

Trade liberalization in Latin America: The case of Chile

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Abstract

This paper provides an overview and evaluation of trade policies in Chile, as well as the problems facing Chilean trade. It also evaluates the desirability of industrial policy and of a shift away from natural resource based exports.

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1 Introduction

This paper provides an overview of the situation of foreign trade for Chile, the problems it faces and an evaluation of policies, including some that have been proposed but not implemented. After a brief description of Chilean trade, it considers the role of the free trade agreements that have become such an important factor in Chilean trade. In particular, it examines some of the disadvantages of free trade agreements in addition to the traditional trade deviation argument. Following Harrison et al. (2003), I agree with their conclusion that Chile's approach is reasonable when the highest tariffs are low, as is the case. Second, I examine non-tariff measures and suggest that contingent protection is a problem for some Chilean exports but in general it appears that the threat of sanctions has been more important than their actual use. Similarly, Chile has not been very active in its use of these measures. We then examine other types of non-tariff protection (administrative, phytosanitary, based on standards) and argue, based on the results of a survey of exporters, that this type of protection represents an important barrier for exports to Latin America, but not to other export markets. Finally, I examine proposals for industrial policy and for the creation of clusters in the export sectors. I suggest that successful export sectors –even in natural resources– have created their own clusters of supply industries naturally, without government intervention. Moreover, I hypothesize that future development will be based on these clusters based on natural resource exports.

2 A brief description of Chilean Trade

Chile is a developing economy with a GDP of about 70 billion US\$. It had a long period of fast growth during the years 1985-1997, which averaged 6-7% annually. Since then, growth has stagnated, averaging about 3% per year since then, though prospects have improved recently. It is a very open economy, with maximum tariffs of 6% (excluding sugar, wheat and oil imports) and average duties of less than 3%, given all the Free Trade Agreements signed by the country.

Trade represents about 55% of Chile's GDP. Exports grew fairly rapidly until the Asian crisis of 1997, which led to declines in the prices of many Chilean exports. Exports volumes continued to grow, however, and the recent increase in export prices led to a value of exports that surpassed US\$20 billion in 2003 and will probably exceed US\$26 billion during 2004.

The trend toward signing trade agreements that began in the early 90's was a

change from the previous 15 years of unilateral liberalization.¹ While there was no extremely convincing basis for this new strategy, one of the arguments was that an agreement could lead to concessions from the trade partner that would be unavailable under unilateral tariff reduction.²

Chile has signed Agreements with most economies in South America: Bolivia, Colombia, Cuba, Ecuador, Peru, Venezuela and Mercosur.³ Chile has also signed standard FTA's with the: European Union, Canada, Mexico, the US, EFTA, Central America, and a recently ratified agreement with South Korea, that country's first FTA. The fact that Chile has signed all these FTA's imply that in many cases, the only protection exporters face is non-tariff protection.

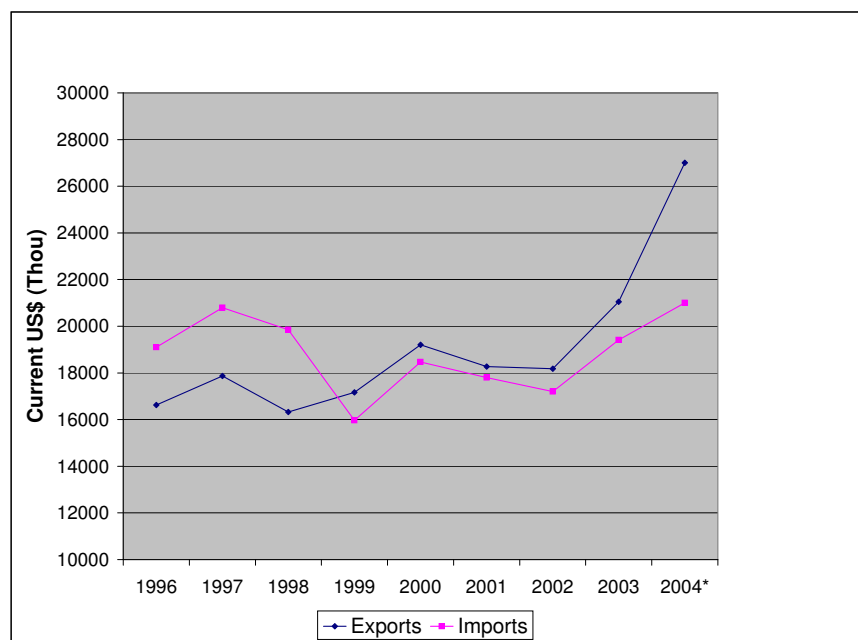


Figure 1: Chilean trade (data for 2004 are estimates of the author).

Chilean exports (see table 1) are to a large extent based on natural resources, though in many cases they have been processed. Copper is the main export, with forestry

¹Nevertheless, there has been a complementary gradual unilateral reduction in the maximum tariff to 6%.

²Harrison et al. (2003) use a GE model to suggest that this was the correct strategy to follow for Chile.

³The agreements with the South American economies are *Acuerdos de Complementación Económica*, a slightly more inclusive form of trade agreement, which encompasses agreements on investment and other measures.

Table 1: The main Chilean exports by value

Rank 2000	Tariff Classif.	Name	Exports 2000		Exports 2003*	
			MMUS\$	%	MMUS\$	%
1	7403	Refined copper	4.662	25,3	4.528	22,5
2	2603	Copper minerals and conc.	2.383	12,9	2.407	12,0
3	4703	Cellulose	1.111	6,0	881	4,4
4	0806	Grapes	693	3,8	617	3,1
5	0304	Fish fillets and other fish	603	3,3	847	4,2
6	2204	Wine	580	3,1	678	3,4
7	0303	Frozen fish	490	2,7	460	2,3
8	4407	Sawn wood	334	1,8	445	2,2
9	2905	Acyclic alcohols	317	1,7	450	2,2
10	7108	Gold	292	1,6	283	1,4
11	0016	Services for ships	291	1,6	375	1,9
12	7402	Unrefined copper	286	1,6	432	2,1
13	0808	Apples, pears	256	1,4	318	1,6
14	2301	Fish meal	235	1,3	372	1,8
15	2710	Petroleum oils	174	0,9	398	2,0
Total			18.425	100,0	20.140	100,0

Source: Data for 2000 from Fischer (2001). Data for November 2003 from ProChile.

products, wine, fruit, salmon and other seafoods are other important sectors.⁴ The concentration of exports has been decreasing over time. In 1980, the first fifteen categories of exports (at the four digit tariff classification level) represented 79.5% of all exports, a number that fell to 69.0% in 1990 and reached 67.1% by 2003.⁵

Exports have also become very diversified in their destinations: around 12% of exports go to Central and South America, 24% to Nafta countries, 24% to the European Union and the EFTA, and almost 31% is exported to Asia and Oceania.⁶

The diagnosis is that of a country with a healthy foreign sector, whose trade to GDP ratio is no higher because of its distance –and hence transport costs– to the demand centers and also due to the types of products it exports, which are based on natural resources and require few imported intermediate inputs in production.⁷

⁴Wine can be thought of as fruit plus capital, and salmon as fishmeal plus capital. So these products belong to a second stage of processing of the underlying natural resource. See Fischer (2001).

⁵In years of specially high copper prices, such as 2004, the concentration of exports tends to increase against the secular trend.

⁶The source of the data is Prochile, for January-November 2003.

⁷As compared to some Asian countries that assemble products made from imported components.

3 Trade agreements

Given the Chilean penchant for signing trade agreements, it is important to evaluate whether they are substitutes for multilateral lowering of trade barriers. Unfortunately, trade agreements are an inferior substitute. Apart from the possibility of losses due to trade deviation⁸, there are at least two further reasons for inefficiency.

3.1 Horizontal cumulation

One of the problems of trade agreements is that in most cases their benefits are not transitive. Suppose a country such as Chile has trade agreements with Canada and Colombia. Suppose cloth is exported from Canada to Colombia where it is transformed into a dress that is exported to Chile. It is possible that the good does not receive national treatment even though more than half of its value is produced in countries with which Chile has trade agreements (for instance, if the value of cloth is 51% of its final value and the remaining 49% of its value were added in Colombia). This makes bilateral trade agreements inferior to multilateral agreements. Though trade agreements permit back-and-forth cumulation⁹ there is no “horizontal” cumulation.

3.2 Political economy of trade agreements and economic efficiency¹⁰

Assume that we rank the goods produced by countries according to their international competitiveness. Goods exported by the country are internationally competitive and therefore face no tariffs in the country. What about the goods that are less competitive? Assume that tariffs are not uniform and are shaped by the political economy process. In general we expect that there will be no producers of the goods in which the country is least efficient, so there are no protectionist reasons to have high tariffs in these goods. Tariffs should be higher for goods for which the economy is semi-efficient, specially those which are barely imported on average. Figure 2 shows the expected pattern of protection.

Consider the negotiation of a trade agreement. During the negotiation process between countries that are planning an FTA, there will be no problems in achieving low barriers in those goods for which either country is very inefficient, because there

⁸See Panagariya (2000).

⁹A good that is exported from one of the two countries to the other and then reexported satisfies national content laws.

¹⁰Due to P. Serra.

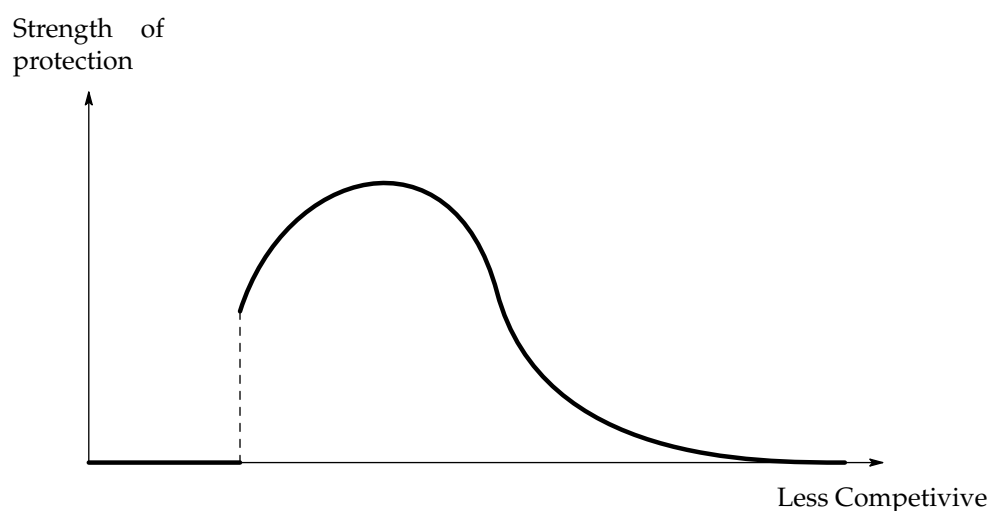


Figure 2: The political economy of protectionism.

will be few (if any) producers. If these goods are those for which the partner country is not very efficient, we will have the classical case of trade deviation, by shifting to imports from a relatively inefficient provider.

In the case of goods for which one country is very efficient and the partner is relatively inefficient, the lobby against lowering trade barriers will be strongest. Therefore, the agreement will not achieve an efficient distribution of production in the goods. Finally, the goods on which the negotiations are most intense are those in which one country has a small comparative advantage and the other one has a small comparative disadvantage. If successful, we have trade deviation, and otherwise, no benefits.

According to this argument, when one country is very efficient and the partner is very inefficient in a good there will be no protection in the partner country, so there are no gains from the FTA. If both countries are very inefficient in the production of a good, again there are no gains from the agreement, because tariffs will be low in both countries. If both are efficient, they export to the rest of the world and there is nothing to gain from the agreement. In the intermediate case in which one country is very efficient in a good and the other one is relatively inefficient, there probably will not be any reduction in protection. Finally, in the case in which one country is not very efficient and the other one does reduce its barriers, we have trade deviation.

The only cases in which benefits will accrue are those when the average tariff level is low and so the trade deviation effects will be unimportant relative to the increased access to the partner country. This argument may explain the results of the applied

GE analysis of Harrison et al. (2003), which showed that Chile would lose out if it established FTA's with a uniform tariff of 11%, but that these negative effects disappear when tariffs are 6%.

4 Neoprotectionism

As has been clear ever since the Tokyo Round of GATT, the reduction in tariffs has brought on the increased use of non-tariff barriers, which are often more difficult to eliminate than the original tariffs. These new forms of protection include contingent protection (safeguards, antidumping and CVD regulations), standard based protection (phitosanitary, quality or otherwise) and administrative protection. Many of the barriers facing and imposed by Chile (and other LA countries) correspond to this category.

4.1 Antidumping and other contingent measures

The use of contingent protection measures (specially antidumping) as a substitute for tariffs has been noted by many authors, including Finger (1987), and, more recently, by Blonigen and Prusa (Forthcoming), which provide a useful analysis of the *state of the art* in antidumping theory and practice. Much of this analysis applies also to other forms of administered (or contingent) protection.

4.1.1 Chilean use of contingent protection

The abuse of contingent protection has been fairly limited, though there was an initial period in which their use was fairly extensive. In the period 1981 to 1985, which coincided with a severe crisis, there were 171 complaints of unfair trade presented to the predecessor of the current *Comisión de Distorsiones*, which resulted in 51 applications of protective measures. In the five year period ending in 2002, there were only 19 complaints, which led to the application of seven measures, see table 2. It is worrying that there has been an increase in the powers of the Commission and it has been altered by the presence of a representative of the Agricultural Ministry, which is usually responsive to protectionist measures. Nevertheless, there seem to exist strong pressures (both from exporters and due to ideological reasons) against the use of contingent protection in Chile.

There is one important exception in the case of protection on the three traditional agricultural goods: wheat (and flour), sugar and cooking oil, which are covered by

Table 2: Contingent protection used by Chile 1995-2003

Country	AD init.	AD measures	CVD init.	CVD measures
Arg	6	4	0	0
Bra	3	2	0	0
EU	1	0	0	0
Per	8	4	0	0
USA	4	2	2	0
Ven	1	0	1	0

Source: WTO, processed by author.

the *bandas de precios*. Despite the cost of these measures, which are distortionary and regressive, they have remained and have even become more protectionist in the case of sugar. Fortunately, there to be no prospect of extending this protection to other sectors

4.1.2 Use of contingent protection against Chile

Chile has been a frequent target of contingent protection initiations, specially in the US, Latin America and Europe, see table 3. Fortunately, fewer measures have been actually imposed.

Chile has been at the forefront of negotiations to reduce the use of contingent protection measures, specially in the US. There have been some promising developments in the area of AD. In the Canada-Chile FTA, the two countries agreed not to use AD measures against each other.¹¹

4.2 Other non-tariff measures

The abuse of other non-tariff measures has not been studied systematically until recently. These measures, which comprise the use of standards, administrative measures, restrictive import licences and taxes –not tariffs– that fall mainly on imports are a fairly new issue for trade analysis. The empirical analysis of these measures is it in its early stages. The papers collected in Maskus and Wilson (2001) and Deardorff and Stern (1998) are some of the few organized attempts at measuring these barriers to trade.¹²

¹¹A similar situation arose in the New Zealand-Australia FTA. An alternative would have been to extend antitrust policy to international predatory behavior, but it seemed far too difficult to compatibilize the two traditions.

¹²Among the few theoretical sources are Fischer and Serra (2000) on standards and the collection of articles in Bhagwati and Hudec (1996).

Table 3: Contingent protection used against Chile 1995-2003

Country	AD init.	AD measures	CVD init.	CVD measures
Arg	0	1	0	0
Bra	4	0	0	0
Che	0	0	1	0
Chi	1	1	0	0
EU	0	0	1	1
Kor	3	0	0	0
NZ	1	0	0	0
Pol	0	0	1	0
Rus	2	2	0	0
Ukr	2	2	0	0
US	1	0	1	1

Source: WTO.

4.2.1 Chilean use of other non-tariff measures

There have been complaints of abuse of phytosanitary restrictions to block imports of agricultural products from neighboring countries. Often these standards are difficult to meet for neighboring countries and they may be designed with this object in mind. Some interesting examples are:

1. Changing the meat classification system to make it incompatible with international standards.
2. Raising the quality standard of medical oxygen above international standards in order to raise the cost of entering the market.

There is no hard evidence for administrative protection,¹³ though Latin American exporters have complained informally in the past. Latin American countries used to complain about the *reintegró simplificado*, an export subsidy under the guise of a return of taxes. This subsidy has almost been phased out in accordance to a WTO ruling.

4.2.2 Other non-tariff measures against Chilean exports

In general, the measurement of the protectionist effect of non-tariff barriers is a complex task. It is necessary to construct a metric for the intensity of protection, but this is difficult in practice.¹⁴ The main difficulty is the difficulty in comparing homogenous

¹³The traditional means for this type of protection do not exist: import licences are provided automatically and there is no possibility of arbitrary restrictions on imports.

¹⁴For a consistent theoretical metric, see Anderson (1996).

goods and abstracting from contingent effects due to exchange rates and hysteresis.¹⁵ There are several approaches that have been attempted, with indifferent success. Most empirical studies attempt to compare the unit costs within a country and in the international market, subtracting the effects of transport costs and standard tariffs. An alternative possibility is to ask exporters directly about the additional cost imposed by these measures.

I performed a small survey of Chilean exporters in all branches of the economy in order to test this approach.¹⁶ Unfortunately, even in large exporting companies, there are no systematic databases or accounting for these costs. Therefore the evidence that can be obtained from these surveys is anecdotal, but is nevertheless interesting: it represents the perception of Chilean exporters of the relative difficulty in exporting to different countries due to protection.

The exporting firms surveyed belonged to a wide range of industries, ranging from firms that export hundreds of millions of dollars to others that export less than a million dollars or export only sporadically (see table 2). Total exports during 2002 of the firms in the survey were slightly over US\$1.3 billion. The range of firms includes firms whose main market is exports to those that export only sporadically. Some of the firms export primarily within the western hemisphere (Canada, USA and Latin America), while others specialize in the developed economies. The goods that are exported range from abalone to avocado and from medical gloves to gases.

What are the conclusions of the survey? The first conclusion is that within Latin America, Chilean trade is protected by the free trade agreements, since they confer an advantage to Chilean exporters. This is an example of trade deviation, since at least some of the surveyed firms export to those markets only because of the cost differential generated by the tariffs on other, more efficient, exporters. In that sense, the FTA's signed by Chile have been advantageous to Chilean exporters, but probably not to our LA trade partners.¹⁷

A second conclusion of the survey is that executives complain about nontariff protection in Latin America as compared to developed economies. In general, it appears that rules are more widely respected in developed economies. These economies may have higher quality requirements for their imports, but once these are satisfied, the problems facing exporters are relatively minor.¹⁸

¹⁵The papers collected in Maskus and Wilson (2001) and Deardorff and Stern (1998) are some of the few organized attempts at measuring these barriers to trade. The most recent work is the volume which collects the papers presented at the 2003 "Workshop on Quantitative Methods for Assessing NTMs and Trade Facilitation" in Bangkok.

¹⁶See Fischer (Forthcoming). I interviewed the executives directly responsible for exports.

¹⁷Hopefully, Harrison et al. (2003) is correct and trade deviation is not an important factor for Chilean imports when uniform tariffs are set at 6%.

¹⁸Very few firms export to African, Arab and Sudan economies, but they all complain about the

Table 4: Surveyed firms

Company	Products
1	Cellulose
2	Copper manufactures
3	Paper for newspapers
4	Plastic packaging
5	Bycicles
6	Avocados, lemons, grapes
7	Cellulose
8	Lumber cut to shape
9	Tyres
10	Detonators for mining
11	Tomato paste, canned fruit, jams, pulp
12	Plastic bags
13	Latex gloves
14	Turbot and abalone
15	Electrodes and soldering wire

Some of the important problems affecting Chilean exporters in Latin America consist of bureaucratic and administrative problems on arrival at the destination. In many cases, exporters prefer to export FOB, so that they do not face these difficulties directly. The reason is that, when exporting FOB, an importer who has the local know-how deals with these bureaucratic difficulties, which in many cases may involve payments to persuade bureaucrats to expedite procedures. In the case of firms which have their own local distributors in the foreign markets, this is not possible, and they must face the gamut of trade restrictions.¹⁹ Other problems are associated to antidumping accusations. Neighboring countries (Argentina and Peru) have accused Chilean exporters of dumping, and in a few cases these accusations have prospered and the exporters are excluded from those markets.

Latin American protectionism often takes the form of administrative protectionism, even though contingent protection measures are also often used. It is very common for local firms to recur to lobbying for protection.²⁰

procedures and their lack of transparency, which appear to be far worse than those of Europe, Asia and the Americas. Due to the few firms that exported to those countries, it is impossible to determine whether this perception shows a statistically significant difference.

¹⁹For example, in several countries, custom officers can arbitrarily put containers on the ground for some inspections. The charges for putting containers on the ground and putting them back on carriers are high, and there are costly delays associated to these revisions.

²⁰Exports of bags to Argentina were stopped via the use of special tariffs, and when the company

Among Latin American economies, Brazil received the most complaints among the surveyed firms. Brazil imposes non-tariff trade barriers of all types, and in several cases these barriers dissuaded exporters from even attempting to enter the market, or caused them to cease exporting to that market. Brazil has a host of administrative measures, such as special taxes -not tariffs, even though they mainly fall on imports- and import licences. Those firms that export to Brazil usually consider it the least open market in the Americas.²¹ This occurs even though Chile has had a Free Trade Agreement with Mercosur, and therefore with Brazil, for more than five years.²²

Moreover, there are some self-inflicted problems for exporters due to the rigidity and inflexibility of Chilean procedures. These difficulties imply that there are at least two areas in which the government can have a positive effect on exporters. First, it can improve administrative procedures, increasing the flexibility of the work schedules of the inspectors associated to different services or by increasing the speed of the procedures at the Ministry of Foreign Relations. Second, it might be useful that the same ministry would examine the administrative procedures in the destination markets (perhaps through a program of interviews similar to the present survey) and would act directly with the governments of the importing economies. This should lead to improvements in those procedures.

5 Industrial policy

In the last few years there has been some arguments in favor of an industrial policy for Chile. Larraín et al. (1999) argue that the Chilean export basket is unable to lead to development and that Chile requires explicit policies to guide future development. In particular, they stress the fact that developed countries as a group export more than US\$4,000 per capita, which is much higher than the approximately US\$ 1,300 of Chilean per capita exports. They use this fact to argue that it is impossible that Chilean exports rise much above the present values and therefore Chile must diversify its export basket. They propose a series of industrial policies with the object of moving

started local production, and importing the required materials from Chile, these imports were also blocked via antidumping regulation. In Colombia, bureaucratic measures such as the revision of serial numbers in bicycles can have significant costs. In Mexico, customs procedures can be complex and may require "greasing" (by local importers) the officers in order not to practice destructive inspections or setting the container on the ground with the attendant costs.

²¹Statistical tests of this assertion showed that the probability that Brazil is perceived not to be more protectionist than the other markets in Latin America is smaller than 1%.

²²One of the strongest reasons for opposing a closer association with Mercosur is the lack of independent conflict resolution institutions within Mercosur.

away from the current export basket. While some of the policies are reasonable, such as the stress in education and perhaps science, there seem to be few arguments in favor of increased investment in specific areas such as information technology. The Indian developments they use as an example have been the consequence of a pre-existing large stock of highly qualified scientists and engineers, combined with new technologies that reduce communication costs, and with little (positive) government intervention.

Moreover, computations of exports per person are not strictly comparable. Developed or fast emerging countries have high exports per capita, but this may reflect the higher value of imported intermediates in production. In many cases, there is a lot of interindustry trade in the exports of these countries, which balloons both exports and imports.²³ Conversely, Chilean exports are mostly value added, with a relatively smaller proportion of imported intermediates.

Perhaps the arguments of Larraín et al. (1999) should be interpreted as arguing that countries that develop tend to produce export goods in a more roundabout way –in the Austrian economics sense of the expression–. While this seems reasonable, there is considerable evidence that Chile is moving in that direction. As table 1 shows, the 10 most important export sectors include wine and cultivated fish, such as salmon. Both exports represent a roundabout way of exporting fruit and fish meal respectively. A large fraction of grapes are not exported directly as fruit, but as wine. An important (but less and less so) source of food for salmon and other cultivated fish are pellets made from fish meal. Furthermore, exports of various types of meats (beef, poultry and pork) are increasing, and animals are fed imported grain. These meat exports are not based on natural resources and require advanced techniques to be able to compete in the world markets.

Nevertheless, there seems to be a feeling, common to various economists and policymakers, that Chile needs to develop some sort of hi-tech cluster or develop software that competes with India. Thus there are proposals for a mining cluster, which would be developed using the revenues of royalties on mining. In particular, there is some talk of creating forward and backward linkages in industry.²⁴

However, these proposals neglect the fact that there is a surprisingly extensive network of backward linkages in successful export oriented industries. As documented in Fischer (2001), in the mining industry these include sophisticated makers of dump

²³Consider for instance the case of assembly production.

²⁴Noland and Pack (2002) is a discouraging review of the industrial policy experiences of Japan, Korea and Taiwan, cases which are usually considered as successful experiences.

loaders, which are exported to Canada and Australia; a company that produces explosives and exports them to neighboring countries, another that exports drills to the US. Similarly, there are successful producers and exporters of high quality wine barrels (to the US, Italy and other countries). Finally, the cultivated sea products industry has spawned an equipment supply industry, a fairly successful biotech industry which produces vaccines for local salmon diseases, and has developed the capacity to cultivate local or imported species, as attested by the turbot, abalone and the still infant Chilean sea bass industry.

The important point to note is that the backward linkage clusters associated to these export industries have grown without or with very little state support. Moreover, these are successful sectors based on natural resources. Apparently, few subsidies are required for their suppliers.

6 Conclusions

Chilean trade policy has been successful, in large measure because the attempts to intervene have been tempered by continuous reduction in tariffs and other trade barriers. Even though the FTA's that Chile has signed can be distortive, the reduction in tariffs to a maximum of 6% ensures that the trade deviation effects are small as compared to the trade creation effects in other countries. However, this trade creation effect is smaller than it should be in Latin American countries, and specially in Brazil, due to the existence of various mechanisms that combine to reduce the effectiveness of trade agreements.

Even in those sectors in which protection has remained or even increased, such as the traditional agricultural products, these sectors are under continual pressure to reform, and there are strong lobbies –even in the agricultural sector– against these measures. It is possible that in the not so distant future, even these sectors will be opened.

Regarding industrial policy, there are continuing pressures for the development of some loosely specified cluster with governmental (or coerced) support, for instance, in the mining sector. The literature shows that these attempts have a negative expected value. Moreover, the fears that the country will not be able to create a sophisticated productive base are unjustified, as is shown by developments in the export sectors themselves as well as in the industries that supply these sectors.

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