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Macroeconomic policies, sector performance and firm response: the case of Chile's textile goods market

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Abstract

Traditionally, economic literature has treated macroeconomic theory separately from the evolution of the microeconomic structure. However, the structure of the economy cannot be explained in terms only of macro factors or only of micro factors since each has a major influence on the other. It is important, therefore, to develop a greater linkage between the two in order to arrive at a better understanding of the interactions between macro factors and the microeconomic structure, especially the links between changes in macroeconomic policy and entrepreneurial decisions and firm behavior. This paper explores the macro policy-micro behavior nexus in a Latin American context in the textile goods market.

The first section of the paper is an overview of the macroeconomic environment of Chile during the second half of the 20th century. Its focus is on economic and commercial policy because of the importance that trade barriers and exchange rates are thought to have for the performance of the manufacturing sector. The second section explores the evolution of Chile`s textile and garment sector which is the sector that has been selected for study. The last section is a case study describing the response and behavior of a leading textile firm, throughout its history, in Chile.

I. Introduction

Traditionally, economic literature has treated macroeconomic theory separately from the evolution of the microeconomic structure. The relationship that exists between them has not been explained to any considerable extent mainly because of the limitations that conventional price theory imposes. As Katz (1996) points out, current macroeconomic theory posits that a firm maximizes its utility in a context where it is assumed that there is no reason for its conduct to differ from any of its competitors. Their relationship occurs through the price system and competition is the only disciplinary factor in the conduct of individual firms.

In fact, firms differ in their strategies and structural organization as well as in the technological capacities that they acquire during their lifetime. Many decisions that are taken at the microeconomic level are fairly independent of the macroeconomic context. They mainly follow certain routines that have to be carried out and usually respond or depend only on certain aggregate prices in the economy. These actions are part of the routine of doing business and are carried out because they are things that must be done and they are maintained because they are hard and costly to change.

However, when macroeconomic turbulence and uncertainties reach a crisis level, even the most elementary routines may have to be abandoned and when that happens, major macroeconomic disequilibria will affect the actions of economic agents. In fact, once the growing imbalance brings about changes in decisions concerning, for example, the use of technology and the rationale for innovation and

transformation within firms, one can expect that the micro structure in which these decisions are made will be fundamentally changed.

The structure of the economy cannot be explained in terms only of macro factors or only of micro factors since each has an influence on the other. It is important, therefore, to develop a greater linkage in economic analysis between the two in order to arrive at a better understanding of the interactions between macro factors and the microeconomic structure, especially the effect of changes in macroeconomic policy on entrepreneurial decisions and firm behavior.

This paper explores the macro influence on the micro behavior in a Chilean context in textile goods. Chile is a small economy relative to many of its large competitors and trading partners and the United States economy has a particularly strong influence on Chile's macro economy. Chile's textile industry is small and so it is doubly vulnerable to changes in macroeconomic and trade policies with major competitors such as China. It is essential that the business community and entrepreneurs have a fundamental understanding of the effects of economic policies on their business. The recent impact of commodity prices, particularly copper prices, on the exchange rate of the Chilean peso is a case in point.

The first section of the paper is an overview of the macroeconomic environment of Chile during the second half of the 20th century. Its focus is on economic and commercial policy because of the importance that trade barriers and exchange rates are thought to have for the performance of the manufacturing sector. It then explores the evolution of Chile`s textile and garment sector which is the sector that has been selected for study. The last section is a case study describing the behavior of a leading textile firm, throughout its history, in Chile, a firm that was born in the early 1950's and continues to survive today despite the major macroeconomic changes that have occurred in Chile in the last fifty years. The paper describes how this particular firm has responded and adapted to and survived the changes in macroeconomic policies. This is a considerable achievement considering that, after the general liberalization of the economy, the country lacks any competitive advantage in manufacturing activities in this sector.

II. The macroeconomic environment

Chile's economic history in the 20th century can be divided into two main periods. Prior to 1973, a 40-year-long import substitution strategy marked the structure and performance of the economy. After the military coup in 1973 a general free market approach governed policies, introducing trade liberalization reform along with a reordering of the public finances, massive privatizations, and a new labour institutional framework. These reforms that started in the mid-70s through to the 80s were thoroughly institutionalized and survived the debt crisis of 1982 and the transition back to democracy in 1990 (Larrain and Vergara, 2001).

1. Economic policies

It is interesting to observe the dramatic difference in economic policies that existed before and after 1973 in Chile. Trade policy is an area that illustrates this difference. Though commercial considerations and the comparative advantages of countries with regards to trade have always occupied a central position in the overall design of Chile`s policies, the way that these have been defined has changed considerably.

For much of the 20th century there was a consensus in developing countries that the best trade policy for development was a policy known as Import Substitution as the path to Industrialization (ISI). This meant that the production of import—competing goods should be promoted and expanded to satisfy the domestic market through incentives up to whatever level of import restrictions was needed, including outright import prohibition.

It was thought that import substitution in manufactures was synonymous with industrialization, which was seen as the key to development. Today, by contrast, it is considered that growth is enhanced through an outwardly oriented trade regime with fairly uniform incentives, often functioning mainly through exchange rates, for the production of both exporting and import-competing goods (Kruger, 1997).

The ideological turnabout came with the exhaustion of the ISI strategy. One of the main problems of the past protectionist policies was that they generally ended up being arbitrary. They were used for private interests, which did not bring social benefits and resulted in industrial structures that were not competitive at an international level and were ultimately dependent on governmental protection for their survival (Ffrench-Davis, 1999). It is, nevertheless, important to point out that the gross national product growth rate and the improvement in the standard of living were particularly rapid during this period (1950-1980) but the ISI policy needed to be restructured.

The new open market ideology and policy recommendations represent in effect a simple version of the Heckscher-Ohlin-Samuelson model which encourages a trajectory like the one followed by Chile: indiscriminate trade liberalization. This ideology predicates that the liberalization of imports will bring a rapid reassignment of resources to exportable goods. The net efficiency of the economy would increase due to the exposure of national products to international competition which will push import substitution sectors to take advantage of their economies of scale and orient themselves towards world markets. Chile's experience nevertheless demonstrates that these suppositions were not fulfilled at the start and that the immediate result of an abrupt liberalization was the bankrupting of a significant part of the import substitution sector with only a small increase in its efficiency and scale of production (Ffrench Davis, 1999).

Although the ISI strategy has a poor reputation, it served its purpose at the time. Even though the industrialization that it generated contained much inefficiency, it left some of the Latin American countries, particularly the major ones, with an important manufacturing sector, which in some cases has been the basis of the industrialization process that came later and has oriented the international competitiveness of these countries (Brazil, Mexico, Colombia). This, however, was not the case with Chile, which joined in the indiscriminate liberalization of its economy instead of inducing efficiency gains as sectors contracted.

2. Import substitution industrialization

Import tariffs have been a major instrument of macroeconomic policy in Chile since the world depression and were increased steadily as a central element of the country's import-substitution policy, influenced by the views of Raul Prebisch of the UN Economic Commission for Latin America. This period of import substitution in Chile lasted for more than forty years. It was marked by high and differentiated tariffs, exchange controls, import prohibitions and monopolies, licenses, lists of permitted imports and previous deposit requirements. These instruments were chosen to protect the selected industrial sectors that took the place of exports as the engine of growth. Trade policy was also very much affected by immediate concerns such as exchange crises, revenue shortfalls, and a stable economy. Yet the trend was always an increase in the trade barriers due, in part, to the need to overcome difficulties encountered with the implementation of the import substitution policy which grew more sophisticated and costly and in which the country had no competitive advantage (Hachette, 1998). Table 1 shows the effective level of tax protection in selected years.

Table 1
EFFECTIVE TAX PROTECTION
(percentage)

Tradable goods sector	1961	1967	1975	1979
Agriculture and forestry	145	-7	27	10
Food products	217	365	105	10
Drinks	164	-23	19	13
Tobacco	1	-12	68	11
Textiles	462	492	138	16
Shoes and wardrobe	318	16	164	14
Wood and cork	30	-4	93	15
Furniture	127	-5	58	11
Paper and other products	49	95	114	17
Prints and publicity	77	-15	75	12
Leather & other products	325	18	98	13
Rubber products	137	304	55	15
Chemical products	107	64	53	13
Oil and carbon products	-26	1 140	101	13
Non metal mine products	179	1	87	14
Basic Metals	74	35	86	17
Metallic products	45	92	101	15
Non electric machinery	73	76	72	13
Electric machinery	92	449	72	13
Transport equipment	68	271	n.a.	n.a.
Other manufacturing	129	n.a.	n.a.	n.a.
Median	107	56	86	13
Range	488	1 163	145	7

Source: Hachette, 2001
n.a. not available.

Between 1950 and 1970 there were three attempts to reduce the barriers (1956,1959 and 1968) The previous deposit requirements for imports were replaced by equivalent tariffs. Also, the tariffs for inputs and capital goods were reduced but this meant that the effective protection for some sectors became even greater. The last effort was short lived because the new government in 1970 was very interventionist. The tariffs lost the few assignment roles that they had had in previous years and multiple exchange rates and non-tariff barriers dominated.

Other liberalization efforts were made to expand the local market and enable it to take advantage of economies of scale during the sixties. Chile co-founded the first Acuerdo Latino Americano de Libre Comercio (ALALC) with another nine economies and, in 1969, signed the Andean Pact that supported in-depth integration efforts within a sub-group of six countries of the ALALC (Hachette, 2001).

By 1973, the average import tariff was around 100%, with individual tariffs that varied enormously from 0% to 750%. Many imports were prohibited and the deposit requirements were up to 60% although the Central Bank had the capacity to arbitrarily exempt some importers. This system restricted development and also gave rise to corruption in the Central Bank in the way that foreign currency quotas and import permits were distributed (Hachette, 2001).

3. Unilateral liberalization

The unilateral liberalization of the Chilean economy took place in stages. The first reform came about in 1973 with a generalized policy of giving the market the power to govern economic decisions. Next, came the second commercial reform that responded to the 1982 recession. Last, came the 'reforms of the reforms' in the 1990s once Chile had returned to a democracy, and followed a strategy of unilateral liberalization in combination with bilateral trade agreements. Table 2 shows the evolution of the tariff and exchange rates after the commercial liberation.

Table 2

TARIFFS AND REAL EXCHANGE RATES (1973-2003)

Year	Average Tariff (%)	Real exchange rate (1986 = 100)
1973	94.00	65.1
1974-1979	35.30	73.2
1980-1982	10.10	57.6
1983-1985	22.70	79.1
1986-1989	17.60	106.6
1990-1995	12.00	99.5
1996-1998	11.00	80.3
1999-2001	9.00	88.4
2002-2003	6.00	97.6

Source: Ffrench Davis (2002) and Central Bank of Chile

The commercial policy adopted in 1973 included the elimination of all the non-tariff restrictions, an abrupt process of reducing the nominal tariffs on imports, and the unification of the exchange rate. By 1979 there was a uniform tariff on all imports of 10%. Unfortunately, as Ffrench-Davis (2002) has pointed out, this abrupt opening of the economy, in a context of an exchange rate that was greatly appreciated, combined with a high real interest rate, led to a huge external disequilibrium. In order to adjust to this crisis, the policy that was adopted was a series of devaluations starting mid 1982 followed by the installation of a crawling peg system for the exchange rate. A second commercial reform was started in 1983 and was a mix of restricted liberalization and limited interventions The uniform import tariff was increased in several steps until it reached 35% in 1984. After that, as the external restrictions were reduced and the scarcity of foreign currency lessened, the uniform tariff was reduced, also in several steps to 11% by 1991. Table 3 shows the evolution of the main macroeconomic variables after the liberalization process.

When Chile returned to a largely democratic system after 1990, it continued the basic principles of the commercial policy that had applied previously together with a new strategy of subscribing to free trade agreements, shown in Table 4. The economy continued to maintain a uniform tariff that stayed at 11% in the nineties and then has slowly decreased over a period of years reaching 6% in 2003. In 2004 the effective tariff (which takes into account preferential trade agreements) was below 2%. On the other hand, during most of the 90's, the exchange rate system used was a crawling peg exchange rate where Central Bank interventions became increasingly active. During this period there were large inflows of foreign capital which forced interventions in exactly the opposite direction from the 80's but these policies lost their effectiveness in the second half of the nineties due to the need to react to the massive inflow of capital that came into Chile.

Table 3

CHILE' S LEADING MACROECONOMIC INDICATORS (1974-1999)

		1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986
1	GDP Growth	1.0	-13.3	3.2	8.3	7.8	7.1	7.7	6.7	-13.4	-3.5	6.1	3.5	5.6
2	Unemployment rate (annual average)[1]	n.d.	14.9	12.7	11.8	14.2	13.6	10.4	11.3	19.6	14.6	13.9	12.0	12.3
3	Formation of gross product of fixed capital (%GDP to prices)	18.9	16.7	13.8	15.2	16.5	17.7	20.9	23.2	15.8	13.7	16.3	17.7	17.1
4	Gross national savings (%GDP to current prices)	n.d.	9.5	16.9	13.8	15.3	16.7	19.3	14.2	4.9	6.9	6.5	7.8	11.5
5	Current account deficit (%GDP)	0.5	6.4	-1.4	3.9	6.8	5.6	7.1	14.5	9.0	5.5	10.8	8.6	6.7
6	Real annual salary growth [2]	2.3	-3.4	3.0	10.3	6.3	8.3	8.6	9.0	0.3	-10.9	0.2	-4.5	2.0
7	Real exchange rate (average 1986=100)[3]	n.a.	n.a.	n.a.	57.1	68.1	70.2	60.8	52.9	59.0	70.8	74.0	90.9	100.0
8	Inflation (CPI) (dec-dec)[4]	369.2	343.3	197.9	84.2	37.2	38.9	31.2	90.5	20.7	23.1	23.0	26.4	17.4
9	Public sector non financial superavit (%GDP)	-5.4	-2.0	4.0	0.4	1.6	4.8	6.1	0.8	-3.4	-3.0	-4.3	-2.6	-2.1
10	Exchange terms (1986=100)[5]	225.9	121.4	132.6	122.3	120.9	134.7	132.7	122.3	112.1	114.3	107.6	99.9	100.0
		1987	**1988**	**1989**	**1990**	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**	**1999**
1	GDP Growth	6.6	7.3	10.6	3.7	8.0	12.3	7.0	5.7	10.6	7.4	7.4	3.9	-1.1
2	Unemployment rate (annual average)[1]	11.0	9.9	8.0	7.8	8.2	6.7	6.5	7.8	7.4	6.5	6.1	6.2	9.7
3	Formation of gross product of fixed capital (%GDP to prices)	19.6	20.8	24.5	24.2	22.4	24.7	27.2	27.4	30.6	31.0	32.2	32.2	26.9
4	Gross national savings (%GDP to current prices)	17.3	22.3	23.3	23.2	22.3	21.5	20.9	21.1	23.8	21.4	21.6	21.2	21.8
5	Current account deficit (%GDP)	3.6	1.0	2.5	1.6	0.3	2.3	5.7	3.1	2.1	5.4	4.9	5.7	0.1
6	Real annual salary growth [2]	-0.2	6.5	1.9	1.8	4.9	4.5	3.5	6.5	4.8	5.1	2.4	2.7	2.4
7	Real exchange rate (average 1986=100)[3]	104.3	111.2	108.6	112.7	106.4	97.6	96.9	94.2	88.9	84.7	78.2	78.0	82.3
8	Inflation (CPI) (dec-dec)[4]	21.5	12.7	21.4	27.3	18.7	12.7	12.2	8.9	8.2	6.6	6.0	4.7	2.3
9	Public sector non financial superavit (%GDP)	-0.2	0.2	1.3	3.6	2.3	2.9	2.1	2.3	3.8	2.0	1.0	-1.3	-2.3

Source: Larraín and Vergara (2000), "La transformación económica de Chile".
n.a.: not available.
[1] Change of methodology in 1992.
[2] Change of methodology in 1993. Used as deflator of the CPI corrected by Cortázar and Marshall (1980).
[3] An increase of this index corresponds to a depreciation of the local currency.
[4] In 1974-1978 was used CPI corrected by Cortázar and Marshall (1980).
[5] Defined as export prices of goods and services divided by import prices of goods and services.

This brought an appreciation of the external rate and, when the Asian crisis arrived, the exchange rate lagged. The expectation of a currency devaluation led to a flight of capital with its depressionary effects. The Central Bank resisted these pressures through widening the bands and increasing the interest rate until September 1999, when it allowed the exchange rate to float. This facilitated the correction of the real exchange rate but introduced more volatility.

Table 4

TRADE AGREEMENTS THAT HAVE BEEN SIGNED BY CHILE

Trade agreement	Date subscribed
Economic complementation agreements	
Bolivia (ACE 22)	April 6, 1993
Colombia (ACE 24)	December 6, 1993
Cuba	August 21, 1998
Ecuador (ACE 32)	December 20, 1994
Mercosur (ACE 35)	June 25, 1996
Peru (ACE 38)	June 22, 1998
Venezuela (ACE 23)	April 2, 1993
Free trade agreements	
Canada	December 5, 1996
Centre America	April 17, 1998
South Korea	October 24, 2002
EFTA: European Free Trade Association	June 19, 2000
United States of America	June 6, 2003
Mexico	November 9, 2000
EU: European Union	June 21, 1996

Source: www.direcon.cl

4. External trade

High growth rates were facilitated by macroeconomic policies that provided continuity in business investment and performance. However, the most significant policy affecting the business climate was the transformation of the Chilean economy from one of import substitution to one that opened up to foreign competition and in which exports and imports played an important role. Chile's degree of openness, expressed as the sum of imports and exports as a percentage of GDP, was 51.4% in 2000, one of the highest in South America and up from 32.2% in 1970 (World Bank, 2002). Within this openness there was a rapid switch in the balance between exports and imports. In 1991, total imports were only 84% of total exports. By 1998, imports were 107% of exports while the combined sum of exports and imports doubled (Silva, 2001). It should not be forgotten, however, that Chile is a relatively small economy in the region and its macroeconomic policies must take into account its vulnerability to external shocks due to the high proportion of its GDP that depends on trade, both imports and exports.

Chile has been very successful in transforming its economy from a closed one to one that has opened up substantially and in which exports play a major role. However, most of these exports are primary products. By the end of the 20th century, Chile's leading export products were copper in various forms, fish, wood pulp, meat and fish meal, wine, grapes, gold and lumber, in that order. These leading products accounted for over 63% of the country's exports, demonstrating a significant concentration of exports in just a few products. Some 42% of all exports were copper-based (Macario, 2000) which makes Chile very vulnerable to volatility in copper prices in particular.

As has been observed, the changes that occurred in the Chilean economy during the last three decades have been immense and have completely transformed the macroeconomic environment. This transition has brought numerous costs and benefits, particularly in manufacturing activities. The process had many policy errors, particularly in the first stage. This led manufacturing production to contract in absolute terms and its contribution to national GDP to fall from 25% to 20%. The manufacturing GDP did not regain its absolute 1971 value until 1987, and in per capita terms, it was still below its 1971 level in 1991. This led many firms to bankruptcy (Agosin and Ffrench-Davis, 1998).

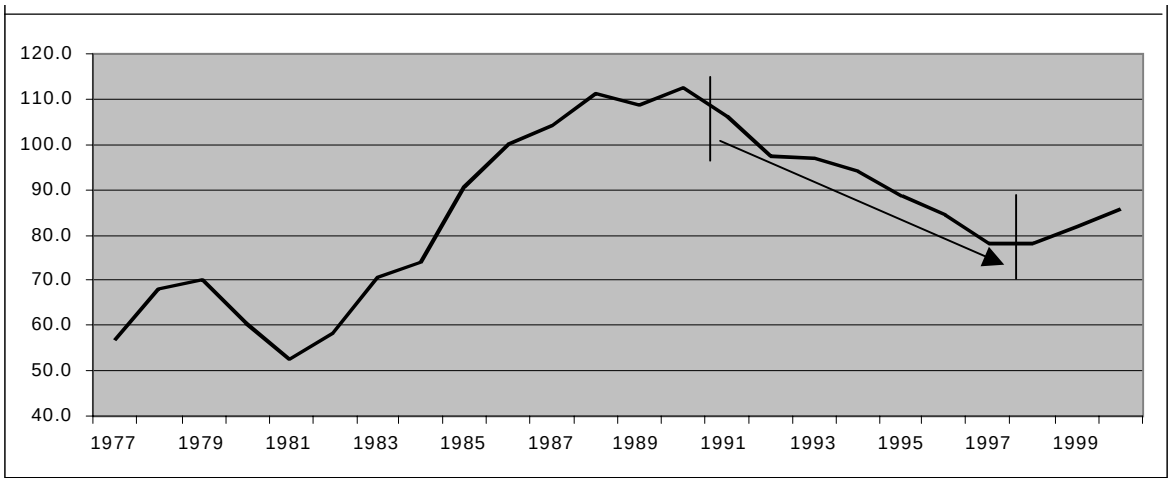
Export dynamism was not capable of taking the rest of the economy with it and, in general, the GDP growth was meager. In per-capita terms it expanded at a rate of only 1% a year from 1973 to 1989. A significant part of the initial growth of manufacturing exports in the second half of the 70s as well as in the period 1982-1985 was due to the idle capacity that generated the commercial and macro policies of the time. When firms were unable to put their products onto the depressed national market, they had to resort to selling them on the world market. A recent study estimates that 38% of manufacturing exports in 1975-1977 were due to already installed capacities and were not because of new investments (Agosin and Ffrench-Davis, 1998).

5. Exchange rates and import tariffs

Uncertainty concerning macroeconomic policy acts as a disincentive for firms to make investment decisions and one of the more important macroeconomic policies is the exchange rate policy. Exchange rate stability is something to be aimed at but an overvalued exchange rate in itself acts as a barrier to investment if exports and imports play a significant role (Bonelli, 1998) as they do in the textile sector in Chile. This has become even more important with trade liberalization and the speeding up of the consequences of exchange rate changes (Macario, 2000). Figure 1 shows the trend in Chile's real exchange rates in the last quarter of the century. Between 1989 and 1997 there was a considerable appreciation in the real exchange rates at the same time as there was a reduction in tariffs and a marked increase in textile imports (See Figure 10). As we will see later, the main markets for textiles and garments were other Latin American countries whose real exchange rates also appreciated in 1989-97. Consequently, Chilean exports to those markets remained competitive.

Figure 1

REAL EXCHANGE RATES (1986 = 100)



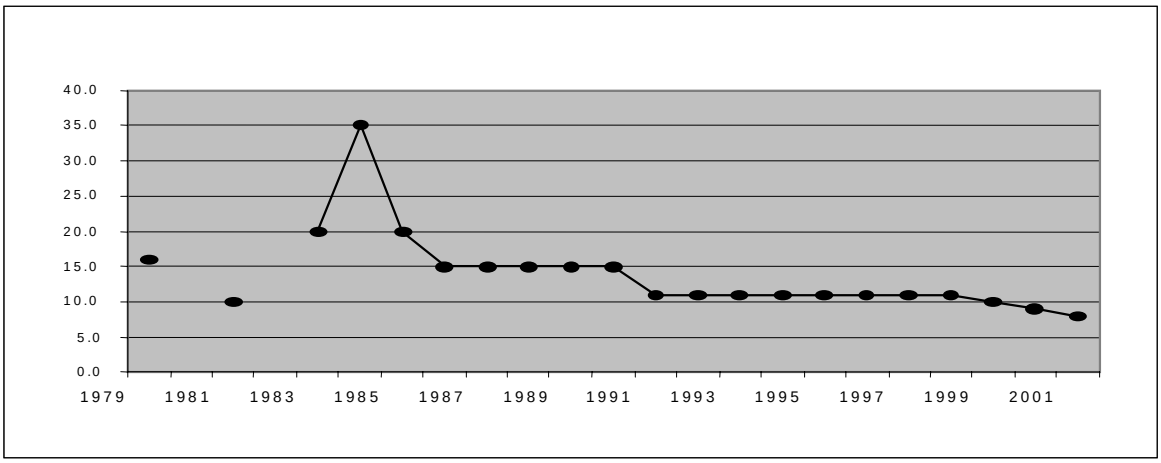
Source: Central Bank of Chile, “Economic and Finance Report”, & www.bcentral.cl

By contrast, if one graphs the trend in textile import tariffs, as shown in Figure 2 below, it seems that the rising trend in the relative importance of textile and garment imports at the expense of the domestic industries stems in part from the macroeconomic policy of lowering import tariff rates in the textile sector. Unlike the case of exchange rates where the broad macroeconomic policy operates at a number of steps removed, we are here dealing with an indicator of a highly focused macroeconomic policy that can be directly transmitted to the export and import activities of a specific sector. It is not the only factor leading to the globalization of textile and garment purchases. Low foreign labour costs, for example, play an important role, but it is evident that the continuous lowering of import tariff rates has been a major contributing factor.

Figure 2

TEXTILE IMPORT TARIFFS

*(Percentage) **

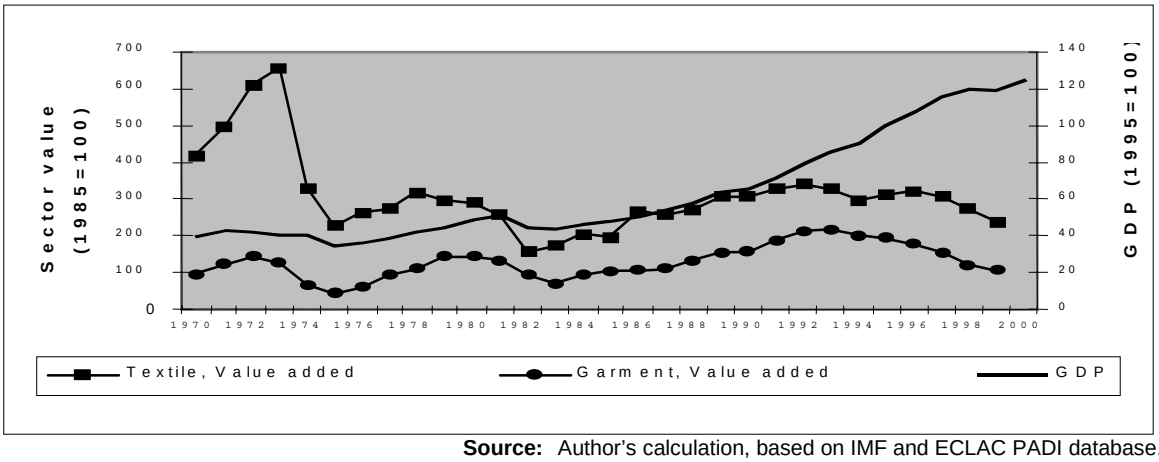


Source: Central Bank of Chile.
* In the early 1970s the import tariffs were well over 100%

One the other hand, the very positive overall macroeconomic growth in Chile does not appear to have been transmitted to the textile sector perhaps because Chile's parallel exposure to increased competition in the textile sector, made possible by declining import tariffs and the accompanying appreciation in real exchange rates, have outweighed the positive effect of general economic growth. This is usually the case with small sectors in an economy where the macroeconomic policies that count are those directly impinging on the sector. (See Figure 3).

Figure 3

VALUE ADDED BY SECTOR



Source: Author's calculation, based on IMF and ECLAC PADI database.

III. The textile and garment sectors

The policy changes that occurred during the last fifty years in Chile, discussed in the previous section, have greatly altered its macroeconomic environment and have exerted a significant effect upon manufacturing activity in general. The effects on the manufacturing sector have been magnified by the many policy changes concerning the liberalizing of the economy and by the various policy errors that have led many firms to bankruptcy, firms that might otherwise have survived. In the this section, the evolution of a meso sector is explored and the response of Pollak Industries/Tricot, discussed in detail in the next section, is offered as an example of a firm that was able to adapt to the changes in the environment in a way that made the difference between disappearing or surviving.

1. The structure and evolution of the textile and garment sectors

We will examine the evolution of the textile and garment sectors through an aggregate trend analysis of the evolution of the two sectors. Unfortunately, an aggregate analysis does not account for the Schumpeterian process of births and deaths of firms, i.e. the changes in the composition of the sector, and so it is not possible to understand through sector data which firms have died because of their inability to compete under the new competitive regime, and which firms have survived. We will examine the question about individual firm behavior using the Pollak/Tricot case study and the experience of the literature,

which is admittedly limited in the case of the Chilean textile goods and garment sectors. Three major sources of data underpin the sector analyses: Cepal data from the PADI database (Programa de Analisis de la Dinámica Industrial); data from the Instituto de Textiles, Sofofa; and Textiles Pollak Hnos. firm data.

The textile and garment sector is made up of a very large number of small firms with the great majority having less than 50 employees (See Table 5). Just a few firms have more than 200 employees and have the resources to use modern technology to respond to the global challenge in order to change their product focus and manufacturing processes. This distribution has not changed much over the last 20 years even as the total number of firms has declined along with its labour force. In the 1990s, the loss of jobs in the garment sector alone was over 75,000 positions.

Table 5
DISTRIBUTION OF FIRMS IN CHILE'S TEXTILE SECTOR

CATEGORY	1979	1989	1998
Total number of firms	945	667	567
Percentage with less than 50 employees	77.5	64.6	71.1
Percentage with 50 to 200 employees	17.2	27.3	22.6
Percentage with more than 200 employees	5.3	8.1	6.3
Percentage with 500 or more employees (includes Pollak/Tricot)	1.8	2.5	1.2

Source: Author's calculation, based on PADI data

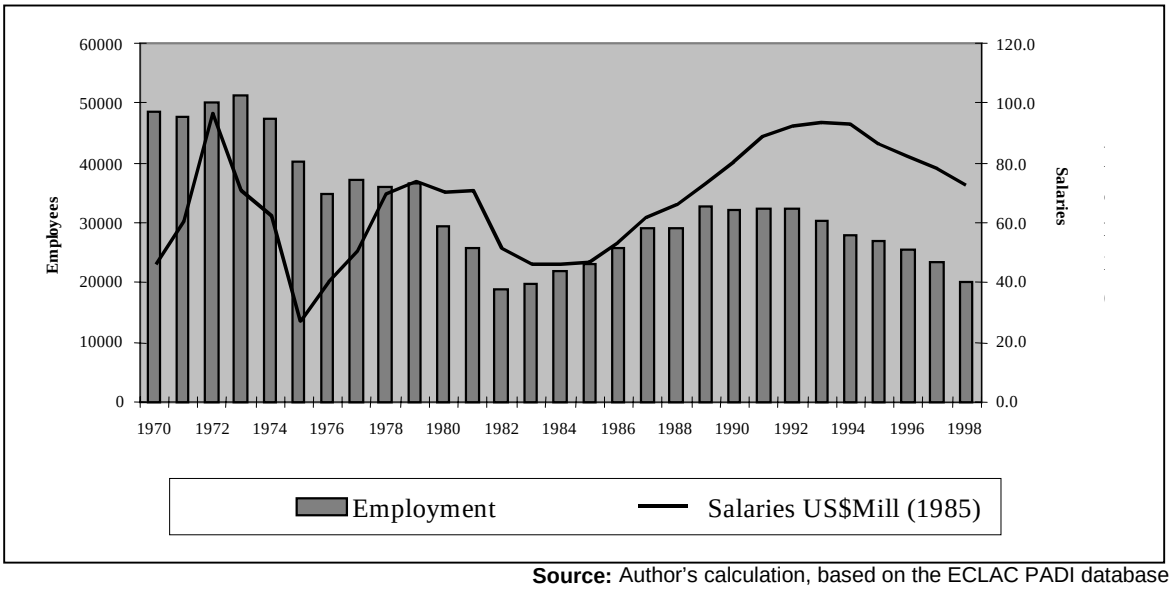
In fact, the number of small firms is even greater than this table suggests because the PADI database used in this table does not cover firms with less than 10 employees, of which there are many in the textile sector. Pollak is one of the group of less than 10 firms in the sector that currently has more than 500 employees.

2. Employment and salaries

In this context it is interesting to look at the evolution of employment and salaries in the textile and garment sectors. In the 1970s and 1980s, sector salary trends tended to parallel sector employment trends. However, from 1991 in the textile sector and from 1995 in the garment sector, salaries began to move more independently of sector employment. Even the recent falls in salaries have still left salaries way ahead of where they would have been if the pattern of the 1970s and 1980s had been maintained. In other words, despite the steep fall in sector employment, salaries have not fallen proportionately. This is partly due to a general increase in salaries but it is also a reflection of the switch to proportionately more skilled workers and fewer unskilled workers, which in turn make the sector less cost—competitive. The composition of the textile labor force has changed and the Pollak experience exemplifies this.

Figure 4

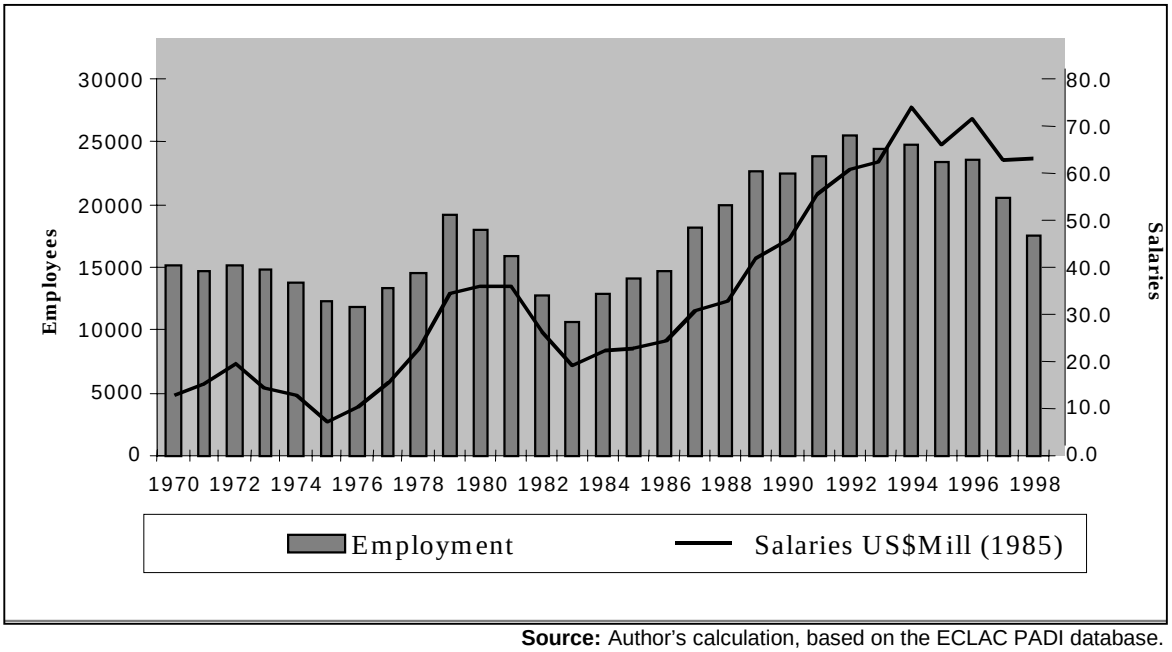
TEXTILE SECTOR: EMPLOYMENT & SALARIES



Source: Author's calculation, based on the ECLAC PADI database

Figure 5

GARMENT SECTOR: EMPLOYMENT & SALARIES



Source: Author's calculation, based on the ECLAC PADI database.

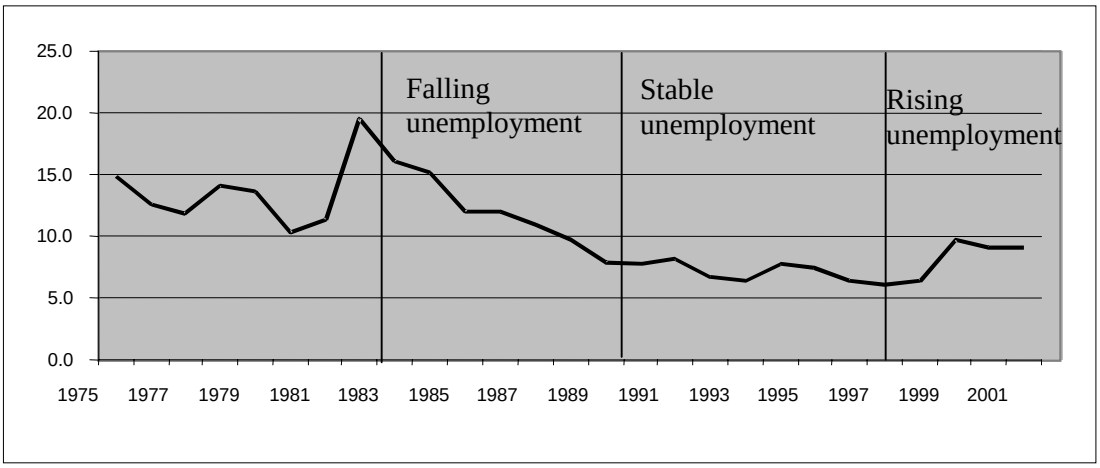
Since the beginning of the Industrial Revolution, workers have worried that technological progress would eliminate their jobs and throw them into the ranks of the unemployed. In early nineteenth century England, workers in the textile industry, known as the Luddites, destroyed the new machines that they saw as a direct threat to their jobs. In fact, the word saboteur comes from one of the ways French workers destroyed machines: by putting their sabots (their heavy wooden shoes) into the machinery. The argument for the threat of technological unemployment is that machines will take over from workers and that there will then be no longer enough work to go around.

The evidence shows that in the long run the adjustment to technological progress is made through increases in output, not increases in unemployment. However, with technological progress comes the process of job creation and job destruction, defined by Schumpeter as creative destruction. The last 20 years have been characterized by a decline, both relative and absolute, in the wages of unskilled workers, to a large extent the legacy of technological progress (Schumpeter, 1950; Blanchard et a., 2000).

There is general agreement that the main factor behind the increase in the relative wages of skilled versus unskilled workers is a steady increase in the relative demand for skilled workers (Blanchard et al, 2000). Since the early 1980s, the relative supply has continued to increase, but not fast enough to match the continuing increase in the relative demand. One of the principal factors, if not the most important, behind this wage gap is the effect of international trade. High-wage unskilled labor in the US and other high-income, high-wage countries is driven out of the market by imports from similar firms in low-wage countries. Accordingly, firms in high-wage countries must relocate their production to low-wage countries to remain competitive and this pattern holds true even in middle income countries like Chile. That two occupations belonging to the textile industry are among the ten fastest-declining occupations in the United States (Blanchard, 2000) is testimony to the fact that the US textile industry has largely moved to low-wage countries. This has also happened in Chile and the experience of Pollak Industries with its upgrading policy and new labor profile, discussed in the case study presented later in the paper, bears this out.

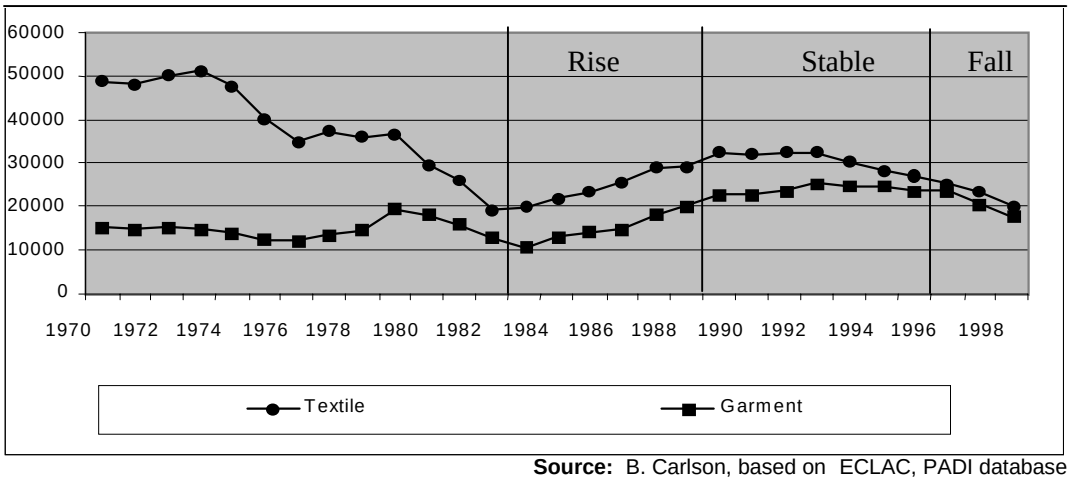
It is interesting to observe the strong connection during the period 1984 to 2002 between the overall unemployment rate and the level of employment in the sector and in one of its major firms, Pollak, as shown in the three graphs below. The period 1984 to 1990 shows falling national unemployment and rising sector and Pollak employment. The period 1991 to 1998 shows all three relatively stable. The period 1999 to 2002 shows unemployment rising again accompanied by falling sector and Pollak employment. General macroeconomic employment patterns would seem to be too broad to have much of an impact on this small sector and, furthermore, the overall sector employment figures do not differentiate among skill levels which have changed considerably in recent years.

Figure 6
NATIONAL UNEMPLOYMENT RATE
(percentage)



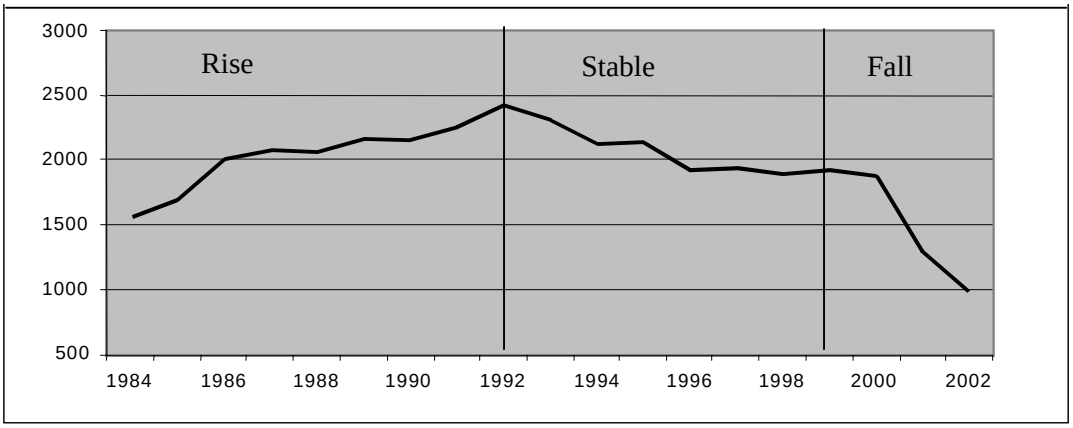
Source: J.Weller, ECLAC, with annotations and interpretations by B. Carlson.

Figure 7
NATIONAL EMPLOYMENT BY SECTOR
(Number of employees)



Source: B. Carlson, based on ECLAC, PADI database

Figure 8
POLLAK EMPLOYMENT
(Number of employees)



Source: B.Carlson, based on Pollak company data.

3. Textile and garment exports

During the import substitution period, successful textile and garment manufacturers were able to produce for the domestic market without strong competitive pressures and, consequently, firms were not obliged to introduce changes to improve their productivity and quality. The import substitution-based model allowed Chile to create and nurture a manufacturing sector and to train workers for this sector. However, between the mid 1980s and the late 1990s, Chile, along with most of the countries in the region, transformed its macroeconomic and trade policies as well as most of its regulatory environment. These changes have had a considerable effect on the performance of firms, altering the framework in which they were used to operating and submitting them to strong competition from imports.

The main motivation for companies to begin exporting was the need to offset the fall in demand in the domestic market. The need to find markets for the products that could not longer be sold in the domestic market drove firms to export. While an export strategy may have started as a temporary measure during periods of low domestic demand, firms began to view an export strategy

as good business sense – a permanent complement to the firm's domestic market share. Exporting allowed firms to obtain a reliable source of hard currency and decreased their vulnerability to the fluctuations in the domestic market. It also provided companies with learning and upgrading opportunities.

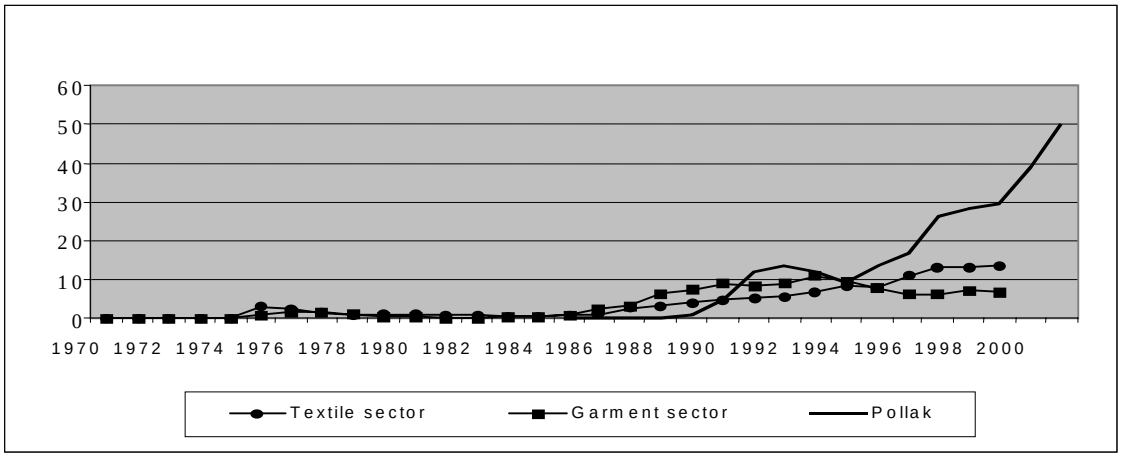
To begin exporting, companies had to obtain information and establish a network abroad. Exporting exposed firms to international competition and new standards that provided companies with significant opportunities to upgrade their performance in order to be able to conform to the prevailing standards in the export markets. This learning process led to changes and improvements within firms in the course of adapting their production processes to satisfy export market requirements. New knowledge, new machinery, and new technology led to a sharp learning curve followed by a positive shift in the firm's production function with a new level of output and efficiency (Macario, 2000a).

Due to the considerable increase in the imports of goods from the far eastern countries, especially Chinese garments, the profile of the textile industry has been severely reduced, with a few exceptions, leaving mainly the small contractors of specialised products which, because of their fashion characteristics, could not be imported because of the standard one-and-a-half years lead time for imported garments. The garment industry is a high risk, highly volatile enterprise The strategy, therefore, is to import staples in high volume but produce high fashion garments domestically because fashion changes so fast. Small companies can survive and informal labour and low investment operations survive depending on how fast fashions change. Department stores are major consumers. They import up to 50% of their garments and supplement this with small contractors, combining the strategies of faster change and stability, i.e. jeans fashion. Whenever a fashion garment becomes a staple then these small companies suffer because they would be required to import a large quantity of sizes and colors. But the small contractor can replenish right away which means that the buyer is willing to pay a higher price for local goods, higher than for Chinese imports, so the two markets complement each other.

Chilean exports of textiles and garments began to take off only in the late 1980s and 1986 was the first year that Chilean exports amounted to more than US$10 million. They rose rapidly to US$100 million by 1992, reached US$200 million by 1997, but then began to decline because of growing global competition, more favourable trade arrangements among other countries, and the large slowdown in trading partnerships within Latin America. What is interesting about Chile's textile exports is how concentrated they are in a few large companies. In 2001 and 2002, two firms, one of which was Pollak Industries, accounted for nearly 30% of total exports. Half the exports were accounted for by only six firms and three quarters of the exports were accounted for by only 17 firms. The many remaining small firms in the textile sector account for only 20% of all exports, but their labour force account for at least 80% of the jobs.

Textile and garment exports, expressed as a percentage of total textile and garment sales, increased very slowly and have remained very low, even declining in the mid-1990s, and account for only 7% of sales in the garment sector and 13% of sales in the textile sector. By contrast, Pollak's exports, which took off in 1990, account for 50% of its total sales which shows a performance that is quite different from the textile sector as a whole, as is shown in Figure 9. Pollak is one of the small group of seriously exporting textile companies and accounts by itself for 10% of the exports of the whole sector.

Figure 9
EXPORTS TO TOTAL SALES
(percentage)



SOURCE: author's calculation based on Instituto Textil and Pollak company data.

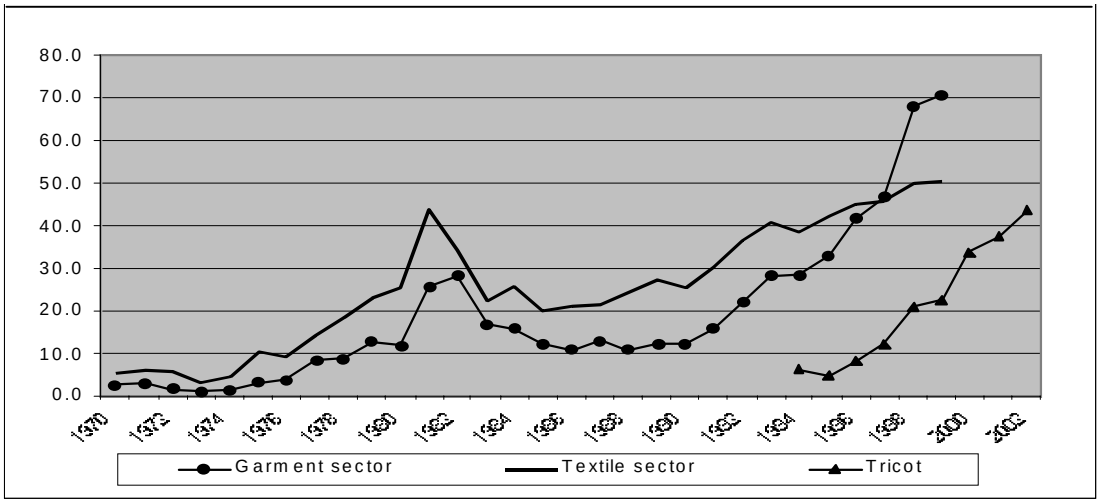
The leading countries to which the Chilean textile and garment sectors export are mainly in Latin America. They consist of Mexico, Brazil, Argentina, Bolivia, Colombia, Peru and Venezuela in descending order of exports. The only non-Latin American countries in the top ten countries to which the Chilean textile and garment sectors exports are USA (8th), Canada (9th), and Italy (10th). No single country dominates the textile export market but the first four Latin American importing countries are considerably more important than the others.

4. Textile and garment imports

Imports into Chile of textiles and garments began to take off much earlier than exports so that the US$100 million figure was reached in 1979 and the US$200 million figure was reached in 1988, about the same time that exports began to take off. The US$400 million figure was quickly reached in 1991 and the 2001 figure soared to US$900 million. In contrast to the distribution of exports, the distribution of textile imports is much more evenly spread among firms. The top six importing firms account for a quarter of the imports; the top 17 firms, including Pollak, account for a third and the remaining firms account for two thirds of the imports.

Textile and garment imports, expressed as a percentage of total textile and garment sales, have risen steadily, apart from a sharp decline in the second half of the 1980s, and now account for 50% of sales in the textile sector and 70% of sales in the garments sector. The imports of Tricot, a Pollak Industries subsidiary, which took off only in 1994 have now reached 44% of Tricot sales. This is in line with the rest of the sector as is shown in Figure 10.

Figure 10
IMPORTS TO TOTAL SALES
(percentage)



Source: Instituto Textile and Pollak company data.

The sector import pattern is quite different from the sector export pattern with respect to the countries with which the Chilean textile and garment sectors trade. One country, China, completely dominates the supply of textile imports. At some US$320 million in 2001, it was equal to the total of the next nine leading countries and accounted for more than a third of all textile imports into Chile. (In addition, Taiwan (9th) and Hong Kong (12th) account for another US$ 40 million). The only other countries to exceed 30 million were USA, Argentina, Brazil, Italy and Pakistan, in descending order. It is worth noting that the Asian countries, including China, accounted for nearly US$500 million, some 55% of all textile imports into Chile.

Although China was a latecomer it has now assumed first place in the growth of East Asian trade with Latin America, a growth that has been sustained at a very high annual rate. Chile is now one of China's main trading partners in Latin America and Chilean imports from China increased steadily in the 1990s as has happened with many other countries in the region. China is by far the largest source of garment and textile imports into Chile and the Chilean textile and garment sectors are becoming increasingly uncompetitive in world terms.

In the globalized economy, Chile suffers from a double disadvantage. Its wages are higher than its poorer global competitors, the average labor cost for textile and garment manufacture being more than ten times greater than China's figure of 22 cents per hour. At the same time, its skill levels are lower than its richer global competitors and even some of its poorer global competitors (Carlson, 2000).

IV. The Pollak and Tricot case study

The typical import-substitution manufacturing firm was a family company that was initially set up in a small workshop to produce garments, footwear or food products. This small workshop slowly expanded, buying new equipment and moving to new premises, and became a respectable manufacturing firm (Macario, 2000).

The Pollak and Tricot case was a successful example of this pattern. The transition from small workshop to manufacturing plant was often quite risky in the face of competition from many other similar workshops. Financial assistance was generally unavailable for small firms and few made the transition. Management was generally the responsibility of family members and did not follow professional criteria. In general, inputs were manufactured within the country in view of the prevailing import substitution policies and the costs and delays involved in importing from abroad. There was a major incentive for firms to become as integrated as possible since companies selling intermediate goods were rivals in the finished product market. Most goods produced were sold on the domestic market. There was little incentive to export because of the high tariffs and other barriers in other Latin American countries.

We will see, however, that as trade barriers fell and global competition grew, Pollak changed its production mix from low-skilled labor intensive textile production to include garment production and direct selling which has in time come to dominate the firm's production, sales and profits. This transition is clearly seen in Table 6.

Table 6

THE EVOLUTION OF HERMANOS POLLAK S.A. : 1940 s TO DATE

Date	Firm strategies and structure
1940s	A set of four sibling partnerships with 100 employees.
1952	Four partnerships combined to make one company: Pollak Industries.
1955	First Tricot retail store opened.
1962	Tricot merged with Fábrica de Paños Continental.
1965	Tricot operating eight retail stores in an expanding chain.
1972	Government takeover.
1974	Operation returned to the company and the company made responsible for the large government debts arising from the crisis.
1974-1983	Financial crisis: Volatile market and flexible strategy. Obtained foreign financing; entered the retail market on a large scale via Tricot; reinvested profits in the latest equipment and technology; brought new products into the market, e.g. Banlon, denim, corduroy, t-shirt printing; held real close-out sales to unload end of season goods.
1983-1995	Financially sound but few clients and employees: Flexible strategy. Purchased close-out goods from Hong Kong for quick low-margin sales; bought large-scale latest foreign equipment and hired technicians; sold uniforms to the police and military; started exporting; supplied large-scale international buyers; focused on very light weight expensive worsted wool market and men's wear; used firm`s diversity to spread risk.
1990	Pollak starts to export.
1992	Pollak has 2,400 employees.
1994	Tricot starts to import replacing Pollak domestic production, as tariffs drop.
2001	Outside professional manager hired and independent directors appointed. Pollak has sales of US$ 23 million, 950 employees and exports are 50% of sales.
2002	Tricot has sales of US$ 70 million, 1,450 employees in 29 stores, 400,000 credit card customers, and imports are 44% of its sales.

Factors	1940s to 1060s	1980s	1090s	Current
Number of Pollak employees	100	750-1,600	2,400	950
Number of Tricot employees	50	..	..	1,450
Pollak exports as % of sales	0%	0%	2%	50%
Tricot imports as % of sales	0%	0%	8%	44%

Source: Author's elaboration.

Pollak's history has been extremely volatile from a humble start of 100 employees in the 1940's up to 1,700 by 1981, down to 760 in 1983, back again to 2,400 by 1992 and just under 1,000 today. Its sales similarly fluctuated and were reported at 23 million US dollars for 2001, half of which consisted of exports. All this took place in the manufacturing area and the volatility of the textile market was obvious. To protect itself against this problem, Pollak created a retail chain in the mid-50's named Tricot, S.A. for the purpose of selling most of their knitted garments. In 2002, Tricot had 1,450 employees, 29 stores, and sales of approximately 70 million dollars, from selling a full range of garments made in Chile and imported from different countries.

1. The early days

The company originated in the consolidation in 1952 of four partnerships that were started by the Pollak brothers and their in-laws who came from Rumania in 1947-1949. Each partner contributed his specialized knowledge. One was a weaver, another a knitter, another an administrator and another a salesman. They sold their knits and fabrics on the wholesale market with whatever raw materials they could get. They realized that the provider of their raw materials was making most of the profits so, having a critical mass, they went ahead to build a spinning plant to satisfy their needs. This reactive behavior to market openings rather than the result of proactive long term strategies was the pattern of their growth and development.

The Chilean government in the 1960's was a major economic player. It controlled currency exchange, and it maintained high tariffs. Due to the lack of monetary reserves, it used different means to restrict imports such as "*bonos-dolares*" (documents rented and deposited at the Central Bank for purposes of importing) and "depositos previos"(sums of money equivalent to 200 or 300% of the c.i.f. value of the goods which had to be deposited with the banks for over 120 days). It was a period of high inflation because of high demand and lack of products and services. Manufacturers practically had a monopolistic situation. Many productively inefficient manufacturing concerns sprung up because of the lack of competition. There was a large migration of the population from the countryside because of the lack of opportunities and from 1960 to the beginning of the 1990s, the percentage of Chile's population living in metropolitan Santiago rose from 29% to 40%.

The 1950's and the 1960's showed most growth in most of the divisions of the company. The knitting division serves as an example of this. Once it opened itself to the retail market and realized its profitability, it expanded in that period from one to eight stores. Two other features accounted for the division's success at the time. It reinvested most of its profits in the latest technology as well as having an aggressive marketing policy, copying new products as they became available in the international market and introducing them into the Chilean market. One such case was the introduction of ladies' garments made out of Banlon, a nylon yarn manufactured under a US license that gave the garment a soft and voluminous touch. Another feature of its marketing strategy was characterized by copying the US market's behavior of real close-out sales for the purpose of unloading end of season products.

The combination of all these strategies allowed the division to work year round which was atypical in the sector and the division reached a production level of 50,000 garments per month. The woolen division (tweeds, cashmere, and flannels) became very competitive in the same period because of its spinning mill and its capacity to recycle the cuttings of the knitting division. The only stage that this division was missing in order to be totally independent from contractors was the finishing and sponging of the fabrics. In the second half of the 1960's, a finishing and sponging plant was brought from abroad, making the division totally vertical.

The two combined divisions, organized as they were, made for a very efficient financial organization. The cash sales of the knitting division through its retail outlets financed the long term cycle of the wholesale sales of over 150 days of the woolen division. To complete its total verticality, the company invested in 1967 in a worsted spinning mill for the knitting division.

Parallel to Textiles Pollak, there was another company, Fabrica de Paños Continental, S.A. which manufactured worsted fabrics (palm beach, gabardine, cashmere). It consisted of a worsted spinning plant and approximately 50 looms. It sold its products directly to the wholesale market and had to finance a 120 day production cycle and a 180 sale cycle. It was always short of cash and depended on financing by the banks which was not the case with Pollak Hermanos because of its retail outlets. At the beginning of the 60's, the shareholders of Pollak and Continental exchanged shares, for all practical purposes turning the two companies into one company, although the accounts were kept separately.

2. The 1970s and 1980s

The outcome of the 1970 elections was traumatic the company. The first day after the election, the families left Chile, leaving the companies in the hands of professional managers. The families had kept themselves free of any political involvement and identification with any political movement since their arrival in Chile. Their departure from Chile was understood by the government as one of safeguarding their security, after having undergone great hardships after the second world war which had brought them to Chile in the first place. They were invited many times to come back to the country. They were probably the only company of that size that reached an agreement of "usofructo" with the CORFO. In this agreement, the shareholders kept title and the CORFO became responsible for the profit and loss situation. The companies were taken over in October of 1972 and returned to their rightful owners in January, 1974. However, the new military government did not recognize the "usofructo" agreement and the shareholders became liable for the losses incurred by the earlier government takeover.

At that point the company was in a bad financial state having no inventories and incurring a tremendous debt with the national banking system. Through the combination of capital increases, foreign financing, and the cash sales of Tricot, the company slowly moved towards a sound financial footing. All kinds of projects were implemented to try to make the company solvent. Among them were the weaving of denim, the import and installation of a corduroy manufacturing plant, and the production of transfer printing t-shirts. By 1982, the jeans factory dropped from 160 to 60 employees and the factory started making work clothes. All these projects lasted a very short time. They were not in the tradition of what the company manufactured. Nevertheless, they served their purpose and helped to keep the company afloat. The situation was not helped by the high interest rates and high inflation. Eventually, in the late 1970s, when the country as a whole started recuperating, so did the different divisions. Nevertheless, one has to keep in mind, that practically 15 years had gone by and the company's machinery and technology had not been brought up to date.

The crisis of 1982 found the company in a relatively sound financial situation but with no clients to whom to sell fabrics to make profits. They were faced with the need to drastically reduce expenses as well as reducing manpower. One of the cost-saving measures was for Pollak Hermanos to absorb Continental to avoid duplicating services. The combined company accounted for over 1,600 employees in 1981 but, by 1983, employment was down to 750. The necessary funds to pay the large amount of severance pay while keeping the company afloat was obtained by means by purchasing US$3 million of close-out goods from Hong Kong, selling them fast at a low

margin through Tricot and using the profits to pay off the employees and finance the operation of the company.

As there was no market for the fabrics, it was decided to start a garment manufacturing division and sell the fabrics as garments through Tricot. They were also encouraged by several representatives of the Armed Forces to do this because there were no acceptable manufacturers of uniforms. With the use of European consultants, they acquired a turn-key project consisting of a garment manufacturing plant from Germany capable of manufacturing men's suits on a large scale. Not being familiar with this end of the textile business, they engaged the services of foreign technicians to run the plants and hired qualified labour from other garment plants that had gone bankrupt. Pollak, which was the prime supplier of fabrics to the Chilean police force (through public bids) also now became the supplier of uniforms. Three quarters of the fabric was turned into uniforms and sold to the police force and the remaining quarter was used to make garments to supply the Tricot business to be sold slowly to supply retain chains. This strategy led to a demand for new labour for the garment plant. This worked out well for several years until another vendor won the police contract by importing the uniforms from China, leaving Tricot as only an outlet for garments. However, Tricot stores were too small for the new volume. Consequently the garment factory increased its employees and this gave birth to the garment division that was later called, "Confecciones Bagir".

At the same time at the end of 1982 they acquired electronic knitting machines, through foreign credits, to replace the obsolete ones which were limited in design capability with low productivity. The arrival of the electronic knitting machines involved changing personnel. A small number of more qualified, electronically skilled technicians were required to run and maintain the machines but, at the same time, less qualified workers were needed to use the machines. The cost of a standard industrial knitting machine had risen from US$ 750, capable of producing 300 darts per day, to a more sophisticated version of that same machine costing US$ 2,500, but capable of producing 1,200 darts per day. The state of the art machine cost US$ 150,000. The cheap machines had low productivity and required a qualified person while the state of the art machine ran itself, needing unqualified operators and a few key technicians to maintain them. The productivity increment was almost 20 fold.

These entrepreneurial decisions, which might be considered risky in the light of the economic conditions at the time, were ones that paid off and allowed the company to overcome the financial difficulties of the country and survive when approximately 70% of the garment and textile industry went bankrupt. The reason for the survival of Pollak was not its size nor just its efficiency but was because of its diversification. One or another division would always carry the rest of the firm. This was not the case with most textile firms in Chile which were forced out of business. Among the major firms which were forced out of business in the fabric area were Rayonil, Hirmas S.A., Yarur S.A., and Pichara S.A. In the garments area the major firms that went under were Burger, Heyum, Buffalo and Vestex.

3. The main operating divisions

In analyzing an economy it is difficult to avoid blurring the differences among its sectors. In analyzing a sector it is difficult to avoid blurring the differences among its firms, particularly in such a disparate sector as the textile and garment sector. Similarly, in analyzing a single firm like Pollak it is important where possible to differentiate among its separate divisions, especially because the firm's diversification has been essential to its survival. A brief description of the history and practices of its main divisions illustrates the different impacts of global trends on the behavior of the divisions.

The **worsted and woolen division** has an installed capacity of 120,000 to 150,000 meters today compared to 50,000 meters in the 1960s, using advanced technology, and produced strictly for the local market until the mid 1980s. As a consequence of the 1982-83 crisis, most garment manufacturing went bankrupt and the division started looking for markets elsewhere in order to keep producing sufficient yardage to stay competitive. The division had established contacts with two US agents and, with their assistance and know-how, developed fabrics suitable for the US market. At the same time it also produced fabrics for the parent firm both for products to be sold locally and other export markets. This division really exists for the export market and could just as well have its design and management personnel located in New York.

The reason for this division's survival is that fashion in the US has changed and there has been a big increase in the demand for very light weight worsted fabric made out of expensive wools. This is almost trabajo artisanal "roll-by-roll" production by very qualified personnel and entails a high degree of quality control. The contracts contain large indemnity clauses for non-performance be it quality, time or non-delivery. On the other hand, the purely woolen part of the Division has closed down because fashion has changed and tweeds and other heavy weight fabrics are not consumed anymore. This involved the firing of 75 people in 2000 who had accounted for 40% of the Division's sales at the time although this drop in sales has since been partly compensated by the increase in the sales of worsted fabrics to the United States. Italian companies are the main competitors but they can still sell for US$12 per yard while Pollak can sell for only US$7 per yard, due to the prestige of Italy's high quality textiles. Now the TLC with the US has been signed, Pollak will be more competitive in its pricing, as it had been previously subject to a duty of 27%.

The **hand and industrial knitting yarn division** was producing 150 tons per month in 1967, with 85% of the output sold wholesale and the remaining 15% allocated to interdivisional consumption. However, when the TLC with Mexico was signed, an additional competitor was introduced into the market. Mexico had two strengths: a) comparatively low labour costs, US$125 per month, instead of US$500 per month for Chile in 1998, and b) its companies have economies of scale. All the spindles in Chilean would fit into one Mexican acrylic spinning plant. Mexico's transport costs are also lower as Mexico's container costs are half Chile's shipping costs. This great difference has forced down international competitive prices substantially, causing many Chilean firms to go bankrupt because of insufficient margins.

The **spinning division** started to import yarn from Turkey to produce a lower average selling price. It then improved its service to clients and moved up in the market by introducing 'fancy yarns'. Even with these steps, it had to reduce its production to 100 tons per month because there was practically no market any more, representing a lay-off of about 85 people as a consequence of the competition with TLC protected Mexico. If it survives, this will be only because the TLC between Chile and USA has been signed.

The vacuum in the sector that had been created by the companies that had disappeared was taken advantage of by Pollak Industries to bring the garment plant to maturity, and the original number of 120 employees had risen to approximately 600 during the second half of the 1980s. It was also necessary to invest in electronic design and pattern making equipment as well as computerized controlled cutting devices. At the same time, the garment division , which already had seven men's boutiques named Bagir, took on contracts with Liz Claiborne, the second biggest women's wear concern in the United States.

The relationship between Liz Claiborne and Pollak Industries became a very close one and lasted approximately seven years in which not only did the division produce CMT (cut, make, and trim) but Liz Claiborne bought finished garments with fabric manufactured by the fabric division.

The large quantities per design and color allowed for high efficiency and required the renewal of most of the weaving plant which was obsolete at the time and was in no condition to manufacture export quality fabrics. The partnership between Liz Claiborne and Pollak Industries lasted until 1995 when the firm could no longer compete with the cheaper Central American wages, despite good personal relationships, and this is now happening with the industrial knitting division.

The **fabric division** had shrunk to 450 employees in 1997 but was able to open markets in Mexico and Canada because of the free trade agreements. Margins dropped by 10-15% because the men's wear market is far more competitive than the women's market. Pollak has been exporting to Mexico and Canada, taking advantage of its TLC agreements, and to the US via Brooks Brothers because of that firm's reputation for high quality and reliability. Exports now consist exclusively of men's wear because the available products in the women's market are such that Pollak cannot be competitive. Women's clothes are easier to manufacture and require less technology and so there is much more competition with the Pollak products.

4. Recent developments

The beginning of the 1990s were extremely profitable years for the company. Because of the end of the relationship with Liz Claiborne, a decision was made to sell the excess men's wear through Tricot. The number of stores were increased and the square meters per store average was increased to accommodate the new inventory. Because of this new strategic decision, Tricot, which was a limited partnership, became a corporation and its capital was increased to handle the increase in inventory and sales. This idea worked well for approximately three years until it became clear that the clientele of the Tricot stores were mainly in the C2, C3, and D1 socio-economic categories and were not clients for suits. An independent professional management at Tricot decided to replace the space with goods bought in the local market as well as to explore importing goods from the Far East.

The influx of goods from China in the second half of the 1990's, referred to earlier in the paper, was a big blow to the local textile and garment manufacturing industry. At Pollak Industries, the first division to suffer was the knitting division which for a long time had been the biggest profit maker. Even with the latest technology, it could not compete with the low price of Chinese knits. Today the knitting division has only 30 employees, down from a high of 350. It produces teenage fashion wear which is managed by sub-contractors and sold to big department stores.

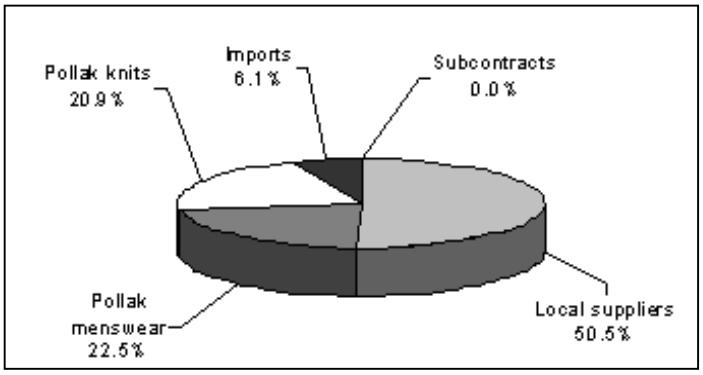
After Tricot recognized that it lacked the right clients, the garment division had to look elsewhere to place its production capacity. Today, it produces strictly men's wear for export to Mexico, Canada, and USA. This is a very competitive situation because of the high cost of Chilean labour and the slow-down of the world economy. The fabric division, on the other hand, having learned to produce export-quality goods for Liz Claiborne, acquired the services of two selling houses and was able to maintain productivity by exporting high fashion fabrics of very fine yarns, requiring a lot of specialist labour and high quality control.

In early 2001, the shareholders of the company decided to change its managerial structure from a family managed company to a non-family run company. It was decided that some very strong measures would have to be taken which only outside managers and independent directors could carry out. The new management decided on a policy, approved by the Board of Directors, to keep only the profitable divisions and those viable in the future. The company now has 950 employees and its sales have dropped by a third. The future for the textile industry as a whole looks gloomy but the Free Trade Agreement with the United States which was signed last year may make the future more favourable.

The irony of this manufacturing company is that the child it gave birth to, its marketing arm, today has twice the amount of sales as its parent company. It has grown to a chain of 29 stores and 1,450 employees. It stays financially profitable by importing large quantities of Chinese goods and having over 400,000 credit card customers. Tricot has grown and become independent and lowered its consumption of knitted goods. It has reached a point where even though Textiles Pollak Hermanos S.A. has a knitting division, Tricot's product managers travel to China to buy knitted goods at one third of the cost of making them in-house. Figures 11 and 12 show the complete change of purchasing and importing policy that had to be adopted by Tricot because of changes in macroeconomic and trade policies.

Figure 11

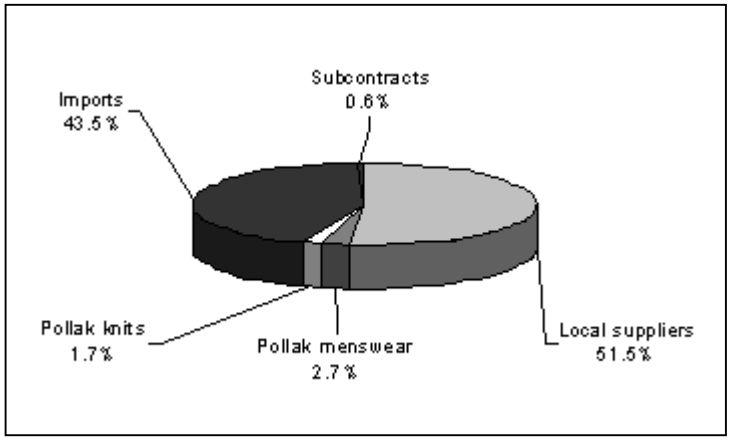
TRICOT: TOTAL SALES COMPOSITION: 1994



Source: Author's calculations based on Tricot company data.

Figure 12

TRICOT: TOTAL SALES COMPOSITION: 2002



Source: Author's calculations based on Tricot company data.

V. Conclusion

It is important for economic policy makers and the business community to have a better understanding of the interactions between the macroeconomic environment and the microeconomic structure. In the last 30 years, Chile has undergone a major macroeconomic transformation that has completely altered the economy at the microeconomic level, and it was thought that Chile would make a very suitable patient for a detailed examination of the effect of macroeconomic policies on the sector and firm performance in the textile and garment industry. In particular, the paper has analyzed the evolution (life cycle) of a leading textile firm and the entrepreneurial decisions that it had to make in response to the changing macroeconomic and policy environment and the overall impact of globalization.

With this objective, the paper examined a number of indicators of macroeconomic policy to try to assess the impact of these policy changes on the performance of Chile's textile and garment sectors as well as on this leading firm. The macroeconomic policy indicators that were selected were: GDP growth; unemployment; exchange rates; wages; and import tariffs, all of which might be expected to affect sector and firm performance. There appears to be a clear connection between the observed trends in unemployment and exchange rates and sector or firm overall performance. It might be though difficult to show conclusively a causal relationship between a basic across-the-board macroeconomic policy and the performance of a small sector, like textiles and garments, where other more immediate factors might have had a more direct impact.

However, in the case of the fifth macroeconomic policy, trade liberalization and import tariffs, there is a very powerful causal connection. The paper shows that the growing importance of textile and garment imports at the expense of domestic manufacturing was a consequence of the opening of the economy through the lowering of import tariff rates.

With the lowering of import tariffs, firms in the textile and garment sectors increasingly found themselves unable to compete with other textile and garment producing low-cost countries. It was observed that these sectors consisted of a very large number of small firms, the great majority with less than 50 employees. Only a few large firms had the know-how and resources to make use of modern technology to respond to the global challenge and change their firm strategy, product focus and manufacturing processes accordingly. At the same time, despite the steep fall in sector employment, sector salaries did not fall proportionately, in part reflecting a switch to proportionately more skilled workers and fewer unskilled workers. Furthermore, we have seen that Chilean textile imports are very concentrated among a very few countries. China, a very low-cost country, completely dominates textile imports, accounting for more than one third of them, while the Asian countries as a whole account for more than half.

The last part of the paper is a case study of a leading firm in the textile and garment sector, Textiles Pollak Hermanos S.A. and its retail subsidiary, Tricot. Textiles Pollak is the second largest textile exporter in Chile and, with Tricot, its tenth largest textile importer. In its origin, Pollak was typical of family-organized textile sector firms but, although declining like the rest of the textile sector and then facing serious problems of excess capacity, it remains one of the few competitive textile firms, with exports accounting for half its sales and 10% of the exports of the entire sector. Pollak has survived whereas most of the leading textile firms have been forced out of business.

The firm's ability to survive in a progressively declining sector was because of its vertical integration and diversification and its willingness to adapt to new production methods and product innovations as market conditions changed, adaptations that the paper describes in detail. Today, in an open global economy, vertical integration has become less feasible because the textile market requires specialized manufacturing concerns that produce at a competitive price and for a very specific market. This requires economies of scale that the Pollak manufacturing divisions have never had. The recent signing of the Free Trade Agreements with the United States and the European Union are favourable steps in the current Chilean commercial policy for the survival of these and similar firms but they may well be overshadowed by the forthcoming elimination of all textile and garment import quotas which is scheduled to come into effect in January 2005, as agreed ten years ago when the Multi Fiber Agreement on Textiles (MFTA) was drawn up.

Currently, the Latin American region accounts for 26% of US imports in this sector, with Mexico accounting for 10%. The WTO estimates that, with the elimination of MFTA quotas, the Latin American region will soon account for only 8% of US imports, with Mexico accounting for 5%. By contrast, China and Hong Kong which currently account for 25% of US imports will soon account for 50% of those imports because of their efficient large-scale production and low costs. The best way of dealing with the new rules of the game when competing for part of the global textile and garment trade, currently valued at over US$350 billion annually, is the strategy that Pollak has successfully taken –focusing on high quality and speed. But that may not be enough.

Bibliography

Acuerdos Internacionales de Comercio, Dirección Económica de Chile, Ministerio de Relaciones Exteriores <http://www.direcon.cl/html/acuerdos_ internacionales/bilaterales.php>

Agosín, M. and R. Ffrench-Davis (1998), Managing capital inflows in Latin America, Discussion paper series, Office of development studies, UNDP, New York.

Blanchard, O. (2000), Macroeconomics, Second Edition, Prentice-Hall Inc., Upper Saddle River, New Jersey.

Bonelli, R. (1998), "Exporting non-traditional manufactured goods", DPPM, ECLAC, Santiago, Chile.

Carlson, B. (2002), Educación y mercado de trabajo en América Latina frente la globalización, Revista de la Cepal 77, August 2002. Santiago, Chile.

—(2001), "Human Resources, Technological Capacity and Competition in Latin America", background paper for the ECLAC-IDB Seminar "Camino a la Competitividad, March 2001, ECLAC, Santiago.

—(2000), "El desafio de la competitivcidad: recursos humanos y la region en el contexto global"in Equidad, Desarrollo, y Cuidadania, Vol II, CEPAL/Alfaomega 2000, Bogota.

Central Bank of Chile, Informe Económico y Financiero, varios números and www.bcentral.cl

Ffrench-Davis, R. et. al (1992), Liberalización comerical y crecimiento: la experiencia de Chile 1973-1989, in Pensamiento Iberoamericano No. 21, ICI-CEPAL, Santiago, Chile.

—(1999) Macroeconomía, Comercio y Finanzas para Reformar las Reformas en América Latina. CEPAL y Mc Graw Hill, Santiago Chile.

—(2002) El impacto de las exportaciones sobre el crecimiento en Chile, in Revista de la CEPAL 76, Abril

Hachette, D (2001), Las Reformas Comerciales y Financieras in Larraín F. and R. Vergara eds. (2000), La Transformación Económica de Chile, Centro de Estudio Público, Santiago, Chile.

INE (Instituto Nacional de Estadísticas) (2002), INE database, Santiago, Chile.
IMF(International Monetary Fund) (2002), International Financial Statistics Yearbook, Washington, D.C.
INTECH (Instituto Textil de Chile) (2002), Informes estadísticos, Santiago, Chile.
Katz, J. (1996), Regimen de incentivos, marco regulatiorio y comportamiento microeconomico en Katz (ed), Estabilización macroeconomica, reforma estructural y comportamiento industrial. Santiago, Chile
Krueger, A (1997). Trade policy and economic development, How we learn. NBER. Working paper 5896
Larraín F. and R. Vergara eds. (2000), Chile en pos del desarrollo: Veinticinco años de transformaciones economics, in La Transformación Económica de Chile, Centro de Estudio Público, Santiago, Chile.
Macario, C. (2000), The behavior of manufacturing firms under the New Economic Model, World Development, Volume 28 No. 9, Oxford.
—(2000a) Export led growth in Latin America, Lynne Rienner publishers, Inc. Boulder, Colorado.
PADI (Programa de análisis de la dinamica industrial) (2002), PADI database, Cepal/UNIDO, Santiago, Chile.
Schumpeter, J. (1950), Capitalism, Socialism and Democracy, Harper & Row, New York.
Silva, V. (2001), Estratégia y agenda comercial en los años noventa, Comercio internacional No. 11, Cepal, Santiago, Chile.
SOFOFA (Sociedad de Fomento Fabril) (2002), Datos estadísticos, Santiago, Chile.
Solow, R. (1988), Growth Theory and After, in American Economic Review, June.
Textiles Pollak Hnos. (2002), Corporate data, Santiago, Chile.
World Bank (2002), World Development Indicators, World Bank, Washington, D.C.

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