relative to smaller and poorer ones is that the former usually have a trade surplus with the latter. The larger and more developed countries tend to produce protected manufactures which compete with imports from the ROW and which are exported to the smaller, poorer neighboring countries.¹³ Once the RIA is formed, these manufactures are sold to the poorer countries free of tariffs. This results in a transfer of tariff revenues from the poorer to the more developed countries (without benefit for the consumers in the poorer countries since prices do not fall due to the unchanged tariffs on similar imports from the ROW). This is equivalent to a worsening of the terms of trade for the poorer member countries and an improvement for the more developed ones.

A second reason for the asymmetry is related to the fact that South-South RIAs tend to generate economic divergence (Venables, 1999; World Bank, 2000).¹⁴ The reason is as follows. The capital-labor ratio of poorer members tends to be smaller than that of the more advanced members and tends to be more distant from the world average capital-labor ratio. Thus, given that the difference between the poorer members' endowments and those of the

functioning.

¹³ The poorer members tend to export primary commodities to the ROW and tend to have trade deficits with the more developed RIA partners.

¹⁴ An exception may be Botswana, a member of SACU. Since the external trade policy of SACU has been determined by South Africa, interest groups in Botswana have had no influence on it and resources have not been wasted on rent seeking activities by these groups in order to influence trade policy in their favor. This has been of great benefit to Botswana, which seems to have gained from membership in SACU.

world is largest, they have the most to gain from trading with the world and have more to lose from forming a RIA than the more developed members.¹⁵

The third reason for the asymmetric gains and losses is dynamic in nature. It is related to agglomeration effects, whereby industry tends to leave the smaller and poorer members and agglomerate in the more developed ones once trade barriers between them are removed. For instance, comparing the share in the manufacturing value added of the CACM between 1965 and 1996, the share of Nicaragua fell from 20% to 6%, the share of Honduras remained unchanged around 11-12%, while the share of the more developed El Salvador rose from 33% to 41% and of Guatemala rose from 36% to 41%. Similarly, between 1972 and 1997, in the CEAO in Francophone West Africa, the share of the poorer, landlocked countries (Benin, Burkina Faso, Niger, Mali) fell from 45% to 29% and the share of the richer member countries (Cote d'Ivoire and Senegal) rose from 55% to 71% (World Bank, 2000).

Consequently, not only is it likely that the trade bloc as a whole will lose from forming a RIA but the smaller and poorer member countries will lose even more, while the more developed members are more likely to gain.

2.3.3.1. Asymmetric Effects, Tensions and Conflict

¹⁵ The opposite holds for a North-North RIA. The more developed members gains less (or lose more) than the less developed ones, so that such RIAs are expected to generate convergence. This has certainly be the case in the EU. Ben-David (1993) shows how the standard deviation of log incomes of the members of the EU fell from 0.34 in 1947 to about 0.13 in 1980, with the EU becoming increasingly integrated, from the BeNeLux Customs Union in 1947, to the Economic Coal and Steel Community in 1951, to the EEC in 1957, to the elimination of quotas in 1962, to the elimination of internal tariffs in 1968, to the expansion of the EEC to nine members in 1973 and to ten in 1981.

Asymmetric effects can result in tensions and even conflict between member countries (World Bank, 2000). This occurred in the 1960s when the East African Community broke down because of Tanzania and Uganda's dissatisfaction with what they perceived to be an unfair distribution of revenues in favor of (the more developed) Kenya. The same occurred in the Central American Common Market in the 1960s when Honduras left the RIA after the more developed El Salvador refused to renegotiate the distribution of revenues.

Moreover, poorer regions have tried to secede because of the unfavorable trade policy imposed on them by the dominant region. Such attempts include the unsuccessful one by the Southern part of the US in the 19th century, and the successful one by East Pakistan (later Bangladesh) in 1971 (Schiff and Winters, forthcoming). In the first case, tensions between the North and South came close to erupting into a conflict in 1828 when the North, which controlled the US Congress, raised tariffs on imports of manufactures which were produced by the North and imported by the South (both from the British and from the North), thereby worsening the South's terms of trade and improving those of the North.¹⁶ Tariffs were finally reduced, but the problem arose once again in 1860. A similar problem occurred between West and East Pakistan, with the former acting like the North of the US had done a century earlier. Consequently, income per capita in the East relative to that of the West fell from about 85% at independence in 1947 to 62% by 1970.

One way to mitigate the problem associated with the asymmetric distribution of revenues and large intra-bloc transfers is to have a compensatory mechanism put in place as part of the CU agreement. This is the case for the UEMOA, where compensation is based

¹⁶ South Carolina referred to that tariff as "the tariff of abominations," refused to collect it, and threatened to secede unless it was rescinded.

on intra-bloc trade flows prevailing before the agreement was signed. This does help mitigate the problem but does not fully resolve it because intra-bloc trade tends to increase following the formation of the CU, and the related increase in the level of transfers is not compensated for. Moreover, trade flows can change for a variety of other reasons over time (changes in terms of trade, aggregate demand, technology, etc.) and any associated transfers are not compensated for either.

Another way to mitigate the problem is to lower the common external tariff (CET) because this reduces the size of intra-bloc transfers, whether positive or negative. Of course, the member country that obtains positive transfers from the CU may be unwilling to go along and lower the CET--and as discussed above, this may lead to tensions and/or conflict. A FTA has a clear advantage with respect to this issue because it enables each member country to liberalize its trade policy with the ROW unilaterally and thus reduce the size of the transfers it may be providing its partners.

2.3.4. Economies of Scale, Competition and Location

Under increasing returns to scale, a RIA may result in economies of scale and in increased competition. Assume, for instance, two countries each with three firms operating behind protective walls, and after forming a RIA, a total of four firms survive in the bloc, operating at a larger scale in the entire RIA market. Of course, the number of firms need not increase and competition may well decline. And economies of scale can be reaped on the world market as well and a RIA is not necessary for that.

The early RIAs (1960s) in Latin America and Sub-Saharan Africa hoped to raise efficiency through economies of scale in the regional markets. However, politics and political economy forces prevented markets to operate. Decisions on what to produce where

were made politically and then often not implemented, and led to duplication. For instance, in the CEAO, though one member country was given the task of developing a cement plant for the region, a lack of trust led all member countries to build one. And in MERCOSUR, industrial policy for the automotive sector has seemed to be based on highly distorted incentives and quantity controls, including firm-specific Argentina-Brazil trade balance, rather than on efficient market principles (Schiff and Winters, forthcoming).

A developing country is more likely to benefit from economies of scale in a North-South than in a South-South RIA because of a larger and more open Northern partner, and a greater likelihood that market forces will prevail. A study of NAFTA simulated its potential effects on the automobile industry and found large output increases for Mexico, fewer firms, each producing a greater output, and lower price-cost margins (Hunter et al., 1992).

Note that in order to achieve these economies of scale, lower intra-bloc tariffs are necessary but not always sufficient. In many RIAs, pressure by lobbies has resulted in domestic barriers being erected to prevent markets from being fully opened to regional competition. As discussed in Section 2.8, deep integration measures are needed, though they have been rare outside the EU.

A developing country may also benefit from the relocation of manufacturing output from its Northern partner in a North-South RIA. A formal “economic geography” analysis of trade policy and location, including the impact of a North-South RIA on the location of industry, is provided in Fujita et al. (1999). Feenstra and Hanson (1997) present evidence on the relocation of manufacturing output from the U.S. to Mexico. The impact of the Mexico-US FTA on the location of production is also examined in Krugman and Hanson (1993).

2.4. Dynamics

This section examines the impact of RIAs on investment and FDI as well as on knowledge spillovers and long-term growth. The impact of RIAs on investment and FDI is determined in part by their effect on credibility.

2.4.1. Credibility

A developing country that wants to raise the credibility of its economic reforms is likely to benefit more from a RIA with a large Northern partner (such as the US or EU) than in a South-South RIA. Of course, that country can also obtain credibility by binding its tariffs at the WTO, especially if it binds them at the applied rates. Fernandez and Portes (1998) argue that a country may do better in a North-South RIA than at the WTO. If a country violates its commitment at the WTO, it will hurt a larger number of countries than in a RIA and these are less likely to retaliate because each one may try to free ride on the efforts of others.¹⁷ On the other hand, the challenge to violations of WTO commitments are typically managed by the major trading partner, so this argument may not hold. Another argument is that more issues can be dealt with in a RIA, including deep integration (see Section 2.3.10.5 below).

Though credibility may be obtained in a North-South RIA, one question is credibility with respect to what? The likely answer is that a country will mostly gain credibility with respect to those policies and instruments that are explicitly mentioned in the agreement. For instance, though Mexico was a member of NAFTA at the end of 1994 and was thus unlikely to raise tariffs against imports from its Northern partners, nothing constrained it from devaluing its currency or raising tariffs against the ROW, both of which

¹⁷ Francois (1997) also argues that North-south RIAs provide credibility to the Southern partner.

it did at the time. And raising these tariffs did not violate its commitments at the WTO because its bound tariff rates were significantly higher than its applied rates.

Another question is whether the Mexican experience is replicable. For credibility, the Southern member must care about any retaliatory action by its Northern partner and the latter must care enough about violations by the former in order to take the trouble and expense of retaliating if needed. With the overwhelming majority of Mexico's trade, investment and financial links being with the US, Mexico takes its commitments with the US very seriously. And with Mexico being the second largest US trading partner and the main conduit of illegal immigration and drugs to the US, the latter clearly cares about developments there. However, one may wonder whether the US would bother to punish a small Central or South American country for violating some clause of some agreement, or whether the EU would bother to do so against a typical Sub-Saharan African country (whose GDP, outside of South Africa and Nigeria, averages about 1% of Belgium's GDP).

Credibility is unlikely to be achieved unless the country that seeks it reforms its own policies unilaterally. For instance, following their accession to the EU (most likely the deepest type of integration, with acceding countries having to adopt the entire "acquis communautaire"), Portugal and Spain reformed their macroeconomic and other policies while Greece did not. The former attracted significant flows of FDI and accelerated growth, while the latter did not.

2.4.2. FDI and Welfare

The issue of FDI is clearly linked to that of credibility. Again, a North-South RIA is likely to be better from the viewpoint of inflows of FDI and their impact on welfare. A Northern partner is likely to be more open, and the FDI is likely to go into efficient export

industries. This has been the case for Mexico in NAFTA, a point stressed by Whalley (1996), for Ireland in the EU (Frank and Bradley, 1997) and for various Central and Eastern European countries (CEECs) exporting to the EU. Mexico served as an export platform to the US and attracted FDI—which more than doubled in the year following the launch of NAFTA, much of it from non-NAFTA firms taking advantage of preferential access to the US, with some redirecting FDI from the US and Canada to Mexico (World Bank, 2000).

The above indicates that the increased FDI flows to Mexico may have had more to do with the preferential access to the US and the increased security (credibility) about the stability of such access, than with NAFTA's impact on the credibility of Mexico's macroeconomic policies. The importance of a developing country's preferential access in a North-South RIA as a means of attracting FDI flows is also stressed by Ethier (1998).

A South-South RIA may also attract FDI, though it is likely to be tariff-jumping FDI where the larger integrated market of the RIA may convince a multinational to locate there. However, the latter may well result in a welfare loss. Though selling behind a protective wall may be very profitable for the multinational, the social return on such investment—which includes the loss of tariff revenues associated with the reduction in imports, and the reduction in labor's (and other inputs') social productivity—is much lower than the private one and may be negative.¹⁸ MERCOSUR's policy with respect to its automotive sector seems to suffer from this problem, as well as from other problems associated with an intrusive industrial policy that has gone way beyond protection.¹⁹

¹⁸ Assuming a competitive labor market, private labor returns (wages) are equalized across sectors. However, the social return to labor in the protected sector (evaluated at world prices) is lower than the private one, which is not the case in other sectors. Thus, drawing labor into the protected sector reduces welfare.

¹⁹ For more analysis on regional integration and FDI, see Blomstrom and Kokko (1997).

2.4.2.1. Hub and Spoke

A final issue covered here is that of “hub and spoke,” a phenomenon which can arise in a FTA but not in a CU. A country is a hub if it has signed several FTAs, and its partners are spokes if they have not signed FTAs between them. In that case, investors will prefer to invest in the hub because they can reach all the spokes from there, while they cannot do so if they locate in one of the spokes. For instance, the EU is the hub of a large hub-and-spoke system as it has signed a number of FTAs, including the Europe Agreements (with CEECs), Euro-Med Agreements (with Mediterranean countries), FTAs with South Africa and Mexico, and is negotiating with MERCOSUR and Chile. And MERCOSUR might run the danger of becoming a spoke of the EU if the FTAA is not formed. On the other hand, Mexico has become a hub itself, with eight FTAs signed (including NAFTA, the G-3 with Colombia and Venezuela, and with the EU) and eight others being negotiated.

2.4.3. Growth and Knowledge Diffusion

An influential literature, based on endogenous growth theory, argues that trade serves as a channel for the diffusion of technological knowledge (Coe and Helpman, 1995; Coe, Helpman and Hoffmaister 1997), and that such knowledge contributes to total factor productivity (TFP) growth. It concludes that growth can be enhanced by increasing the degree of openness of the economy, and by opening up to those countries that are major producers of that type of knowledge (measured by the stock of R&D). Thus, a developing country will obtain more knowledge and growth in a North-South RIA than in a South-South one.

Blyde (2001) finds technology diffusion in Latin American countries from trade with the North as well as from trade with each other, though the latter has a much smaller impact on TFP. Olarreaga, Schiff and Wang (2001) also find that middle-income countries learn from trade with the OECD though not from trade with each other, while low-income countries learn from both the OECD and middle-income countries. And Madani (1999) finds that growth in countries of the Andean Pact was higher in those sectors that sourced their inputs mainly outside the Andean Pact than in sectors that sourced mainly inside the Andean Pact.²⁰

In theory, FDI may also result in technology diffusion. However, most empirical studies so far find that FDI from OECD countries has little or no impact on productivity in developing countries and various studies find a negative impact, probably because a greenfield investment by a foreign firm reduces the size of the market for domestic firms and raises their costs. So far, studies have only examined the effects on firms in the industry where the FDI takes place. New studies should examine the impact, if any, on productivity of downstream and upstream firms.

2.5. Selected Administrative Issues

2.5.1. Rules of Origin (ROO)

Under an FTA, a member country (referred to as “home country” or “HC”) requires mechanisms to control the origin of goods imported from partner countries in order to avoid the problem of *trade deflection*. HC might have higher MFN tariffs than its partners on a number of products.²¹ These products could then be imported by firms in partner countries,

²⁰ Based on the literature on trade and growth, dynamic benefits of Lebanon’s FTA with the EU are examined in Winters (1997).

²¹ “MFN” stands for most-favored nation, and is the non-discriminatory tariff that applies to the ROW.

paying the lower partner tariff, and sold duty-free in HC. This is known as “trade deflection.”

Trade deflection has the following consequences. First, HC would lose control over its external trade policy for these products because they would not pay the higher HC tariff but rather the lower partner tariff. Thus, the *effective* tariff on these goods would be the lower partner tariff. But HC would not even collect the revenue associated with that lower tariff because the firms importing the goods would be paying the lower tariff to the partners’ customs authorities. In other words, HC would then be better off adopting the lower partner tariff because this would eliminate any incentive for trade deflection and it would at least collect the tariff revenue associated with the lower tariff.

In order to avoid the consequences of trade deflection, HC’s customs administration needs to control the origin of goods that it imports from its partners. Ideally, duty-free trade between HC and its partners should only apply to goods that are produced within the FTA bloc, and not to goods imported from outside the bloc. This may seem simple in theory, but the reality of controlling the origin of goods is complicated. Goods exported by partners to HC are likely to incorporate inputs imported from outside the FTA bloc. In that case, only the value added can be considered as having been produced inside the bloc. The question arises then as to whether these goods should be considered as having been produced inside the bloc or not. If they are, they enter HC duty-free. If not, they must pay HC’s MFN tariff.

Ideally, a FTA should entail the free movement of value added produced inside the bloc. However, trade takes place in final goods and not in value added. Consequently, rules of origin (ROO) have been devised to (imperfectly) control for the origin of goods. The most common rule uses the share of value added as a criterion, in which case the parties agree that in order for a country to obtain preferential access to its partner’s market for a

given product, the value added produced inside the bloc must be above a certain percentage of the value of the product.²²

The attempt to solve the problem of trade deflection through ROO results in a number of new problems. The paper focuses on four of them. First, ROO can lead to additional trade diversion and welfare loss. For instance, assume that HC can import inputs either from partners or from the ROW, but that if it uses inputs from the ROW, it will not comply with the ROO and will not receive trade preferences on its exports to its partners (i.e., it will have to pay their MFN tariff). The cost of the inputs from the ROW is 50 while the cost of the same inputs from partners is 60 (because of 20% protection on them). Assume that the tariff the partners charge on imports of the final good from the ROW is 20. Then, it is advantageous for HC to buy the expensive inputs in partner markets because, even though the inputs cost 10 more, HC avoids paying 20 on its exports to its partners. Thus, ROO generate additional trade diversion: the ROO has resulted in an inefficiency loss of 10 since HC was forced to buy more expensive inputs in order to benefit from its duty-free access to partners' markets.

Second, ROO are typically quite complex and enforcing them can be very costly for the authorities. The ROO section of the EU agreement with Poland has 81 pages and that of NAFTA has some 200 pages. Enforcing such complex rules entails a variety of additional costs, over and above the standard costs of customs administration in the case where MFN tariffs apply to all countries. These costs have been estimated by Herin (1986) at 3 to 5% of the f.o.b. price for EFTA countries.

²² Under other ROO, a good will be considered to be produced inside the bloc if i) it entails a substantial transformation of the inputs from outside the bloc, where the criterion typically is that the tariff line of the product differs from that of the inputs (say, steel versus automobiles), or ii) an essential component is produced inside the bloc (say, the motherboard for computers).

Third, ROO can be, and in fact almost always are, used as protectionist devices. For instance, in order to protect its textile industry from Mexican imports, the US insisted in the NAFTA negotiations on the “triple transformation test,” whereby the yarn, the cloth and the garments all have to be fully produced within NAFTA in order for Mexican exports to be conferred NAFTA origin and enter the US duty-free. Moreover, the implementation of ROO typically entails a great amount of discretion, which generates both additional costs and uncertainty for exporters.

Fourth, overlapping FTAs (referred to in Latin America as “spaghetti bowl”) are likely to greatly complicate and significantly raise the cost of the administration of ROO as well as the other costs mentioned above.

The various points enumerated above indicate that ROO can be very costly. HC can reduce these costs by further liberalizing its economy unilaterally. If HC’s tariff rates are lower than those of its partners, trade deflection will not arise and neither will administrative costs of ROO. On the other hand, HC exporters may still have to bear the cost of proving origin when exporting to partner countries as well as the cost of having partners use ROO for protectionist purposes.

Note that even with such complex rules, and even in the absence of any cheating or smuggling, the problem of imports entering through the country with lowest tariff is not entirely solved because of *indirect trade deflection*. Under indirect trade deflection, a low-tariff member exports its own output to its partners and meets its own consumption requirements by importing from the ROW. As long as the low-tariff member does not satisfy the entire partners’ import demand at their tariff-inclusive price (i.e., as long as they still import from the ROW), it will benefit from exporting its output to them.

2.5.2. FTA vs. Customs Union

The above suggests that there are benefits from forming a Customs Union (CU) rather than a FTA. Nevertheless, most recent RIAs have taken the form of FTAs. The reason is that CUs also entail costs, including a greater loss of sovereignty, difficult negotiations to determine the common external tariff (CET), a need for new political institutions to manage the CU, and the potentially conflictive issue of sharing the CET revenue. FTAs are likely to be easier to implement, especially in North-South agreements where member countries differ significantly. In fact, the ratio of FTAs to CUs is 6 to 20 times higher in North-South RIAs than for South-South ones (Schiff, 2000).

2.5.3. Administrative Resources

Note that the scarcest resource for small and poor states is the administrative capacity needed to deal with the large number of domestic, bilateral, regional and multilateral issues it faces. RIAs are typically complex and require large amounts of administrative resources both for negotiation and for operating them. Given the low or negative welfare impact of South-South RIAs, it is likely that such resources could be used more productively for the management of essential public programs. A policy of unilateral liberalization with low and reasonably uniform tariffs would save on administrative resources and improve policy transparency. An additional and significant source of administrative cost examined in the next section is the need to establish rules of origin in FTAs.

2.6. Regional Cooperation

Neighboring countries can benefit from cooperation in the area of regional public goods, such as transport and other infrastructure, water basins, energy and environment (Schiff and Winters, forthcoming). However, such cooperation can be established independently of any trade preferences. Though a RIA may help negotiations on regional cooperation by embedding them in a wider agreement, its necessity has not been demonstrated. And a RIA that results in tensions among member countries, say because of asymmetric distribution of revenues, is likely to hurt regional cooperation.

In assessing the value of regional projects in the presence of a RIA, care must be taken to measure incentives correctly. Because tariffs are removed between member countries but not with the ROW, prices on trade with partners are higher than world prices, resulting in greater intra-bloc trade. As noted earlier, in South-South RIAs, the increase in intra-bloc trade is likely to consist (mainly) of trade diversion. And this may result in a seemingly higher net present value on regional transport projects than the true one. And such projects will seem even more attractive if evaluated at domestic prices rather than at world prices. For instance, with MERCOSUR resulting in increased trade between Argentina and Brazil, investment in transport infrastructure between the two countries may appear beneficial, even though modernizing the countries' ports in order to promote trade with the ROW might be superior. On the other hand, cases where deeper integration were to result in an improvement in the RIA's terms of trade--see Section 2.3.5--would suggest preference for regional infrastructure, though this effect is unlikely to dominate in most South-South RIAs.

2.6.1. Joint Negotiation

Small states can also benefit from regional cooperation in the area of international negotiations. Small states face severe disadvantages in their dealing with the ROW due to low bargaining power and high fixed costs of negotiation. Due to their small size, they do not usually possess the needed human and physical capacities to unilaterally conduct all the bilateral and multilateral negotiations that are typical for developing nations. Forming a regional grouping with neighboring nations may help a country share its fixed negotiation costs and increase its bargaining power. It has been shown that the probability that small states will cooperate, as well as the equilibrium group size (number of cooperating members), the optimal group size, and the number of issues tackled, all increase with the degree of similarity between the member countries and with the level of international negotiation costs (Andriamananjara and Schiff, 2001).

Small Caribbean nations, for example, have benefited from the establishment of CARICOM under which they have pooled their negotiation resources and have formulated common policy stances in negotiations on trade and investment with larger countries or regional trade blocs. Specifically, CARICOM countries have been involved, among other things, in the ACP-EU, GATT/WTO, UNCTAD, UNCLOS (UN Conference on the Laws of the Sea) negotiations as well as in various commissions or joint councils with Canada, Cuba, Japan, Mexico, the US, the FTAA, the OAS, the G3 (Mexico, Venezuela, Colombia), and many more. Moreover, by trading each other's support, the CARICOM nations succeeded in getting their nationals elected to key international positions such as Commonwealth Secretary-General and ACP Secretary-General.

Though cooperating for the sake of joint negotiation may be helpful, the group itself need not be based on geographic proximity. Another selection criterion for members of a

group is similarity of interests, possibly based on the structure of output or exports. For instance, the CAIRNS group was formed by both developed and developing countries who share a similar interest in WTO negotiations, namely improved access for their agricultural exports to the large protected markets of Japan, the EU, and the US, and the removal of agricultural subsidies.

2.7. Stability

Large developed countries or regions such as the US or the EU are economically stable relative to developing countries. The latter often suffer from large fluctuations in their terms of trade and in policy-making. These may result in income volatility, sudden policy changes and other shocks. Thus, from this viewpoint as well, a developing country is better off integrating with a developed than with another developing country. Similarly, developing countries are likely to be less stable politically.

Note that Rose and Engel have shown that RIAs are likely to result in more synchronization of business cycles among member countries. Whether that is a good or bad thing for a given country depends on whether its partner (or partners) is more or less volatile economically. Also, Kraay and Ventura (2002) argue that removal of trade barriers could raise the benefit of removing barriers to trade in assets and could improve risk-sharing among member countries.

2.8. Deep Integration

Deep integration—actions by governments to reduce the market segmenting effect of differences in national regulatory regimes through coordination, harmonization, or

mutual recognition of national policies—potentially offers great benefits. However, because it typically implies some loss of sovereignty and requires high levels of political commitment, it is relatively rare. Moreover, lobbying by interest groups that do not want to be subjected to increased competition is also likely to hinder it.

As mentioned earlier, some forms of deep integration are necessary to achieve genuinely free intra-regional trade, but little has occurred outside the EU. The need for increased competition led the EU to embark on the Single Market Program (EU-92). On the other hand, many RIAs have maintained contingent protection instruments (such as anti-dumping and safeguards), a variety of red-tape border frictions, differences in standards, and more. And even in the EU, a variety of non-tariff measures in the area of automobile distribution restrict competition, including national product and licensing requirements (Mattoo and Mavroidis, 1995).

Another aspect is the degree of competitiveness of industry. Non-competitive market structures may also result in market segmentation, and developing countries should implement domestic competition policies. Deep integration measures should also extend to services, including the right of establishment. Given that developed countries have superior institutions, deep integration is likely to be more beneficial in North-South than in South-South RIAs. A useful analysis of deep integration issues is Hoekman (1999).

2.9. WTO

I just want to make one point here. The WTO consists of a number of agreements and obligations (such as the GATT and GATS) which member countries are committed to implement. However, the fact that domestic measures and policies are allowed under WTO

rules does not mean that they are necessarily beneficial or should be followed. Each country should use the multilateral system as one component of an efficient policy framework (Finger, 1996). Taking advantage of weaknesses in the WTO system in order to implement protectionist policies that favor specific import-competing sectors is not in individual countries' interest. For instance, the fact that tariffs can be bound at the WTO at rates that are above the applied ones does certainly not imply that doing so is good economic policy. For a detailed analysis of the political economy of the WTO, see Hoekman and Kostecki (2001).

2.10. Conclusion of the Overview

Some conclusions obtained from the analysis presented above are:

- i) A developing country will benefit from unilateral trade liberalization (UTL): it will benefit from the standard gains from trade in the absence of RIAs, and it will benefit from the reduction in transfers to its trading partners in the presence of RIAs;
- ii) A developing country is likely to do better economically in a North-South than in a South-South RIA;
- iii) Both for economic and political economy reasons, South-South RIAs are likely to lower bloc welfare (though in large South-South RIAs, terms of trade may improve); and the smaller and poorer member country is likely to lose at the expense of the larger and more developed one;
- iv) Some forms of deep integration are likely to be necessary to achieve free intra-bloc trade; and they are likely to be easier to obtain and to be more beneficial in North-South than in South-South RIAs;
- v) Rules of origin (ROO) can be costly, and more so in the case of multiple FTAs;

- vi) CUs are preferable because they do not require ROO, while FTAs are preferable because they allow individual member countries to liberalize unilaterally;
- vii) Some South-South RIAs may generate political benefits;
- viii) South-South cooperation on regional public goods or international negotiations is likely to be beneficial, though it is unclear whether a RIA is either necessary or helpful; and
- ix) Countries should not exploit weaknesses in the WTO system to implement protectionist policies, but rather should take advantage of the WTO to help liberalize their economy.

3. The Case of Chile

3.1. Trade Structure

This section briefly examines the structure of Chile's trade and its evolution. Exports are examined in Section 3.1.1. and imports in Section 3.1.2.

3.1.1. Exports

The structure of Chile's exports, by sector and region, is summarized in Table 1. Starting with Chile's exports to the world, note that exports of products based on renewable resources (the first nine columns) amount to US\$ 6.2 billion, or about 34% of total exports of US\$ 18.5 billion. Mining amounts to US\$8.4 billion, or about 45% of total exports. Of the exports of products based on natural resources, fruits and vegetables (and food products) amount to 32%, fisheries (fresh, frozen and processed) to 18%, wine to 9% and forestry (and wood products) to 39%.

In terms of destination, slightly over 50% of fruits and vegetables are exported to the US, followed by the EU with about 19% and Latin America with 18%. The same order is obtained for fresh fish exports. However, 85% of frozen fish are exported to Asia (79% to Japan). As for fish fillet and others, the US is the first destination (60%) followed by Asia and Europe. Europe comes first with respect to wine exports (49%) followed by the US (22%), Latin America and Asia. In forestry products, the US is first (45%), followed by Asia (32%), Latin America, and Europe. As for cellulose, paper and others, exports are almost evenly divided between Latin America, Asia and Europe, with less than 2% to the US.

How have the various export categories grown in the last decade? This is shown in Table 2. First, it is clear that the dramatic growth rate of exports in 1990-95 was not sustained in the second half of the 1990s, declining from 90.5% to 12%, with a cumulative growth rate for 1990-2000 of 113.5%. The exports of products based on renewable natural resources (first six items of Table 2, which includes elaborated and processed products) grew in 1990-2000 by 142.9% or 26% faster than total exports, implying an increase in their share of total exports.

The items representing processed or elaborated products (processed food; beverages etc.; forestry and cellulose etc.) all grew faster than total exports in 1990-2000. However, even though the high growth rate in 1990-1995 of “Beverages, alcohol, tobacco and others”--where wine is a major component--continued in 1995-2000 (for a cumulative rate of 648.5%), this is not true for “Processed foods” and for “Cellulose, paper and others” where the growth rate in 1995-2000 turned negative. These changes should be a matter of concern, but their analysis is beyond the scope of this study.

The category “Rest of Exports” grew at 234.6% in 1990-2000, or over twice the growth rate of total exports. The main items that led to such high growth of that category are “Chemicals, petroleum and derived products” which grew by 366%, “Iron, steel and non-ferrous metals” which grew by 234%, and “Metallic products, machinery, equipment, electrical and transport material, and measurement instruments” which grew by 508%.

In terms of destinations, the growth of Chilean exports in 1990-2000 was higher than the average to all main destinations except to the EU and Japan. The fastest growth of exports was to China and Mexico (both starting from a small basis), followed by Canada, Korea and MERCOSUR.

3.1.2. Imports ²³

Tables 4 and 5 provide information on the structure and growth of imports. Table 4 shows that the main category of imports in 2000 is “metallic products, machinery and equipment,” amounting to 44% of total imports, followed by “chemical products” (20%). The main source of total imports is Latin America (35.8% including Mexico, with MERCOSUR equal to 26%), followed by the US (19.7%), Europe (19%) and Asia (17.4%). The US has the largest share of “metallic products, machinery and equipment.” Latin America has the smallest share of that category and the largest share of “food, beverages, tobacco and others” and of “chemical products”. Asia has the largest share in “dress, footwear, and others.”

²³ For more detailed information on the structure of Chile’s imports and exports, see the reports of the Ministry of Foreign Affairs dealing with Chile’s foreign trade (Ministerio de Relaciones Exteriores, 3rd report of 2001 and earlier issues)

The 1990-2000 cumulative growth rate of total imports was 146.2%, approximately the same as for imports from the US. Imports from Mexico grew some 3.5 times faster (510.7%), those from MERCOSUR close to twice faster (285.9%), those from Asia some 50% faster (205%, with those from China over 11 times faster), and with those from Europe more than 60% slower. The growth rate of imports in 1995-2000 was less than one sixth of that in 1990-1995, and it fell for all regions except Canada and the Rest of the World.

3.2. Recent Trade Policies

Chile started reforming its trade policy in the 1970s. Trade liberalization was based on the implementation of a uniform tariff, which—except for a temporary increase during the economic crisis of the early 1980s--was gradually reduced. The uniform tariff reached 8% in 2001 and should reach 6% in 2003. Chile has also applied price bands to a few products, an important departure from its policy of uniform tariffs. The price band became effective for wheat and sugar in 1982, with wheat flour and oil seeds added later on. The effectiveness of the price band for oil seeds (rapes and sunflower) has been undermined by a loophole in the FTA with Bolivia: despite having safeguards on vegetable oils, none were imposed on oil mixes.

During the 1990s, Chile also moved away from its uniform tariff policy by embarking on a strategy of preferential trade agreements, forming FTAs with MERCOSUR, Mexico, Canada, the members of the Andean Pact, Central American countries and Cuba. Chile is also negotiating a FTA with the US and, at a less advanced stage, with the EU and EFTA (Switzerland, Norway, Iceland, Lichtenstein). It is also planning to resume negotiations on a FTA with Korea.

Furthermore, Chile recently passed legislation on safeguards (Modificación de la Ley 18525, Artículo 9), this despite the opposition of one hundred of the most reputable Chilean economists who expressed their views in a public letter. This may explain a sort of ‘compromise’ whereby Chilean safeguards were designed for a one-year period, with the possibility of renewal for a second year (for a maximum of two years), even though four-year safeguards are legal under the WTO (renewable for another four-year period). Safeguards were used to raise protection on milk and products derived from it, and a safeguard for sugar was implemented on November 27, 1999, which raised protection to levels of 70-80% and even over 100%, significantly more than the 31.5% binding at the WTO.

Given the fact that the safeguard for sugar was expiring on November 26, 2001, Chile requested that its tariff binding on sugar at the WTO be raised from 31.5% to 98%. This was accepted under the condition that Chile provide compensation to its most important sugar provider, Argentina, and enter into “good-faith” conversations with its second and third providers, Guatemala and Brazil. Compensation was made through the provision of zero-tariff sugar quotas. This was accepted by Argentina and Guatemala, but Brazil has complained that its quota is too small and does not compensate for its loss.

Chile has recently signed a phyto-sanitary agreement with China that includes a dispute settlement mechanism. And though no official announcement has been made, articles in the local press have reported that Chile is expected to sign a similar agreement with India, and a zoo-sanitary agreement with China.

Finally, Chile is interested in an improvement in the market access provided by OECD countries for its agricultural exports, and has been an active member of the CAIRNS group, which consists of developed and developing agricultural exporters. Though

agriculture had been traditionally excluded from GATT negotiations, the CAIRNS group succeeded in having it included at the Uruguay Round of the WTO (and thus in future Rounds as well).

3.3. Consequences

Chile's trade policies and its negotiations with various countries or groups of countries have a number of political, political economy and economic consequences. These are examined below.

3.3.1. Politics

The FTA with MERCOSUR may entail security benefits. Chile and Argentina were involved in territorial disputes at different times throughout their history, and came close to a conflict in the late 1970s. This issue may be a thing of the past, but the FTA with MERCOSUR is unlikely to hurt. With Chile being more integrated economically with Argentina, and with Brazil as a more concerned partner, it is likely that any future dispute will be resolved with less friction. And one may wonder whether the FTAs with Bolivia as well as with MERCOSUR and other Latin American countries have contributed to a spirit which has enabled Chile to consider Bolivia's request for access to the sea more positively. Another reason for forming FTAs with countries of the region may have been the perception of a need for enhancing international political legitimacy after the military regime (Hachette, 2000). As for governance, entering into FTA agreements with the US and the EU may help strengthen Chile's democratic institutions. Note also that a democratic form of government is a condition for association with MERCOSUR.

3.3.2. Credibility

3.3.2.1. FTAs with Central American and Andean countries

Chile signed FTAs with Central American and Andean Pact countries, and with Cuba. Since Chile's credibility with respect to its economic policies is higher than that of these countries, FTAs with them is unlikely to have contributed to Chile's policy credibility. It may even have harmed it because of the departure from uniform tariffs.

3.3.2.2. FTA with MERCOSUR

By signing a FTA with MERCOSUR, Chile became more closely integrated with it.²⁴ Because the economies of its member countries are significantly more volatile than those of Chile's other important trading partners, a closer integration with MERCOSUR raises the degree to which this volatility is transmitted to Chile's economy.²⁵ This is likely to be costly, both because it complicates the production and export plans of Chilean exporters and because it may harm Chile's international credibility.

Non-tariff measures have been increasing for some time in MERCOSUR and have undermined the level and security of the bloc's internal free trade (Berlinski, 2000) and of Chile's access to MERCOSUR markets. And the recent situation in Argentina has led to some extreme actions. For instance, in November 2001, Argentine truck drivers blockaded their country's borders and prevented the entry of foreign trucks. They even held some Chilean trucks found on Argentine territory. Even though these actions clearly violate Argentine and international law, including the agreement on international land transport in

²⁴ Table 3 shows that exports to MERCOSUR grew by 162% during 1990-2000, or 43% faster than total exports (which grew by 113%). Table 5 shows that imports from MERCOSUR over the same period grew by 286%, or close to twice as fast as total imports (which grew at 146%).

the region (Acuerdo de Transporte Internacional Terrestre (ATIT) in Spanish), the Argentine government did not prevent them. The blockade ended after the authorities promised to look into special (protectionist) measures to help the transport sector.

These problems generate additional costs for Chilean exporters (and for MERCOSUR countries exporting to Argentina) and further reduce MERCOSUR's already depleted credibility. Given Argentina's macroeconomic instability and the uncertainty with respect to its trade policy, it is clear that Chile's credibility would have been hurt much more deeply if it had integrated more closely with MERCOSUR by forming a customs union with it.

3.3.2.3. FTA with the US

On the other hand, an agreement with the US is expected to provide some credibility benefits. By signing a FTA with the US, Chile is likely to be more widely perceived as belonging to a select club of countries. This may improve its ability to borrow abroad and may result in a decline in its cost of capital. However, given Chile's high level of international economic credibility, its borrowing costs are already very low (its country risk premium on international financial markets is 2.5%), and whether a FTA with the US will in fact result in a lower cost of capital, and to what extent, is unclear.

Some chapters of the agreement may also serve to raise policy credibility, including the one relating to investment. Chile is very open with regard to foreign investment: there is no minimum (maximum) national (foreign) ownership requirement, no discrimination in establishment (national treatment applies), and no protection of national culture (no

²⁵ Among other problems, stability in MERCOSUR has most likely been hurt by the diametrically opposed exchange rate policies of its two largest economies. The EU obviously chose a very different path.

minimum time for national programs on the radio or TV). These issues are also important for trade in services. But though Chile is very open in these as well as in other areas (including international transport and telecommunications), foreign investors only have recourse to Chilean courts to settle any disputes and some of these issues are not codified into law. These and other aspects are expected to be resolved in the investment chapter of the FTA with the US. With a bilateral investment treaty between the US and Chile, US investors will also have recourse to the International Center for the Settlement of Investment Disputes (ICSID).

Though an investment agreement exists among Latin American countries (Acuerdo de Protección y Promoción de Inversión (APPI) in Spanish) that allows access to the ICSID, an agreement providing stronger guarantees is likely to benefit Chile because of its important investments in the region. Thus, Chile is likely to benefit if the investment chapter negotiated with the US becomes a model for the FTA of the Americas (FTAA).

3.3.2.4. Contingent Protection and Uniform Tariffs

Chile recently passed legislation on safeguards. These were applied to sugar, vegetable oils and milk. With the sugar safeguard expiring on November 26, 2001, Chile requested an increase in the bound tariff at the WTO. The vegetable oils safeguard is no longer effective because of the loophole with respect to oil mixes in Chile's FTA with Bolivia. And the milk safeguard is no longer in effect due to the increase in the world price.

However, though these safeguards no longer apply, this need not reflect a change in the authorities' policy stance. Milk is no longer protected because protection is not needed at this point, vegetable oils are no longer protected because of a seeming oversight by the negotiators of the FTA with Bolivia, and sugar remains highly protected even though a

different instrument is now being used. And the safeguard instrument remains on the books and can thus be used at any time. In fact, there has been some discussion and studies concerning the introduction of safeguards for manufacturing products such as steel and lighters.

Chile has long benefited from its policy of uniform tariffs. This policy has several well-known advantages, including the fact that i) effective protection is the same for all sectors and equals the nominal protection rate; ii) it is simple, clear and transparent, and therefore reduces business costs; iii) it reduces the cost of the customs administration; and iv) it reduces discretion (corruption).

However, a policy of uniform tariffs has another important benefit, namely to turn trade policy into a “public good.” Because a sector lobbying for protection under a uniform tariff policy receives only a small part of the expected benefit of raising the uniform tariff--with most benefits going to other import-competing sectors--it has little incentive to lobby and will prefer to free ride on other sectors’ lobbying efforts. But since all sectors have similar incentives, the general free riding results in a low level of lobbying. Thus, under such a policy rule, raising tariffs because of private sector lobbying is unlikely.²⁶

This benefit does not obtain when policy instruments are privatized, as is the case with safeguards where a sector can lobby independently of other sectors and capture 100% of the benefits obtained through its lobbying efforts. This is a powerful argument for maintaining a uniform tariff policy, and for staying away from contingent protection and

²⁶ Of course, uniform tariffs may be raised by the authorities in extreme situations, such as occurred in Chile in the early 1980s in order to deal with the large Current Account deficit.

other “new” forms of protection.²⁷ The number of annual complaints presented to the Central Bank of Chile (in order to obtain some form of protection) averaged 31 in 1981-85, 14.4 in 1986-90, 5.6 in 1991-95, 1.7 in 1996-98 and 4.3 in 1999-2001. Thus, the number of complaints fell over the period 1981-1998, and then increased again starting in 1999, the year when the law with respect to safeguards was passed.

3.3.2.5. Tariff Bindings at the WTO

Chile has been gradually lowering its uniform MFN tariff (to 6% in 2003), and this is likely to contribute to its policy credibility. It has bound its tariffs at the WTO at 25% for most products and 31.5% for a few. And it has recently requested to the WTO to raise its binding on sugar from 31.5% to 98%. Binding at rates above the applied ones does not help Chile’s credibility, and the increase in the bound rate for sugar is positively harmful.

Chile should take advantage of the WTO, not by using WTO-legal instruments to increase protection, but rather by using the WTO to support its unilateral trade liberalization efforts. Binding all tariffs at the WTO at their applied (uniform MFN tariff) rates, binding the sugar tariff at the same rate, and renouncing the use of contingent protection and other non-tariff protection measures, would significantly raise Chile’s credibility by restoring MFN tariff uniformity and by ensuring that protection for specific sectors would not be raised in the future. It would also generate additional benefits, and these are examined in later sections.

²⁷ These include technical, sanitary and phyto-sanitary instruments, when used with a protectionist intent. For instance, Chile’s non-standard method of grading meat has led Argentine (and US) beef producers to complain that this measure represents a technical barrier to trade (Fischer, forthcoming).

3.3.3. Political Economy of FTA with the US (and EU)

3.3.3.1. Price Band

Chile is negotiating a FTA with the US. The most important sectors for Chile in these negotiations are the ones based on renewable natural resources, including fruits, vegetables, forestry, fisheries, and elaborations of these products. This is so for two reasons. First, Chile has a comparative advantage in these sectors: their exports have been growing faster than exports in general in recent years (see Table 2), and they are likely to have a great growth potential for some time to come. And second, because they face the highest trade barriers, including tariff escalation and tariff peaks (see Table 6A), seasonal quotas, phyto-sanitary barriers, and some have been subject to anti-dumping measures (e.g., for salmon).²⁸

In this context, the protection of import-competing agriculture is likely to weaken Chile's negotiating position with the US (and the EU). Wheat and wheat flour are protected by a price band, and these products are of direct interest to US exporters. Sugar is now highly protected (98%), though this should not be of concern to the US which is itself a sugar importer.²⁹ If Chile is unwilling to liberalize its import-competing agriculture with respect to US imports, it will be more difficult to argue for improved market access for Chile's agricultural exports. Thus, protection of agriculture does not only hurt welfare

²⁸ Mining is obviously an important export sector as well. However, it is probably less important in terms of negotiations because it faces low trade barriers, and it is less likely to grow at high rates in the future, partly because of technological change and substitution with other materials. In fact, the price of copper—Chile's main mineral export-- has recently reached its lowest level ever.

²⁹ However, it has complicated matters with Brazil.

directly, but it may also hurt the prospects of one of the most dynamic sectors of the economy.³⁰

As discussed in Section 2.2, politically sustainable RIAs are typically trade diverting, and an exchange of exceptions is usually negotiated for sectors with the greatest potential for trade creation. Chile should avoid such an outcome in its FTAs with the US and the EU by offering to eliminate the price band exception in exchange for a removal by the FTA partners of their trade barriers on Chile's agricultural exports (and other exports based on renewable natural resources).

3.3.3.2. WTO Binding at Applied Uniform MFN Tariff Rate

By binding its tariffs at the WTO at the applied uniform MFN tariff rate, Chile will strengthen its negotiating position in its FTAs with the US and the EU. They will no longer be able to counter Chile's requests for improved market access for its agricultural exports by arguing that, just like Chilean authorities respond to their import-competing agricultural lobbies, they too must take their own lobbies into account.

3.3.3.3. Being Early: Good or Bad?

The US has a FTA with Canada and Mexico (NAFTA) as well as with Israel. Chile is the first country in South America to negotiate a FTA with the US. As discussed in Section 2.2, theory tells us that being among the first to join should be beneficial: as more

³⁰ Note that the US Congress has decided not to provide President Bush with Trade Promotion Authority (fast track) in 2001. The US could still sign a FTA with Chile, but there is a risk that the US Congress might come back and ask to renegotiate some aspects of the agreement.

countries join, excluded countries suffer from increased trade diversion and are thus willing to pay more to join the RIA.

Moreover, the US administration is eager for the FTAA to move forward, and any problems or failure in the negotiations with Chile is likely to provide a negative signal to other Latin American countries that expect to enter into negotiations on the FTAA in the future. This might provide Chile with some increase in bargaining power, though probably not much.

On the other hand, in the case of a small country negotiating as one of the first members of a RIA with a larger country or “hegemon”, negotiations are likely to be subject to a “demonstration” effect and a “precedent” effect, both of which go in the opposite direction. The hegemon is likely to act “tough” in its negotiation with its early partners in order to demonstrate toughness to future partners and be able to negotiate better conditions with them. Similarly, the US may want to set precedents that may be of use in future negotiations. My understanding is that US negotiators have stated explicitly to their Chilean counterparts that they want a chapter on government procurement included in the agreement, and though they have no problem with Chile’s policy because it is very open in this area, they want to establish a precedent for the FTAA negotiations that will take place with the larger countries of the region. The same is probably true with respect to the chapter on intellectual property rights.

Finally, following the events of September 11, 2001, the US interest in establishing alliances, and its willingness to provide incentives for it, has increased. The US Congress is therefore more likely to endorse a FTA with Chile. This point is also made by Kathleen Barclay, president of the American Chamber of Commerce in Chile, who states that at this moment it is important for the US to reinforce its ties with its allies, Chile being one of

them (El Diario, November 14, 2001). This mood may no longer prevail when the other countries of the region enter into negotiations with the US.

On the whole, with various pros and cons, it is unclear a priori whether Chile will do better or worse in its negotiations with the US by being early.

3.3.4. Static Welfare Effect

A number of studies of Chile's FTAs have been undertaken, mainly on the FTAs with MERCOSUR and with NAFTA (or the US). Harrison, Rutherford and Tarr (1997) have examined the effect of these FTAs with the use of a computable general equilibrium (CGE) model. The study uses the level of uniform tariffs prevailing at the time, namely 11%, as its base case. The authors simulate the effects with various elasticities of substitution, and I report here the results with central elasticities.³¹

Chile loses by forming a FTA with MERCOSUR and loses more by forming a customs union with MERCOSUR, though when its uniform tariff equals 6%, Chile gains a little from a FTA with MERCOSUR. On the other hand, Chile gains from a FTA with NAFTA, whether its uniform tariff is 11% or 6%, though in the latter case, the benefit is about 80% larger. And Chile loses from a FTA with NAFTA if its market access does not improve, whether its uniform tariff is 11% or 6%.

The main reason for the difference in results between the FTA with NAFTA and with MERCOSUR is the high level of protection and tariff escalation in NAFTA for the specific products that matter to Chile, i.e. fruits, vegetables and fish products. Tariff peaks and escalation by the US on some Chilean products is provided in Table 6A, and by the EU

³¹ The results with other values for the elasticities are qualitatively the same in general.

in Table 6B. Note also that MERCOSUR raised its common external tariff from an average of 12% to 15% in response to the Asian crisis, and this makes preferential access to MERCOSUR more attractive for Chile.

The issue of improved market access is important. With an economy of less than one percent of that of the US, Chile has little bargaining power, and it is not outside the realm of possibilities that US lobbies will prevent improved market access for Chile's exports of products based on renewable natural resources. In this regard, and as mentioned earlier, the price band for wheat and wheat flour is certainly not helpful.

Assuming full access to NAFTA's markets, Schiff (1996) also claims that Chile should benefit from a FTA with NAFTA and that this benefit increases with Chile's further liberalization. The study also argues that the benefits associated with a lower country-risk classification are unlikely to be large. This assessment differs from that of Coeymans and Larraín (1996) who claim that the latter is expected to be the main benefit from a FTA with the US. I understand that the assessment by Chile's negotiating team is that, since Chile's country risk is already very low (2.5%), it is not very likely to fall further because of a FTA with the US.

The protection of agriculture is almost sacrosanct in the EU. The EU also has a privileged relationship with the ACP (Africa, Caribbean and Pacific) countries who enjoy preferential access in the EU market. Consequently, it is likely that negotiations with the EU will be more difficult, and that it will not be easy for Chile to obtain improved access for its agricultural exports and other exports based on renewable natural resources in EU markets.

This assessment seems confirmed by what occurred at the recent Doha Ministerial meeting of the WTO (November 14, 2001). Now that a new round of multilateral trade

negotiations has been approved by all members of the WTO, it is likely that the evolution of these negotiations will have an impact on the negotiation of concurrent or later RIAs. In this context, the EU succeeded in watering down the language of the original Doha declaration which said the negotiations should aim at the phasing out of farm export subsidies, and in getting the words "without prejudging the outcome of the negotiations" included in the declaration. This took away much of the power of the declaration with respect to agriculture. On the other hand, as far as Chile is concerned, El Mercurio (27 November 2001) reports that agriculture will be included in the negotiations on a FTA with the EU, something that was eschewed by Mexico.

As for FTAs with Central American and Andean countries, Fischer (2001) argues that most of them have had little effect, either because trade is not significant (e.g., with Costa Rica, El Salvador and Panama) or because the exceptions cover such a large share of the items traded (e.g., with Bolivia, Peru and Venezuela). However, note that, as was argued in Section 2.2, exceptions typically occur where a potential for trade creation exists, so that the items on which exceptions are not imposed are more likely to be trade diverting. This should result in a loss for the FTA as a whole.

With FTAs with Latin American countries and Canada, and with FTA negotiations with the US, the EU and EFTA, Asia remains the only major trading partner with whom Chile has not signed or is not negotiating a RIA. Forming a FTA with the major Asian trading partners will provide static gains for two reasons. First, it will improve Chile's market access to these economies; and second, Chile will have lowered its preferential tariff to *all* its major trading partners, with an effect similar to that of unilateral trade liberalization. It will also provide dynamic benefits, and I return to this below. With respect to improved market access, China has acceded to the WTO, and this will result in an

opening up of its economy. Chile has recently signed a phyto-sanitary agreement with China, and this is likely to generate important benefits in the future. Also, Chile is expected to restart FTA negotiations with Korea. It is important that it also envisage to enter into FTA negotiations with the other large Asian economies, particularly with Japan.³²

Finally, note that the studies described above do not include two important effects, namely intellectual property rights and rules of origin. These will be costly for Chile and are examined below.

3.3.5. Intellectual Property Rights

In its FTA with Chile, the US is expected to go beyond the multilateral TRIPS (Trade Related Intellectual Property Rights) agreement, both in terms of substance and timetable. This is likely to be rather costly for Chile in the short and medium term, and also in the long term unless Chile becomes a large producer of intellectual products and services. In 1991, Chile passed a new law on patents and protection of intellectual property. However, the US also wants patent protection for the period before 1991.

The area of greatest concern is that of pharmaceuticals where Chile produces a variety of generic products and sells them at low price without paying royalties to the US patent holder. Enforcement of intellectual property rights in a FTA with the US will result in a direct transfer to US patent holders and in an increase in health costs in Chile. This is likely to especially hurt low-income consumers. And the same is likely to occur in the FTA with the EU (and EFTA). In this context, it is interesting to note that many international economists who are fervent free traders, including (but not only) at the IMF and World

³² It would be unfortunate if Chile ended up importing fewer Japanese cars because of the discriminatory trade policy against Japan. And improved access to Japan's market could provide large benefits.

Bank, consider the TRIPS agreement to be essentially a mechanism designed to transfer rents from poor to rich countries.

A recent article in “La Segunda” (November 19, 2001, p. 12) refers to a study from CIADE of the University of Chile that calculated the cost for Chile of conforming to the WTO’s TRIPS agreement (a bill which is presently before Chile’s Congress) and concludes that it would result in a 75% increase in the cost of medicines. I understand that other studies show a smaller cost increase, but given that the US is planning to go beyond the TRIPS agreement in its FTA with Chile, the cost of the latter to low-income consumers is likely to be significant. In fact, the article claims that one of the reasons the cost of medicines will rise so much is that aspects of the bill now before Chile’s Congress exceed Chile’s commitment to the WTO.

In recent years, some developing countries have been able to obtain discounts on important anti-HIV medicines by threatening to allow domestic manufacturers to produce the drug. For instance, Brazil has successfully used this strategy with Merck and Roche, two big drug companies. And the US threatened a similar move and got Bayer to provide Cipro, an antibiotic against anthrax, for close to half the price (The Economist, October 27, 2001). It is worth noting that, even though fewer than twenty anthrax cases have occurred in the US so far, it did not hesitate to challenge a valid patent while complaining when South Africa or Brazil or others do the same in the incomparably worse case of the AIDS epidemic.

In fact, India, Brazil and others have called for change in the TRIPS agreement. For instance, note that developing countries that do not have the capacity to produce generics will have to import them from other countries (so-called “parallel imports”), something not allowed by the TRIPS agreement as of now. The US seems very firm in wanting to prevent

parallel imports, and this has been construed by some as being anti-competitive. For those who do have the capacity to produce generics, a separate declaration at the Doha Ministerial on the TRIPs Agreement has clarified that Members have the right to grant compulsory licenses in the area of pharmaceuticals and that they have the freedom to determine the ground upon which such licenses are granted. This (and other provisions in the declaration) remove several ambiguities with respect to flexibilities available in the TRIPs Agreement. These issues are likely to affect Chile's FTA negotiations.

Finally, in the long run, if Chile becomes an important producer of intellectual goods and services, it will also gain from stronger laws and better enforcement. In this context, Lanthuria and Fikkert (2001) obtained estimates of the private value of patent protection in 12 different technology sectors both before and after India weakened its intellectual property regime in the 1970s. They find that the weaker regime resulted in a 23% drop in the private value of patent protection.

Enforcement of existing laws also seems to be a problem with respect to some music products (e.g., CDs), software and books. However, the value of the pirated music and software is probably small compared to the problem of pharmaceuticals, and the US is unlikely to be concerned with pirated books since the vast majority of them is in Spanish.

3.3.6. Rules of origin

As far as I know, no empirical study of the administrative costs of rules of origin (ROO) exists for Chile. As discussed in Section 2.3.7, the administrative cost of ROO has been estimated at 3 to 5 percent of the f.o.b. value of imports for EFTA (Herin, 1986). How do Chile's costs compare to these estimates? First, the cost of ROO rises with the number of FTAs. As described above, Chile has signed FTAs with MERCOSUR, the Central

American and Andean Pact countries, Mexico, Cuba, and it expects to sign one with the US in the near future. I assume here conservatively that this issue does not affect Chile's administrative ROO costs relative to those estimated for EFTA. Second, the need to control for origin--in order to determine whether or not to provide preference to goods imported from partner countries—falls as the level of tariffs declines: the lower the tariffs, the smaller the gains from trade deflection and the smaller the number of products for which trade deflection is beneficial. With Chile's uniform tariff expected to decrease to 6% by 2003, the cost of ROO is expected to decrease as well.

I assume therefore that costs for Chile are lower than those estimated for EFTA in 1986 and have chosen a level of costs of 2% of the value of imports.³³ These are presented in Table 7, based on import values for the year 2000. Despite the conservative estimate selected, the estimated costs are anything but negligible. They amount to some US\$ 240 million for imports from the countries/regions with which Chile already has a FTA or is negotiating one (Latin America, US, Canada and EU). These costs rise to about \$286 million if the principal Asian countries are included. The marginal cost of the FTA with the US is estimated at about \$66 million, with the EU about \$45 million, with Japan some \$14 million, and with Korea \$10 million. These calculations assume a constant marginal cost, even though it probably rises as the number of FTAs increases. These costs may also increase in the future due to imports rising with economic growth.

Note that the administrative costs only represent part of the cost of ROO. Even if tariffs were completely eliminated, other costs remain, including the costs of the additional trade diversion caused by ROO (see Section 2.3.10) and the cost for exporters of proving

³³ Available data on Chile's imports are c.i.f. rather than f.o.b., so that calculations based on those values would somewhat overstate the cost of ROO.

origin when exporting to markets of partner countries. On the other hand, administrative costs could be further reduced if Chile were to lower its uniform MFN tariff below 6%.

3.3.7. Dispute Settlement Mechanism

An important aspect of negotiating a RIA is the establishment of a dispute settlement mechanism (DSM). Agreements typically do not cover all possible aspects of bilateral trade relations in full detail, and they are not able to anticipate all potential future events that may occur. Consequently, DSMs are established to deal with any disputes that may arise.

DSMs typically increase confidence in the security of market access of member countries because they now have a mechanism to resolve disputes that was not available previously. Of course, the effectiveness of a DSM--and the trust of the various parties in it--depends on how it is designed, the authority given to it, the relative power of RIA members, and more.

Without having any specific information about it, one might speculate that the DSM in the FTA between Chile and the US might be modeled after the one negotiated between the US and Mexico. In this context, it is worth noting that in its trade disputes with the US, Mexico has not always turned to NAFTA's DSM. Rather, it has (successfully) turned to the WTO's DSM because it felt that its chances were better there.

3.3.8. FDI

The FTA with the US is likely to raise FDI flows to Chile. There are three reasons for this: i) an improved access to the US market (assuming it is significant), ii) the investment chapter in the agreement which will provide greater guarantees to foreign

investors (see Section 3.3.2.3), and iii) the effect of the FTA on the credibility of Chile's policy regime and its impact on Chile's international borrowing cost. The latter is probably the most speculative. Moreover, its benefit, if any, would essentially be the reduction in the cost of funds rather than any increase in FDI.

A similar FTA with the EU is also likely to raise FDI. And by raising policy credibility, binding tariffs at the uniform MFN applied rates at the WTO may also raise FDI flows. It might reduce FDI flows going into import-competing sectors because these could no longer expect future increases in protection, but such a development would raise welfare (see Section 2.3.6 on tariff-jumping FDI).

3.3.9. Growth and Knowledge Diffusion

As discussed in Section 2.3.8, Chile is unlikely to absorb much knowledge, if any, from its FTAs with Latin American countries. In fact, knowledge absorption and productivity growth may have been affected negatively because these agreements led to a reduction in trade with OECD countries (because of trade diversion effects) and thus in less knowledge absorption than in the absence of these agreements.

Guidotti (2001) and Yeats (1998) have argued that the protection offered by MERCOSUR has led Argentina to increase production of low-quality goods to be exported to Brazil and which cannot compete on the world market, a clear case of trade diversion. Consequently, when Brazil devalued, Argentina was unable to redirect its output towards the world market, and this exacerbated the negative impact of Brazil's devaluation on Argentina's economy.

This seems to apply to Chile as well. For instance, 13% of Chile's exports to Argentina in 1999 consisted of machine and auto parts (Government of Chile, 2000). It is unlikely that Chile would have a comparative advantage in the production of auto parts and that it could compete on the world market. It is probably only because of its preferential access to Argentina's market that Chile is in that business. Similarly, Chile exports plane and helicopter parts to Brazil (3% of total exports to Brazil in 1999). And though these activities provides static welfare gains, it makes Chile more dependent on fluctuations in the MERCOSUR economies and less able to respond to them (by redirecting its exports), and it reduces productivity growth by reducing Chile's exposure to the competitive pressures of world markets.

The effect of forming FTAs with the US and the EU is to increase trade with these regions and to reduce trade with Latin American countries. This will raise the degree of knowledge absorption and the contestability of Chile's market, both of which should raise productivity growth. On the other hand, these agreements will also reduce trade with Asian countries such as Japan and the East Asian Tigers (Hong Kong, Korea, Singapore, Taiwan) who produce large amounts of R&D and technological innovations. In Section 3.3.4, it was argued that it was important for Chile to enter into FTAs with Asian countries for static welfare reasons. This section argues that this holds for dynamic reasons as well.

3.3.10. Standards

The FTAs with the US and the EU may require some side agreements on labor and environmental standards. It is beyond the scope of this study to examine Chile's labor and environmental laws in any detail (with some minor exception; see below). Sanitary and phytosanitary standards are also likely to be on the agenda for negotiation of the FTAs with

the US and the EU. This section is limited to a few general points that I believe should be kept in mind when assessing the impact of such agreements.

The optimal level of a standard depends, like all things, on its costs and benefits, and that level therefore varies with the level of income. A standard that may be optimal for a rich country may not be optimal for a poor one. For instance, requirements on food packing that raises welfare in rich countries might raise costs to such a point as to make food unaffordable to many in poor countries. Similarly, a standard that prohibits child labor might mean starvation for many developing country farmers.³⁴ Thus, a FTA between a developed and developing country that includes requirements by the former that various standards be upgraded by the developing country may reduce the latter's welfare.

On the other hand, existing standards in the developing country may be below their optimal level. For instance, the laws may be adequate but not their enforcement, possibly due to asymmetric information and agency problems (firms—the agents—have better information on their own actions than the authorities—the principal) or asymmetric power (firms may be stronger than labor in determining how the rules are to be implemented). Mizala and Romaguera (forthcoming) find that at a formal level, Chile's labor legislation is on a par with that of the US, but that Chile needs to ensure compliance with its own labor

³⁴ It is good for developed countries to be concerned with labor rights and the environment in poor countries. It is interesting to note, though, that this interest seems to have surged at the time when a number of large developing countries (e.g., China, India and Indonesia) opened up and became large exporters to developed countries. The willingness to help may be better measured by the resources developed countries are willing to devote to these issues. The experience with the GEF (Global Environment Fund) indicates that it is limited. And it is of course easier to demand that child labor cease than to provide the funds needed to allow families to survive without the help of child labor and to fund the education that the children need.

laws.³⁵ The authors state that the biggest problems occur in remote locations and those with difficult access—such as forestry and farm fishing-- where supervision is hardest.³⁶

And the laws themselves may be inadequate. This too may be due to asymmetric information (the authorities may not know how bad things are) or because of lobbying and/or lack of information (the costs of higher standards may be concentrated in a few firms while the benefits are diffused or not well known, resulting in little counter-lobbying).

In the case of either sub-optimal standards or sub-optimal enforcement, if as a result of a FTA, higher standards or improved enforcement obtain, welfare *may* increase. This depends on the standards that are agreed upon. If the FTA leads the developing country closer to its own optimum, it will gain. On the other hand, the negotiated standard may be excessively high for the developing country. This typically occurs when the developed country uses standards as a means of raising production costs in the developing country and as a means of protecting its own industry. An example of the effect of a new phytosanitary standard is provided in Otsuki et al. (2001). They show that, relative to international standards, implementation of the EU's new aflatoxin standard will cut African exports of nuts, cereals and dried fruits to the EU by 64% while probably lowering EU's welfare as well because the standard would raise costs for EU consumers while the reduction in health risks would be minimal (by 1.4 deaths per billion per year).

The WTO has recently made it easier for developing countries to obtain access to rich countries' markets in the face of sanitary and phytosanitary standards. On October 24,

³⁵ They argue that compliance varies between sectors, firms and subcontractors, and recommend that in order to improve compliance, firms be made responsible for security and other labor problems of their subcontractors.

2001, the WTO Committee on Sanitary and Phytosanitary (SPS) Measures approved a decision by WTO members that involves governments accepting the equivalence of different measures which provide the same level of health protection and safety for food, animals and plants. The decision outlines steps designed to make it easier to make use of the “equivalence” provisions of the SPS Agreement, i.e., Article 4. This will help developing countries that use less sophisticated health and safety technologies than those required by importing countries to prove that their products are equally safe, and this will thus help them improve market access to developed countries.³⁷ The test will come when the first case goes to the WTO’s dispute settlement mechanism. This decision by the WTO may well affect Chile’s FTA negotiations with the US and the EU. In fact, Chile and the US have already agreed on SPS standards.³⁸

3.3.11. Price Bands and Related Price-Raising Mechanisms

Price bands exist for sugar, wheat, wheat flour and oil seeds. The design of the price bands is such as to reduce price variability and raise average prices. The reason for the latter is that price reductions (when world prices are high) are limited by the low and decreasing level of the uniform MFN tariff, while price increases (when world prices are low, as is currently the case) are “limited” by the *much higher* tariff bindings at the WTO. Bindings at the WTO are 31.5% for wheat and 98% for sugar, while the MFN tariff is 8% and declining to 6% in 2003.

³⁶ In these areas, labor unions seem to have made alliances with their counterparts in the US (and Canada), so that US negotiators are sometimes better informed on non-compliance in Chile than Chilean ones.

³⁷ Chile is one of the developing countries that submitted comments on an earlier draft.

The price bands are thus protectionist (and their protectionist effect rises as the uniform MFN tariff falls). This raises production costs for bread and other flour-based products, and for all products that use sugar as an input, including soft drinks and candy products (sweets, chocolates, pastries), and has a negative impact on welfare. One of the reasons for the price bands that has been expressed by the wheat and sugar industries is to protect employment. However, the price bands have the opposite effect in the industries that use wheat (or wheat flour) and sugar as inputs. Thus, the net employment effect is ambiguous a priori.

Another argument often heard is that the price band and related policies cannot be eliminated because output is concentrated in a few regions (essentially the seventh to the ninth regions) with no substitutes and no alternative forms of employment. First, removing protection should result in lower land prices, and this is likely to make some alternative activities profitable. Farmers in neighboring regions may find it attractive to use the cheaper land for production. Second, some investors are already experimenting with alternatives. For instance, tulip bulbs have been planted experimentally in the region of Osorno and the return has been extremely high.³⁹ Third, as shown in the following section, the cost of compensating the losers--in order to make the reform politically feasible--may not be very high.

Chile's sugar policy, including its price band, is examined in detail in Appendix 2. It is argued there that the policy is highly regressive, is of little help to small sugarbeet producers, and that it entails large transfers to foreign capital.

³⁸ For more on the use of standards for development, see Wilson (2001). For more on trade and standards, see Hufbauer et al. (2001).

³⁹ These bulbs originate in South Africa, but due to the low frequency of flights to the US, transport of tulips is expensive and it seems more profitable to ship them to the US from Chile.

4. Conclusions and Recommendations

4.1. FTAs

Chile is close to signing a FTA with the US. Though studies seem to indicate that Chile should benefit from it, and though dynamic productivity gains from increased competition and knowledge absorption are likely to be important, benefits will depend crucially on the degree to which Chile's access to US markets improves, on the cost of implementing the intellectual property rights agreement, and on the cost of enforcing the rules of origin. Similar points apply to FTAs with the EU and EFTA. Static and dynamic benefits are more doubtful with respect to FTAs with MERCOSUR and Central American and Andean Pact countries. Finally, the main region left out is Asia. Therefore,

- I recommend that Chile start negotiations on FTAs with Asian countries as soon as possible.

A first step in this direction is the recent signing of a phyto-sanitary agreement with China and the decision to renew negotiations on a FTA with Korea.

4.2. Unilateral Trade Liberalization

Chile will increase the benefits (or reduce the losses) of its existing and future regional agreements by lowering its uniform MFN tariff from the level of 6% in 2003. This will also provide the benefits of unilateral liberalization and lower the cost of administering rules of origin. For these three reasons,

- I recommend that the uniform MFN tariff be reduced below the 6% level after 2003.

4.3. Tariff Bindings at the WTO and Non-Tariff Barriers

- Chile should bind *all* its tariffs at the WTO at the applied MFN uniform tariff rate, including sugar, and should refrain from using non-tariff trade barriers for protectionist purposes. This may require compensation to producers of price-band products (sugar and wheat) to make the reform politically feasible.

This will:

- i) improve Chile's policy credibility;
- ii) improve Chile's position in FTA negotiations with the US, EU and others;
- iii) restore greater transparency to its trade policy, thus reducing business costs and the authorities discretionary power;
- iv) restore tariff uniformity, thus turning trade policy once again into a "public good" less subject to lobbying, and thus preventing the backsliding that is visible in Chile today;
- v) remove the protectionist element of the price bands (except for the remaining problem of the New York No. 14 sugar contract);
- vi) raise welfare and lower transfers to foreign producers and capital; and
- vii) improve the distribution of income by eliminating transfers from consumers (with low income consumers hurt most) to capital and large farms.

References

- Abouyoub, Hasan. 1998. "Personal Communication." World Bank Conference on Regionalism and Development. Geneva (May).
- Amjadi, Azita and L. Alan Winters. 1999. "Transport Costs and "Natural" Integration in MERCOSUR." *Journal of Economic Integration*, 14: 4–9.
- ANBER. 2001. "Banda de Precios del Azucar." Asociación Nacional de Bebidas Refrescantes. Santiago, Chile.
- Andriamananjara, Soamiely and M. Schiff. 2000. "Regional Groupings Among Microstates." *Review of International Economics*.
- Baldwin, Richard E. 1995. "A Domino Theory of Regionalism." In R. E. Baldwin, P. Haaparanta, and J. Kiander (eds.). *Expanding Membership in the European Union*. Cambridge: Cambridge University Press.
- Barry, Frank and J. Bradley. 1997. "FDI and Trade: The Irish Host-Country Experience." *Economic Journal* 107: 1798-811.
- Ben-David, Dan. 1993. "Equalizing Exchange: Trade Liberalization and Income Convergence." *Quarterly Journal of Economics* 108 (3): 653-79.
- Berlinski, J. 2000. "Evaluación de restricciones al comercio interno del MERCOSUR." Paper presented at the Regional Conference of the RED MERCOSUR (MERCOSUR Network), Buenos Aires, 29–30 November.
- Bhagwati, Jagdish and A. Panagariya. (eds). 1996. *The Economics of Preferential Trade Agreements*, Washington D.C.: The AEI Press.
- Blomstrom, Magnus and A. Kokko. 1997. "Regional Integration and Foreign Direct Investment: A Conceptual Framework and Three Cases." Policy Research Working Paper no. 1750. World Bank, Washington, D.C.
- Blyde, Juan S. 2001. "Trade and Technology Diffusion in Latin America." Mimeo, Inter-American Development Bank. Washington, D.C.
- Chang, Won and L. A. Winters. 1999. "How Regional Blocs Affect Excluded Countries: The Price Effects of MERCOSUR", Policy Research Working Paper no. 2157, The World Bank.
- Coe, David T. and E. Helpman. 1995. "International R&D Spillovers," *European Economic Review*, 39: 859–87.

Coe, David T., E. Helpman and A. W. Hoffmaister. 1997. "North-South R&D Spillovers," *The Economic Journal* 107 (Jan): 134-49.

Coeymans, Juan Eduardo and F. Larraín. 1996. "La Integración al NAFTA: Un Análisis Cuantitativo de las Consecuencias para Chile." In M. Schiff and C. Sapelli (eds.). *Chile en el NAFTA. Acuerdos de Libre Comercio versus Liberalización Unilateral*. Santiago: Centro Internacional para el Desarrollo Económico (CINDE).

Ethier, Wilfred. 1998. "The New Regionalism." *Economic Journal* 108 (July): 1149-61.

Feenstra, Robert and G. Hanson. 1997. "Foreign Direct Investment and Relative Wages: Evidence from Mexico's Maquiladoras." *Journal of International Economics* 42: 371-93.

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

Finger, Michael J. 1996. "Legalized backsliding: Safeguards provisions in GATT." Chapter 11 in Will Martin and L. Alan Winters (eds.). *The Uruguay Round and the developing countries*. Cambridge, UK: Cambridge University Press.

Fischer, Ronald. 2001. "Trade Liberalization, Development and Government Policy in Chile." Mimeo, Department of Industrial Engineering, University of Chile (August).

_____. Forthcoming. "Introduction." In R. Fischer (ed.). *Latin America and the Global Economy: Export Trade and the Threat of Protectionism*. Macmillan: London.

Francois, Joseph. 1997. "External bindings and the Credibility of Reform." In A. Galal and B. Hoekman (eds.). *Regional Partners in Global Markets*. London: Center for Economic Policy Research.

Fujita, Masahisa, P. Krugman and A. Venables. 1999. *The Spatial Economy: Cities, Regions, and International Trade*. Cambridge, Massachusetts: The MIT Press.

Galetovic, Alexander. 2001a. "La banda que no tiene techo." *La Segunda*, June 26.

_____. 2001b. "Banda del azúcar: quién pagó y quién se benefició." Mimeo. Industrial Engineering Department. University of Chile. Santiago, Chile.

Grossman, Gene and E. Helpman. 1994. "Protection for Sale." *American Economic Review* 84 (4): 833-50.

_____. 1995. "The Politics of Free Trade Agreements." *American Economic Review* 85 (4): 667-90.

Government of Chile. 2000. *Segundo Catastro Nacional sobre Barreras Externas al Comercio - 2000*. Departamento de Comercio Exterior. Subsecretaría de Economía. Ministerios de Economía, Minería y Energía. Santiago, Chile.

Guidotti, Pablo E. 2001. "Mercosur, Not the Peso, Makes Argentina Uncompetitive." *Wall Street Journal* (July 20), p. A11.

Hachette, Dominique. 2000. "La reforma comercial." In F. Larraín and R. Vergara (eds.). *La Transformación Económica de Chile*. Centro de Estudios Públicos: Santiago, Chile.

Harrison, Glenn W., T. F. Rutherford and D. G. Tarr. 1997. "Trade Policy Options for Chile. A Quantitative Evaluation." Policy Research Working Paper No. 1783. World Bank. Washington, D.C.

Herin, J. 1986. "Rules of Origin and Differences between Tariff Levels in EFTA and in the EC." EFTA Occasional Paper No. 13. EFTA Secretariat. Geneva (February).

Hirschman, Albert O. 1981. *Essays in Trespassing: Economics to Politics and Beyond*. Cambridge, U.K.: Cambridge Univ. Press.

Hoekman, Bernard. 1999. "Rents, Red Tape and Regionalism: Economic Effects of Deeper Integration." In B. Hoekman and J. Zarrouk (eds.) *Catching Up with the Competition: Trade Opportunities and Challenges for Arab Countries*. Ann Arbor, Michigan: University of Michigan Press.

_____ and C. Primo Braga. 1997. "Protection and Trade in Services: A Survey." *Open Economies Review* 8: 285-308.

_____ and M. Kostecki. 2001. *The Political Economy of the World Trading System*. Second Edition. New York: Oxford University Press, Inc.

Hufbauer, Gary Clyde, Barbara Kotschwar and John S. Wilson. 2001. "Trade Policy, Standards, and Development in Central America." Policy Research Working Paper series No. 2576. World Bank, Washington, D.C.

Hunter, Linda, James R. Markusen, and Thomas F. Rutherford. 1992. "US-Mexico Free Trade and the North American Auto Industry: Effects on the Spatial Organization of Production of Finished Autos." *World Economy* 15 (1): 65 – 81.

Kechichian, Joseph. 1985. "The Gulf Cooperation Council: The Search for Security." *Third World Quarterly* 7: 853-81.

Kraay, A. and J. Ventura. 2002. "Trade Integration and Risk Sharing." *European Economic Review*.

Krugman, Paul and G. Hanson. 1993. "Mexico-U.S. Free Trade and the Location of Production." In Peter Garber (ed.). *The Mexico-U.S. Free Trade Agreement*. Cambridge, Massachusetts: MIT Press.

Lanthuria, M. and B. Fikkert. 2001. "Valuing Intellectual Property Protection – Econometric Estimates for India." Paper presented in the Trade Unit Seminar series (November 21), World Bank. Washington, D.C.

Lumenga-Neso, O., M. Olarreaga and M. Schiff. 2001. "On 'Indirect' Trade-Related R&D Spillovers." Mimeo, DECRG-TR, World Bank.

Madani, Dorsati. 1999. "South-South Regional Integration and Industrial Growth: The Case of the Andean Pact", World Bank, DECRG-TR, mimeo (March).

Mattoo, Aaditya and P. Mavroidis. 1995. "The EC-Japan Consensus on Cars: Interactions between Trade and Competition Policy." *World Economy* 18 (3): 345–65.

Ministerio de Relaciones Exteriores. 2001. "Comercio Exterior de Chile." Dirección de Estudios. Dirección General de Relaciones Económicas Internacionales. No. 3. Tercer Trimestre (November); and other issues.

Mizala, Alejandra and P. Romaguera. Forthcoming. "Protection and Labor Standards." In R. Fischer (ed.). *Latin America and the Global Economy: Export Trade and the Threat of Protectionism*. Macmillan: London.

Olarreaga, Marcelo and I. Soloaga. 1998. "Explaining MERCOSUR's Tariff Structure: A Political Economy Approach." *World Bank Economic Review* 12 (2): 297-320.

_____, M. Schiff and Y. Wang. 2001. "Trade and North-South Technology Spillovers: An Industry-level Study." Mimeo, International Trade Unit, World Bank.

Otsuki, Tsunehiro, John S. Wilson and Mirvat Sewadeh. 2001. "A Race to the Top? A Case Study of Food Safety Standards and African Exports." Policy Research Working Paper No. 2563. World Bank. Washington, D.C.

Panagariya, Arvind. 1997. "Preferential Trading and the Myth of Natural Trading Partners". *Japan and the World Economy* 9: 471–89.

Polachek, Solomon W. 1992. "Conflict and Trade: An Economics Approach to Political Interactions." In Walter Isard and C.H. Anderton (eds.). *Economics of Arms Reduction and the Peace Process*. Amsterdam: North-Holland.

Quiroz, Jorge. 2001. "Estimacion de los efectos de la banda de precios." Jorge Quiroz Consultores. Santiago, Chile.

Rose, A.K. and C. Engel. 2001. "Currency Unions and International Integration." Mimeo, Haas School of Business, UC Berkeley.

Schiff, Maurice. 1996. "La Integración de Chile al NAFTA: Temas Elegidos." Chapter 2 in M. Schiff and C. Sapelli (eds.). *Chile en el NAFTA. Acuerdos de Libre Comercio versus Liberalización Unilateral*. Santiago: Centro Internacional para el Desarrollo Económico (CINDE).

_____. 1997. "Small is Beautiful: Preferential Trade Agreements and the Impact of Country Size, Market Share, Trade Policy, and Smuggling." *Journal of Economic Integration* 12 (3): 359–87.

_____. 2000. "Multilateral Trade Liberalization, Political Disintegration, and the Choice of Free Trade Areas versus Customs Unions." Policy Research Working Paper Series no. 2501. World Bank, Washington, D.C.

_____. 2001. "Will the Real 'Natural Trading Partner' Please Stand Up?" *Journal of Economic Integration* (June).

_____ and W. Chang. 2000. "Market Presence, Contestability, and the Terms-of-Trade Effects of Regional Integration". Mimeo, DECRG-TR, World Bank.

_____ and L. A. Winters. 1998. "Regional Integration as Diplomacy," *World Bank Economic Review* 12: 271-96 (May).

_____ and _____. Forthcoming. *Regional Integration and Development*. Oxford University Press: N.Y.

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

Viner, Jacob. 1950. *The Customs Union Issue*. Washington, D.C.: Carnegie Endowment for International Peace.

Whalley, J. 1996. "Why Do Countries Seek Regional Trade Agreements?" in J. Frankel (ed.) *The Regionalization of the World Economy*, Chicago University Press.

Wilson, John S. 2001. "Bridging the Standards Divide: Recommendations for Reform from a Development Perspective." Mimeo. DECRG-Trade. World Bank. Washington, D.C.

Winters, L. Alan. 1994. "The EC and Protection: The Political Economy." *European Economic Review* 38: 596-603.

_____. 1996. "Chile y el NAFTA: Lecciones y orientaciones futuras." In M. Schiff and C. Sapelli (eds.) *Chile en el NAFTA. Acuerdos de Libre Comercio versus Liberalización Unilateral*. CINDE: San Francisco.

_____. 1997. "Lebanon's Euro-Mediterranean Agreement: Possible Dynamic Benefits." In W. Shahin and K. Shehadi (eds.). *Pathways to Integration: Lebanon and the Euro-Mediterranean Partnership*. Bonn: Konrad Adenauer Foundation.

World Bank. 2000. *Trade Blocs. A Policy Research Report*. Washington, D.C.

Yeats, Alexander. 1998. "Does MERCOSUR's Trade Performance Raise Concerns about the Effects of Regional Trade Arrangements?" *The World Bank Economic Review* 12 (1): 1-28.

Appendix 1. Definitions of RIAs

AFTA = Association of Southeast Asian Nations (ASEAN) FTA;

CACM = Central American Common Market;

CARICOM = Caribbean Community;

CEAO = Communauté économique de l'Afrique de l'ouest (West African Economic Community);

CEMAC = Communauté Economique et Monétaire de l'Afrique centrale (Economic and Monetary Community of Central Africa);

COMESA = Common Market for Eastern and Southern Africa ;

ECOWAS = Economic Community of West African States;

Euro-Mediterranean (Euro-Med) Agreement = FTA between the EU and various Southern and Eastern Mediterranean countries;

Europe Agreement = FTA between the EU and various Central and Eastern European countries;

IOC = Indian Ocean Commission;

MERCOSUR = Common Market of the South;

NAFTA = North American Free Trade Agreement;

OECS = Organization of Eastern Caribbean States;

SAARC = South Asian Association for Regional Cooperation;

SACU = Southern African Customs Union;

SADC = Southern African Development Community;

UEMOA = Union Economique et Monétaire Ouest-africaine (West African Economic and Monetary Union);

Appendix 2.

Chile's Sugar Policy: Transfers from Labor to Land and Foreign Capital

The policy related to the sugar industry seems to have resulted in a number of negative effects. These include a regressive impact on income distribution, the traditional negative welfare effect of protection, and the more important losses associated with transfers to foreign capital, and possibly to foreign suppliers through a worsening of Chile's terms of trade. This conclusion is based on studies by ANBER (2001), Fischer (2000) and Galetovic (2001a, 2001b). A different viewpoint, provided by Quiroz (2001), is presented at the end of the section. It should be noted that the sugar market is highly distorted and fragmented, and therefore quite volatile. However, the fact that many countries pursue inefficient sugar policies does not imply that Chile should do the same.

How did the policy come into being? As stated above, sugar benefited from a price band. As the world price of sugar declined starting in early 1998, protection increased, reaching over 100% at some point. Chile was thus no longer in conformity with its WTO commitment which consisted of a bound tariff of 31.5%. Safeguards were then approved on November 27, 1999, for a period of one year, and extended for a second year. Safeguards are allowed by the WTO *only* after a country has shown that a large surge in imports *and* damage to the domestic industry took place. It is not clear that Chile went through these steps and the issue is under review by a WTO panel. With the expiration of the safeguard, Chile then requested an increase to 98% in its tariff binding at the WTO.

Sugar has not only been protected by the price band, the safeguard, and then the higher tariff binding, but may also have been protected by the reference world price used. The reference price is a weighted average of two prices: the price of the London No. 5

contract, with a 90% weight, and the New York No. 14 contract, with a weight of 10%. The New York No. 14 contract is for US sugar *only*, and given the high protection of the latter, its price is approximately twice that of the London No. 5 contract (ANBER, 2001). This raises the entire price band, including its floor.

In addition to the negative welfare effects of the high degree of protection discussed earlier, the sugar price band worsens the distribution of income. On the consumer side, Fisher (2000) calculated—based on information from the Sixth Agricultural Census (INE 1996-97)—that the absolute amounts spent by consumers on sugar vary little with income. This is confirmed by ANBER (2001). Thus, low-income consumers pay proportionately more than higher-income ones. In 1997, the share of income spent on sugar by the lowest quintile (1.76%) was 63% higher than by the fourth quintile (1.09%), 2.25 times more than by the third quintile (0.78%), 3.5 times more than by the second quintile (0.50%), and close to 12 times more than by the first quintile (0.15%). The policy is thus highly regressive.

On the producer side, it is well-known that higher prices are typically capitalized in the price of the specific factor, namely land. And this factor is by definition more abundant on large farms. Galetovic (2001a) states that according to the census of agriculture, farms with less than five hectares only produce 4% of the country's sugar beet output and received in the period 1998-2000 less than 1% of the transfers provided by consumers.

The reason for the difference between the output share (4%) and the share of transfers to small farms (1%) is, first, that the market is not competitive, and IANSA--a monopsonist-- collects a large share of the transfers, and second, that another part (the tariff collected on imports) goes to the government.⁴⁰ According to Galetovic (2001b), based on a

⁴⁰Moreover, IANSA provides farmers with sugar beet production quotas, and it is administratively cheaper to buy from large farms than from many small ones.

methodology developed in ANBER (2001), in the year 2000, consumers spent an excess of US\$ 78 million for sugar.⁴¹

Of these US\$ 78 million, farmers collected US\$ 16 million (about 20%), the government US\$ 25 million (32%) and IANSA US\$ 37 million (about 48%). Thus, of the rent obtained on the consumption of domestic output (and going to the private sector), IANSA collects 70% (37/53) and sugar beet farmers collect 30% (16/53). In this context, note that IANSA's rhetoric has been that sugar protection is needed to support domestic sugar beet farmers. The results indicate that the one that captured most of the "support" is IANSA itself.

Real interest rates on Chile's Central Bank instruments (such as the "Pagare Reajutable con Cupones") averaged around 6% over the last three years (for both eight-year and twenty-year maturity). Assuming IANSA's real cost of capital is 2% higher than that of the Central Bank or 8%, and assuming a constant flow of transfers over time, the policy would raise the pre-tax value of IANSA by the present value of these flows or by over US\$ 460 million.

Note also that foreign capital gains more from the sugar policy than domestic sugar beet producers. Such a transfer implies a loss in national income for Chile and an additional welfare cost. IANSA was estimated to capture close to 48% of the transfers. With a 51% of IANSA owned by foreign capital, close to a quarter of all transfers (24.2%) is captured by foreign capital. This amounts to about US\$ 19 million, with a present value of over US\$ 235 million. And the transfers to foreign capital are larger than those to Chile's sugar beet producers (US\$ 19 million versus US\$ 16 million).

⁴¹ This is just the transfer and does not include the welfare (triangle) loss due to the price increase.

Since the increase in the cost of sugar consumption is about the same for all quintiles, the added cost for the poorest quintile is about 1/5 of the total or US\$15.6 million. On the other hand, foreign capital receives US\$19 million. Thus, transfers to foreign capital are more than sufficient to fully compensate the lowest quintile for its increased sugar expenditures.

Argentina is Chile's first sugar supplier, though Guatemala (the second supplier) and Brazil (the third supplier) are more efficient, and Argentina's sugar industry is protected against imports from Brazil. From conversations with economists in government and academia and with sugar importers, I have heard two plausible explanations as to why Chile imports from Argentina, and imports more from it than from any other country. The first one is price discrimination (I owe this explanation to Jorge Quiroz). Argentina's sugar industry is highly concentrated and, according to this explanation, acts as a discriminating monopolist, selling at a lower price in Chile than in Argentina. In that case, Chile would gain from Argentina's price discrimination. An alternative hypothesis is that Chile could obtain better prices for its sugar imports than what it actually pays, and that the higher prices paid result in transfers to foreign suppliers and a worsening of Chile's terms of trade, and are due to collusion between Argentina's sugar industry and IANSA.

Which of these two hypotheses is closer to what actually occurs is difficult to ascertain because of a lack of transparency. Transfers to foreign suppliers may also take place with respect to imports from Guatemala. Non-IANSA sugar importers report that when they have tried to buy sugar from the highly concentrated Guatemalan sugar industry, they have been told that the industry only deals with IANSA. If so, this certainly reduces

the competitiveness with which sugar is purchased abroad. And it has led some to wonder whether collusion might exist between the Guatemalan sugar industry and IANSA.⁴²

In fact, both hypotheses may be correct. Calculations made based on data from ODEPA (Oficina de Estudios y Políticas Agrarias) show average CIF import prices for sugar in January-August 2001 of US\$/ton 298.1 from Argentina, US\$/ton 311.5 from Brazil and US\$/ton 284.5 from Guatemala. Thus, despite Argentina's protection against imports from Brazil, it sells to Chile at a price below that from Brazil (and the same holds for the FOB price), which seems to point to price discrimination by the Argentine sugar industry. On the other hand, Guatemala's CIF price is below that from either Argentina and Brazil, and Chile would benefit by importing more from the former.

Finally, with the 98% tariff binding at the WTO, Chile provided tariff-free quotas to Argentina (20,000 tons), Guatemala (16,000 tons) and Brazil (12,000 tons).⁴³ These quotas provide those who obtain them with a profit margin which is determined by the price band, and whose maximum is 98%. In the calculations made above, IANSA paid farmers an equivalent of US\$ 343/ton in 2000 and sold at US\$ 429/ton, which amounts to a 25% margin. Thus, the tariff-free import quotas entail a potential profit margin that is about four times as large (without the need to produce). If IANSA receives the quotas, it will benefit twice, once on the rents described above and once on the tariff-free quotas. And this will result in another transfer to foreign capital and another welfare loss for Chile. Note that soft drink producers have requested that these quotas be given to them as a way to compensate them for the high cost of domestic sugar (El Mercurio, November 16, 2001).

⁴² Assuming the information were available, one way to find out would be to examine the Guatemalan export contracts and IANSA's import contracts and check whether they varied by source or destination.

⁴³ These are referred to as tariff quotas or tariff-rate quotas (TRQ), whereby a country receives a quota with a zero or low tariff rate up to its quota level, and pays the normal (98%) tariff beyond the quota.

El Mercurio (26 November 2001) reports that Brazil plans to go to the WTO and request compensation for the increased protection against its sugar exports to Chile. Brazil sold 53,900 tons of sugar to Chile and finds the tariff-free quota inadequate. Brazil's government and private sector are particularly critical of the protection provided to IANSA. According to Pedro de Camargo Neto of the Ministry of Agriculture of Brazil, Brazil may retaliate by restricting Chilean imports of fruits, wine, salmon, copper, cellulose and paper. This would imply the worst of both worlds, with welfare losses associated with Chile's sugar import restrictions as well as with restrictions on access to Brazil's market.

One way to resolve these issues would be to bind *all* products at the WTO at the level of the applied uniform MFN tariff rate, including sugar (and wheat). This would do away with the asymmetry of the price band, with the regressivity of the policy, and with the various sources of welfare loss described above.

Such a reform might not be politically feasible unless losers were compensated. The policy provided about US\$ 16 million of extra income to sugar beet producers and US\$ 25 million of government revenue. Thus, with full compensation, the cost would be US\$41 million or about 0.05% of GDP. The cost would be lower if compensation to producers were less than 100% of the loss, as is typical in compensation schemes, and would decline over time as alternative uses for the cheaper land are found. It is likely, though, that IANSA might not go along (it has threatened to stop buying from domestic producers if protection is removed), in which case reform would become more expensive.

Note also that the tax is highly inefficient and that alternative sources of government revenues are likely to exist that are less costly. Under the sugar policy, the government collects US\$25 million, while transfers to foreign capital are US\$19 million. In other

words, for every dollar the government collects, 76 cents are transferred to foreign capital. And this does not include the consumer and producer efficiency costs of the policy.

As mentioned at the start of this section, Quiroz (2001) presents a different view of the situation. He argues that from 1986 to 1997, the price band provided protection to the sugar sector that was only about 5% above the protection based on the average uniform tariff over that period (or 19% inclusive of the uniform tariff), and that for 1986-2000 the protection provided by the price band was 13% above the uniform tariff (or 28% inclusive of the uniform tariff). He obtains levels of protection in excess of the level of the uniform tariff equal to 37% in 1998, 61% in 1999 and 49% in 2000. Quiroz also sees a benefit in the policy due to its stabilizing price effect for a highly volatile commodity.

A few points need to be mentioned with respect to these results. First, the protection rate of the price band is calculated on a price that includes the uniform tariff rate and not on the CIF import price. Calculations based on the CIF import price would show that the price band resulted in a higher protection rate (e.g., 41% rather than 37% in 1998). Second, the figures reported are annual averages and may therefore hide variation within the year. And third, protection seems to have increased in the year 2001 which is probably why Chile requested such a large increase in its bound tariff rate at the WTO, from 31.5% to 98%. In any case, Quiroz's results show a lower rate of protection resulting from the sugar price band than does Galetovic (2001a).

**Table 1. Chile: Value (in US\$ millions) and Share of the Main Export Products
(as a Percentage of Total Exports) by Country/Region of Destination, 2000**

Trade Partner/Region	Vegetables	Fruits	Fisheries			Processed food products /3	Wine	Forestry	Cellulose, paper and others	Mining	Rest of exports	Total exports
			Fresh	Frozen	Fish fillet and others							
World (US\$MM)	224.59	1,336.11	115.28	491.06	606.50	455.46	580.51	985.84	1,442.76	8,387.61	3,834.81	18,460.53
NAFTA	54.3%	55.4%	45.3%	3.0%	62.6%	34.7%	31.8%	51.0%	3.0%	15.5%	20.4%	23.2%
United States	51.5%	50.7%	43.9%	2.6%	60.3%	23.4%	21.6%	44.5%	1.7%	9.6%	12.7%	17.4%
Mexico	2.4%	4.5%	0.8%	0.0%	1.3%	9.7%	2.3%	5.1%	1.2%	4.2%	7.0%	4.4%
Canada	0.4%	0.2%	0.7%	0.4%	1.0%	1.6%	7.8%	1.4%	0.1%	1.7%	0.6%	1.3%
Latin America (except Mexico)	17.3%	13.5%	25.9%	1.7%	4.0%	34.2%	9.6%	7.1%	29.8%	7.6%	37.9%	16.7%
Mercosur /1	13.6%	5.7%	18.4%	0.8%	3.0%	14.3%	4.2%	2.1%	15.7%	7.0%	16.5%	9.2%
Others	3.7%	7.8%	7.5%	0.9%	1.0%	19.9%	5.4%	5.0%	14.2%	0.7%	21.4%	7.5%
Asia	6.9%	12.6%	1.2%	85.2%	18.2%	10.4%	7.3%	32.1%	33.0%	41.5%	15.5%	30.7%
Japan	5.8%	2.1%	1.2%	79.4%	17.4%	9.6%	5.1%	24.1%	4.4%	16.1%	7.5%	13.8%
China	0.0%	1.2%	0.0%	1.3%	0.1%	0.2%	0.5%	0.3%	9.7%	8.0%	1.8%	4.9%
India	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	1.4%	0.2%	0.7%
Korea	0.4%	0.7%	0.0%	2.4%	0.1%	0.2%	0.1%	1.9%	5.0%	7.6%	1.3%	4.4%
Rest of Asia	0.7%	8.4%	0.0%	2.1%	0.6%	0.5%	1.6%	5.8%	13.8%	8.4%	4.7%	6.9%
Europe	20.5%	18.2%	27.3%	8.6%	13.7%	17.8%	49.1%	7.7%	32.9%	35.0%	15.5%	26.5%
European Union /2	19.3%	16.3%	26.8%	7.9%	13.0%	15.5%	31.8%	6.4%	32.8%	30.4%	12.0%	22.8%
Rest of Europe	1.2%	1.9%	0.5%	0.7%	0.6%	2.3%	17.2%	1.3%	0.1%	4.6%	3.5%	3.7%
Rest of the world	0.9%	0.3%	0.3%	1.5%	1.5%	2.9%	2.3%	2.1%	1.3%	0.4%	10.7%	2.9%
World	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Source: Author's calculation. Based on Central Bank of Chile database.

1/ Includes Argentina, Brazil, Paraguay, Uruguay.

2/ Includes Germany, Belgium, France, Netherlands, Italy, Spain and United Kingdom.

3/ Based on agriculture products.

Table 2. Chile: Value and Growth of Exports by Product, 1990-2000

Product	1990	1995		2000		
	US\$ million	US\$ million	Growth (90-95)	US\$ million	Growth (95-2000)	Growth (90-2000)
Vegetables	108.5	162.7	50.0%	222.8	36.9%	105.3%
Fruits	718.8	1,161.8	61.6%	1,297.0	11.6%	80.4%
Processed food	1,166.1	2,626.2	125.2%	2,591.3	-1.3%	122.2%
Beverages, alcohol, tobacco, and others	83.3	223.2	167.9%	623.5	179.3%	648.5%
Forestry	446.7	882.2	97.5%	986.7	11.8%	120.9%
Cellulose, paper and others	425.0	1,628.5	283.2%	1,441.0	-11.5%	239.1%
Sub-total	2,948.4	6,684.6	126.7%	7,162.3	7.1%	142.9%
Mining	4,830.8	7,984.1	65.3%	8,412.9	5.4%	74.2%
Rest of exports	851.9	1,776.0	108.5%	2,850.1	60.5%	234.6%
Total exports	8,631.1	16,444.7	90.5%	18,425.3	12.0%	113.5%

Source: Author's calculation. Based on Central Bank of Chile (2001), "Indicadores Económicos y Sociales de Chile 1960-2000".

**Table 3. Chile: Value and Growth of Exports by Country/Region of Destination
1990-2000**

Trade Partner/Region	1990	1995		2000		
	US\$ million	US\$ million	Growth (90-95)	US\$ million	Growth (95-2000)	Growth (90-2000)
World	8,631.1	16,444.7	90.5%	18,425.3	12.0%	113.5%
NAFTA	1,583.1	2,603.3	64.4%	4,245.5	63.1%	168.2%
United States	1,469.2	2,375.0	61.7%	3,183.7	34.1%	116.7%
Mexico	57.7	132.3	129.3%	818.1	518.4%	1317.9%
Canada	56.2	96.0	70.8%	243.7	153.9%	333.6%
Latin America (except Mexico)	1,017.1	2,962.7	191.3%	3,182.5	7.4%	212.9%
Mercosur /1	652.0	1,774.7	172.2%	1,709.1	-3.7%	162.1%
Others	365.1	1,188.0	225.4%	1,473.4	24.0%	303.6%
Asia	2,329.3	5,674.5	143.6%	5,671.1	-0.1%	143.5%
Japan	1,388.2	2,906.4	109.4%	2,548.5	-12.3%	83.6%
China	30.6	288.1	841.5%	967.7	235.9%	3062.4%
India	57.0	85.1	49.3%	124.9	46.8%	119.1%
Korea	259.3	896.5	245.7%	806.3	-10.1%	211.0%
Rest of Asia	594.2	1,498.4	152.2%	1,223.7	-18.3%	105.9%
Europe	3,375.1	4,825.8	43.0%	4,888.1	1.3%	44.8%
European Union /2	3,134.9	4,179.0	33.3%	4,206.4	0.7%	34.2%
Rest of Europe	240.2	646.8	169.3%	681.7	5.4%	183.8%
Rest of the world	326.5	378.4	15.9%	438.1	15.8%	34.2%

Source: Author's calculation. Based on Central Bank of Chile (2001), "Indicadores Económicos y Sociales de Chile 1960-2000".

1/ Includes Argentina, Brazil, Paraguay, and Uruguay.

2/ Includes Germany, Belgium, France, Netherlands, Italy, Spain, and United Kingdom.

Table 4. Chile: Value (in US\$ millions) and Share of the Main Import Products (as a percentage of total imports) by country/region of origin, 2000

Trade Partner/Region	Food, beverages, tobacco and others	Dress, footwear and others	Chemical products	Metallic products, machinery and equipments	Rest of imports	Total imports /1
World (US\$MM)	1,237.45	1,098.83	3,370.18	7,313.18	3,635.17	16,654.81
NAFTA	16.3%	10.7%	29.0%	38.3%	8.6%	26.5%
United States	9.7%	7.4%	20.9%	30.1%	4.9%	19.7%
Mexico	1.2%	2.6%	6.2%	4.5%	0.9%	3.7%
Canada	5.5%	0.8%	1.9%	3.6%	2.8%	3.1%
Latin America (except Mexico)	68.7%	19.0%	30.3%	13.7%	62.1%	32.1%
Mercosur /2	58.8%	13.6%	21.7%	12.3%	49.9%	26.0%
Others	9.9%	5.4%	8.6%	1.4%	12.2%	6.1%
Asia	3.3%	53.4%	11.7%	22.1%	7.0%	17.4%
Japan	0.1%	0.1%	2.4%	8.1%	0.6%	4.2%
China	0.3%	36.2%	3.2%	4.1%	3.9%	5.7%
India	0.1%	3.6%	0.5%	0.1%	0.1%	0.4%
Korea	0.0%	3.0%	2.6%	5.5%	0.2%	3.2%
Rest of Asia	2.9%	10.5%	3.0%	4.1%	2.2%	3.8%
Europe	9.0%	13.0%	24.7%	23.9%	8.8%	19.0%
European Union /3	6.4%	11.7%	18.4%	16.3%	6.3%	13.5%
Rest of Europe	2.6%	1.3%	6.2%	7.6%	2.5%	5.4%
Rest of the world	2.6%	3.9%	4.3%	2.0%	13.5%	5.1%
World	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Source: Author's calculation. Based on Central Bank of Chile database.

1/ Data do not include free trade zone imports and other imports not related to any trade region or country.

2/ Includes Argentina, Brazil, Paraguay, and Uruguay.

3/ Includes Germany, Belgium, France, Netherlands, Italy, Spain, and United Kingdom.

**Table 5. Chile: Value and Growth of Imports by Country/Region of Origin
1990-2000**

Trade Partner/Region	1990	1995		2000		
	US\$ million	US\$ million	Growth (90-95)	US\$ million	Growth (95-2000)	Growth (90-2000)
World	7,347.3	15,348.3	108.9%	18,089.4	17.9%	146.2%
NAFTA	1,698.5	4,708.6	177.2%	4,466.1	-5.2%	162.9%
United States	1,373.4	3,792.9	176.2%	3,338.5	-12.0%	143.1%
Mexico	100.8	600.6	495.8%	615.6	2.5%	510.7%
Canada	224.3	315.1	40.5%	512.0	62.5%	128.3%
Latin America (except Mexico)	1,634.8	3,488.1	113.4%	5,361.0	53.7%	227.9%
Mercosur /1	1,124.0	2,677.2	138.2%	4,337.7	62.0%	285.9%
Others	510.8	810.9	58.7%	1,023.3	26.2%	100.3%
Asia	967.4	2,666.3	175.6%	2,950.2	10.6%	205.0%
Japan	568.4	1,013.0	78.2%	710.1	-29.9%	24.9%
China	57.0	390.3	584.4%	999.9	156.2%	1653.3%
Korea	122.7	528.0	330.3%	535.3	1.4%	336.3%
Rest of Asia	219.3	735.0	235.2%	704.9	-4.1%	221.4%
Europe	2,059.3	3,410.1	65.6%	3,197.0	-6.2%	55.2%
European Union /2	1,474.4	2,663.3	80.6%	2,287.3	-14.1%	55.1%
Rest of Europe	584.9	746.8	27.7%	909.7	21.8%	55.5%
Rest of the world	987.3	1,075.2	8.9%	2,115.1	96.7%	114.2%

Source: Author's calculation. Based on Central Bank of Chile (2001), "Indicadores Económicos y Sociales de Chile 1960-2000".

1/ Includes Argentina, Brazil, Paraguay, and Uruguay.

2/ Includes Germany, Belgium, France, Netherlands, Italy, Spain, and United Kingdom.

Table 6a. US Tariffs Peaks and Escalation

Código	Descripción	NMF	%
0806.10.00	Uvas frescas	0 % - 1,13/m3 - 1,8/m3	0,0%
0806.20.00	Pasas	1,8 - 2,8 - 3,5 c/kg	2,9%
2009.60.00	Jugo	4,4 c/liter	3,7%
0808.10.00	Manzanas frescas	0%	0,0%
0813.30.00	Manzanas secas	0,74 c/kg	0,2%
2007.99.90	Mermeladas	5,6%	5,6%
2008.99.00	Conservas y mezclas	0,9 c/kg	0,4%
2009.70.00	Jugo	0%	0,0%
0809.30.10	Duraznos frescos	0% (Excepto 01/06 al 30/11)	0,0%
2008.70.10	Conservas	17%	17,0%
0702.00.00	Tomates frescos	0,039- 0,028	2,2%
0712.90.90	Tomates secos	8,7%	8,7%
2002.10.00	Preparados o en trozos	12,5%	12,5%
2103.20.00	Salsa	11,6%	11,6%

Source: Dirección General de Relaciones Económicas Internacionales, Dirección de Estudios (May 2001).

Table 6b. EU Tariffs Peaks and Escalation

Código Arancelario	Nombre Producto (s)	Arancel	SGP (S/N)
0302.65...	Tiburones y azulejos frescos o refrigerados	2,1% - 4,2%	S
0302.692...	Merluza fresca o refrigerada	0% - 22%	N
0303.78...	Merluzas congeladas	15%	N
0304.2040...	Filetes de merluza congelados	2,6% - 18%	S
0304.207...	Filetes de sardina, jurel o caballa	2,6% - 15%	S
1604.15...	Caballas y estorninos en conserva	7% - 17,5%	S
1604.16...	Anchoas en conserva	25%	N
1604.19	Los demás pescados en conserva	4,9% - 24%	S
4403.20...	Troncos para aserrar	0%	N
4411.11	Tableros de fibra	4,9%	S
0402.1...	Leche concentrada, azucarada y con materia	118,8 - 125,4 eur/100kg	N
0403.90.11...	Suero mantequilla, leche y nata cuajada	100,4 - 167,2 eur/100kg	N
0406.20.9000	Los demás quesos de cualquier tipo	188,2 eur/100kg	N
0808.10.10.00	Manzanas frescas	5,4%	S
2007.99.9...	Las demás mermeladas	15% - 24%+23 eur/100kg	N
0809.30.10.00	Duraznos frescos (del 01/01 al 31/03)	13,2%	S
2008.70.1...	Conservas de duraznos	21,7% - 25,6%+4,2 eur/100kg	S
0806.10.10.05	Uvas frescas, variedad emperador (del 01/01 al 31/03)	6%	S
2009.60.1...	Jugos y mostos de uvas	22,4% - 40%+121 eur/100litros	N
0702.00.00.07	Tomates frescos con p. Entrada >= 84,6 euros/100kg (del 01/01 al	8,8%	N
2103.20.00...	Ketchup y demás salsas de tomates	7,1%	S
2002.10...	Tomates preparados o conservados	14,4%	N

Source: Dirección General de Relaciones Económicas Internacionales, Dirección de Estudios (September 2001).

Table 7. Administrative Cost of Rules of Origin (2%) ^{1/}

Imports from:	(US\$ millions)
LATIN AMERICA AND CARIBBEAN (LAC)	119.2
LAC and CANADA	129.4
LAC, CANADA, US	195.3
LAC, CANADA, US, EU ^{2/}	241.0
LAC, CANADA, US, EU, JAPAN	255.1
LAC, CANADA, US, EU, JAPAN, KOREA	265.8
LAC, CANADA, US, EU, JAPAN, KOREA, CHINA, and INDIA	286.2
ALL TRADE PARTNERS	334.1

1/ Data of imports are of the end of 2000.

2/ EU= European Union (United Kingdom, Germany, France, Spain, Belgium, Holland, Italy)

Source: Author's calculation. Based on Central Bank of Chile database.

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