OECD*publishing*

Please cite this paper as:

Bartók, C. and O. Onodera (2007-10-25), “Facilitating Trade and Structural Adjustment Chile: Experiences in Non-Member Economies”, *OECD Trade Policy Papers*, No. 56, OECD Publishing, Paris.
http://dx.doi.org/10.1787/244288817625

OECD Trade Policy Papers No. 56

Facilitating Trade and Structural Adjustment Chile

EXPERIENCES IN NON-MEMBER ECONOMIES

Csilla Bartók

Osamu Onodera

OECD

Unclassified **TAD/TC/WP(2007)6/PART2/B/FINAL**

Organisation de Coopération et de Développement Economiques
Organisation for Economic Co-operation and Development

25-Oct-2007

English - Or. English

TRADE AND AGRICULTURE DIRECTORATE
TRADE COMMITTEE

TAD/TC/WP(2007)6/PART2/B/FINAL
Unclassified

Working Party of the Trade Committee

FACILITATING TRADE AND STRUCTURAL ADJUSTMENT: EXPERIENCES IN NON-MEMBER ECONOMIES

Country Case Study on Chile

OECD Trade Policy Working Paper No. 56

by Csilla Bartók & Osamu Onodera

Contact: Osamu Onodera: Tel. +33-1-45248937; e-mail: osamu.onodera@oecd.org; Csilla Bartok: Tel.+33-1-45241480; e-mail: csilla.bartok@oecd.org

JT03234624

Document complet disponible sur OLIS dans son format d'origine
Complete document available on OLIS in its original format

English - Or. English

ABSTRACT

This paper is the first of four country case studies which is a part of a broader research programme addressing trade and structural adjustment issues in non-member economies which was conducted as a follow-up to *Trade and Structural Adjustment: Embracing Globalisation* (OECD, 2005) which identified policies for successful trade-related structural adjustment. This paper studies the trade liberalisation experience of Chile from 1973 onward.

The report consists of 5 main parts; Part 1 provides the introduction, part 2 looks at the trade liberalisation in Chile which was implemented in three phases, (1) initial trade reforms (1973-84), (2) trade reform after a temporary policy reversal(1985-89) and (3) after 1990. Part 3 looks at the evolution and structure of exports and imports, and Part 4 looks at sectoral developments in the copper industry, agro-food industry, wood and wooden products industry and the textiles and clothing industry. Part 5 concludes with lessons learnt. The experience of Chile shows that trade reform has been essential for realigning the incentive structures in Chile. A stable macroeconomic environment, trade reform starting with the elimination of quantitative restrictions, introduction of flat tariffs, coherent exchange rate policy, sound institutional framework, rule of law, mild promotion of exports, use of foreign capital, and relatively flexible labour market policies have been important factors in Chile's successful trade liberalisation experience.

Keywords: trade, structural adjustment, liberalisation, liberalization, Chile, macroeconomic instability, tariffs, exchange rate policies, import-substitution, export promotion, unilateral tariffs, regional trade agreements, social and labour policies, copper industry, agro-food industry, forestry and wood sector, textile and clothing industry.

ACKNOWLEDGEMENTS

This project was carried by Osamu Onodera and Csilla Bartók under the supervision of Anthony Kleitz of the OECD Trade and Agriculture Directorate. OECD colleagues inside the Trade and Agriculture Directorate as well as from the Economics Department and the Development Centre provided useful inputs and comments. The authors wish to thank Ricardo Ffrench Davis, Nanno Mulder, José Durán Lima and Felipe Jimenez, Rodrigo Valdes, Manuel Agosin, Marcio Garcia, Alicia Frohman, Maria Teresa Arana, Luis Eduardo Escobar and Raul Saez who throughout interviews contributed valuable inputs to the paper. The comments received on an earlier version of this paper from Diego Moccero, Pablo Zoido, Rolando Avendano, Jonathan Brooks, Sébastien Herreros are greatfully acknowledged.

The Working Party of the OECD Trade Committee discussed this report and agreed to make the findings more widely available through declassification on its responsibility. The study is available on the OECD website in English and in French: http://oecd.org/trade

TABLE OF CONTENTS

Boxes

EXECUTIVE SUMMARY

Chile is a model example of a country that has successfully followed an outward- oriented economic development strategy. While up to the 1970s, Chile followed an import substitution policy and was characterised by a large public sector, high inflation, severe government intervention in the financial sector, extensive price distortions, numerous quantitative restrictions, high and dispersed tariffs and isolation from international goods and capital markets, at present Chile boasts one of the most open economies in the world with a uniform tariff of 6%, lower tariffs for FTA partners and a liberal investment environment.

Chile's trade policies and other liberalisation policies were implemented in three phases, (1) 1974-1984, the initial reforms under the military regime (2) 1985-1989, the second period of reforms under the military regime, and (3) after 1990, the period of continued trade liberalisation under the democratic regime. The initial phase of trade liberalisation consisted of the elimination of quantitative restrictions and radical tariff reduction from over 100% to a uniform level of 10% in a little over 5 years and ended with a reversal of tariffs to 35%. Structural adjustment ran into considerable difficulties due to (1) high inflation and macroeconomic instability, (2) premature liberalisation of financial markets, (3) the use of the exchange rate as an inflation anchor which gradually undermined export competitiveness and (4) inflexible wages and labour market policies. This resulted in high unemployment and high social costs, mainly borne by the lower income groups. The second phase of trade reform was a more pragmatic one in terms of policy coherence and adjustment strategy. Tariffs were cut back from 35% in 1985 to 15% in 1988 and accompanied with a substantial devaluation of the currency with stronger emphasis on export promotion policies (ProChile) and more flexible labour market measures, which contributed to economic recovery and strong export growth by the end of this period. From 1990 on the democratic government maintained and strengthened market orientation and undertook a gradual unilateral liberalisation of the tariffs from 15% in 1990 to 6% in 2003. The active FTA policy extending to Europe, Americas and Asia complemented these reforms. Coherence of policies, macroeconomic stability and increasing emphasis on the social agenda has underpinned stable growth in the economy and trade.

Trade reform has been essential for realigning the incentive structures in Chile and has triggered resource allocation in line with comparative advantage. Copper exports have continued to grow not only through growth of the state owned enterprises, CODELCO and ENAMI, but through an effective regulatory framework which welcomes FDI and embraces competition. The agro-food industry such as fresh fruits, vegetables, wine and salmon, and the forestry cluster are two sectors in which Chile has a comparative advantage and which have shown dynamic growth and export diversification. While driven by the private sector, government support through a stable macroeconomic and business environment, the use of the export promotion agency, and establishment of a stable legal framework has been important for export growth. The textile and clothing sector was one of the sectors most negatively affected by trade liberalisation. While decreasing in size considerably, the sector has adjusted by increasing regional exports and focusing on niche markets.

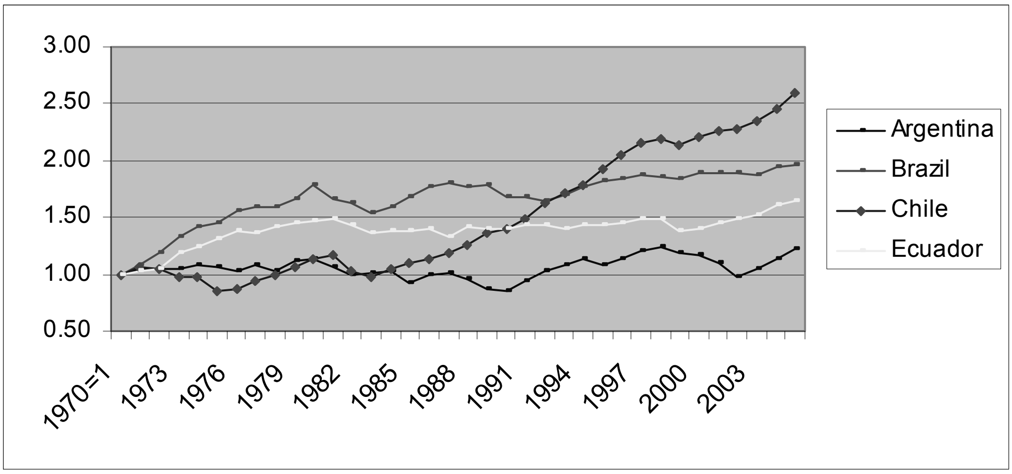
The experience of Chile in the 1970s and 1980s suggests that macroeconomic instability may deter even industries with comparative advantage from investment. From the 1990s the increased macroeconomic and political stability along with improved policy coherence has supported investments in a wider range of sectors. Coherent exchange rate policy with trade liberalisation policies, sound domestic capital and financial markets with proper regulatory oversight reduced the vulnerability of the economy to external shocks. Chile presents an interesting example of how uniform tariffs can reduce distortions by ensuring relatively equal effective protection rate across industries, while reducing lobbying. Export promotion policies in Chile have contributed to the development of a critical mass of exporters in non-traditional industries. The sector-specific studies draw attention to the fact that additional efforts are

necessary to increase value added by improving productivity and enhancing quality through upgrading technology and investments into human capital.

1. Introduction

1. Chile, the sixth largest country in Latin America in terms of both GDP and population, is currently one of the most open economies in the world and widely considered a showcase country that has successfully pursued an outward-oriented development path. It has experienced comparatively high growth in a turbulent region, and despite two serious economic downturns in the mid-1970s and early 1980s, it showed the highest per capita income growth in Latin America since the mid-1980s (Figure 1).

Figure 1. GDP per capita growth of selected Latin American countries (1970=1)



Source : WDI database, author's calculations based on GDP per capita series in 2000 USD

2. Chile has become increasingly integrated with the world economy but this was not always the case. Like many other developing countries, Chile had followed an import substitution policy characterised by the high protection of its manufacturing sector. In the 1970s, at the time when the structural reform programmes took place, the Chilean economy had an overly extended public sector, chronic fiscal deficits, high inflation rates with severe government intervention in the financial sector and monetary policy. Extended price distortions further increased the country's isolation from international markets for goods and financial services (Corbo, 2005). The switch in the policy stance which provided a basis for the transformation of the economy was conducted under the military dictatorship between 1973 and 1989. Since 1990, the democratic government in place has further deepened these market-oriented policies, and strengthened the regulatory framework and institutions while placing more emphasis on social policies.

3. The objective of this paper is to study the trade liberalisation experiences of Chile in order to draw policy implications on trade policy and complementary policies. Chile's experience is of special interest for several reasons. Initial tariff reductions in the early 1980s was very rapid, lowering tariffs from very high levels to 10% in a little over 5 years. Secondly, the low tariff put in place was a flat tariff as opposed to the more common differentiated tariff schedule. Thirdly, the low tariffs were achieved mainly through unilateral tariff liberalisation. Fourthly, Chile has been able to maintain its liberal trade orientation despite reversal in 1981-83 and even strengthen it considerably under the democratic regime. Finally,

Chile's liberalisation process provides interesting lessons in terms of policy coherence between trade policy and other economic policies, the need to avoid appreciation of the real exchange rate when liberalising trade (Table 1).

Table 1. Chile: Average tariff and real exchange rate, 1973-2001

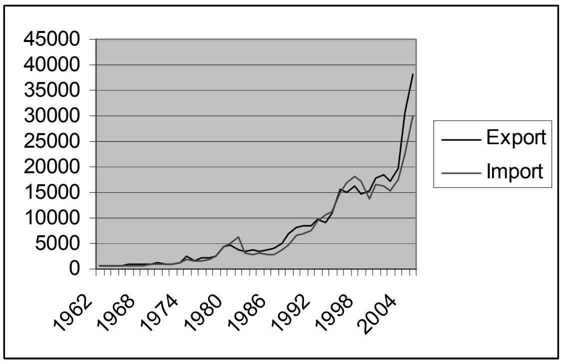
Year	Average Tariff (%)	Real exchange rate (1986=100).[1]
1973	94.0	65.1
1974-79	35.3	73.2
1980-82	10.1	57.6
1983-85	22.7	79.1
1986-89	17.6	106.6
1990-95	12.0	99.5
1996-98	11.0	80.3
1999-2001	9.0	88.4
2002-03	6.0	97.6

Source : Ffrench Davis (2002), Carlson (2005) and Central Bank of Chile

4. Figure 2 and Figure 3 show the evolution of Chilean trade –exports and imports- over the past four decades. Both exports and imports have grown rapidly. In particular the initial period after trade liberalisation (1973-1980), the late 1980s and the first half of the 1990s as well as post 2002 were periods of high export and import growth.

Figure 2. Chile's trade (1965-2005)

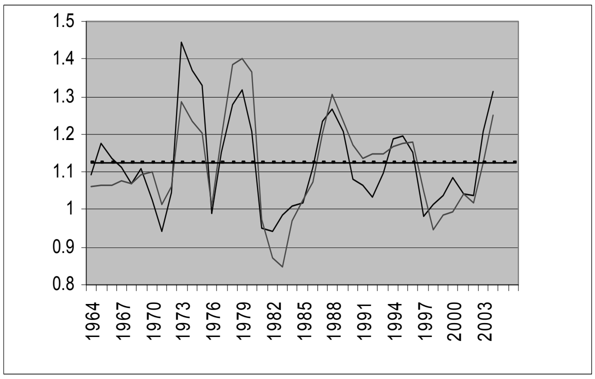
(Millions of current USD)



Source : WITS database

Figure 3. Chile's trade growth rates (1965-2005)

(3-year moving average [2] of annual growth rates)



Source : WITS database, same legend as Figure 2

Note: The average growth rate for exports over the entire period was 1.12 which is presented as a horizontal line.

[1] An increase in the index shows a depreciation of the real exchange rate.

[2] The growth rates were calculated as a 3-year moving average in order to smooth out extreme values over the selected timeline.

5. While in the 1970s copper-related exports were dominant in the economy accounting for 80% of exports, considerable export diversification into areas such as fruits and vegetables, forestry products, fishery products including salmon led to a decrease of copper's share in exports to around 40% in 2003. The share of copper exports has subsequently increased to 55% in the period 2004-06 due to high copper prices (Table 2).

Table 2. Chile: Evolution of export structure

Product name	SITC Rev2 2digits	1976-84	1985-94	1995-05
Non-ferrous metals	68	40.90%	32.55%	28.14%
Metaliferrous ores and metal scrap	28	22.21%	13.35%	15.75%
Vegetables and fruit	05	8.85%	15.12%	11.68%
Fish, crustaceans, molluscs, preparations thereof	03	2.96%	6.17%	8.29%
Pulp and waste paper	25	3.86%	4.47%	4.84%
Cork and wood	24	2.91%	5.43%	4.61%
Beverages	11	0.28%	0.87%	2.89%
Feeding stuff for animals, not incl. unmil. Cereals	08	5.60%	5.14%	2.38%
Inorganic chemicals	52	0.96%	1.46%	1.85%
Paper, paperboard, artic. of paper, paper-pulp/board	64	0.96%	1.28%	1.79%

Source: UN COMTRADE Database, SITC Rev. 2

Note: SITC (68) and (28) covers the copper "sector" including among others copper mining and manufacturing of refined copper

6. Increasing integration to the world economy has triggered an ongoing adjustment process and left a fingerprint on the structure of the Chilean economy (Table 3). While the share of agriculture and industry rose initially, the share of the services sector in GDP has grown only in recent years.[3] The share of manufacturing in GDP decreased from a high of more than a quarter in 1970 to a low of 16% in 1985 (Figure 4), leading some to conclude that there has been substantial de-industrialisation. From the second half of the 1980s and in the 1990s manufacturing has recovered (Figure 5), while its GDP shares in 2000-2005 were around 18-19%.

Table 3. Chile: Structure of the economy

(Average percent)

	1976-1984	1985-1994	1995-2005
Agriculture, value added (% of GDP)	7.4	9.1	8.0
Industry, value added (% of GDP)	37.9	38.8	37.3
Services, value added (% of GDP)	54.8	52.1	54.9
Trade (% of GDP)	45.7	59.8	63.6
Exports of goods and services (% of GDP)	21.8	31.3	32.9
GDP growth (annual %)	3.9	7.4	4.9
Employment in agriculture (% of total employment)	16.0	19.1	14.4*
Employment in industry (% of total employment)	20.8	24.7	24.8*
Employment in services (% of total employment)	63.1	56.2	60.8*

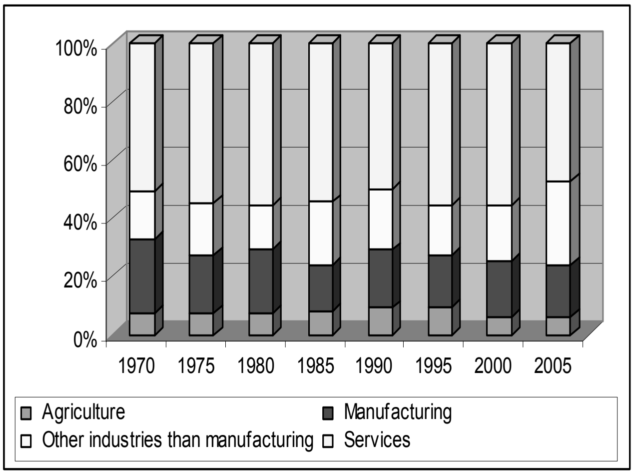
Source: World Development Indicators CD-ROM (2004) and online version.

Note: (*) Employment data is only available up to 2003

[3] When analysing sectoral variation in GDP, one needs to be careful of the effect of high copper prices which is the driver for value added in the mining industry. The growth of the industrial sector is often only a reflection of the price-effect.

Figure 4. Changes in the GDP composition [4]

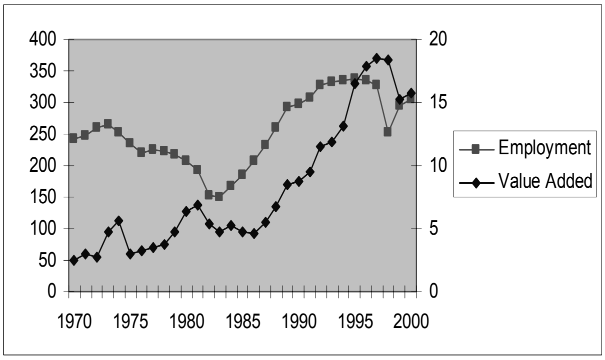
(Percent)



Source : WDI online

Figure 5. Employment and value added in manufacturing

(Million people (left scale); billion USD (right scale))



Source : UNIDO Industrial Statistics 3 digit (2006), ISIC Rev. 2

7. The change in composition within the manufacturing sector has been even bigger. Sectors such as food products, beverages, chemicals and plastic products, wood and wooden products, paper and furniture have increased their share both in terms of output and employment while sectors such as textiles, apparel, transport equipment, metal products and machinery have decreased their shares considerably (Tables A and B in the Annex). The large dip in manufacturing employment during the economic downturn of 1983 and subsequent rapid recovery are especially noteworthy. One can also note that in general sectoral adjustments have reflected comparative advantages. For example, the food industry has continued to increase its share in value added, while textiles have continued to decline. There are however notable exceptions where a decrease in the share in value added has been reversed like the example of the fabricated metals from the 1980s.

8. As we have briefly seen, Chile has undergone substantial trade liberalisation and structural adjustment. The rest of the paper is organised as follows. In section 2, we present an overview of trade policy reforms and other related policies during the three periods of trade liberalisation. In the third section we provide additional analysis on export and import trends and their structure. In the fourth section, we take a more detailed look at developments in few selected sectors: (i) the mining sector (copper), (ii) agro-food industry, (iii) wood and wooden products, and (iv) textiles and clothing. In the final section we draw lessons from Chile's experiences.

2. Trade policy and related policies

9. Like many other developing countries, prior to 1973 Chile took an import substitution policy based on the high protection of its manufacturing sector. In this section we provide an overview of the economic situation before 1973 and discussion on the trade policies and other policies implemented in three periods of trade liberalisation; (1) 1974-1984, from the early years of trade liberalisation and market reforms to the debt crisis; (2) 1985-1989, the second period of trade liberalisation under the military

[4] The relative increase of industry's GDP share and in particular that of the other manufacturing sector over the period reflects as well the high price volatility of the mining sector.

government; and (3) after 1990, the period of continued trade liberalisation under the democratic government. Following a description of trade and other complementary policies, an assessment for each period is provided.

A. Pre market reform (before 1973)

10. Between the mid 1940s and 1970, Chile followed an import substitution development strategy and has experienced modest growth. The economy was highly dependent on the copper sector which provided for over 70% of exports in 1970. While there were some attempts to reduce excessive protection, the economy was generally closed from the rest of the world. The period was also characterised by the increasing degree of state intervention in the economy. During 1960-70, the Chilean escudo was consistently overvalued (Corbo and Meller, 1981) despite continuous adjustment of the nominal exchange rate to reflect high inflation rates.[5] This provided a disincentive to exports reinforcing the segregation of the economy from the rest of the world.

11. In 1970, when the socialist government was elected, it stepped up non-tariff protection, nationalised large scale industries (mining, banking) and introduced price controls. In 1973, most of the industries were highly protected. There was a high level of tariff dispersion and average tariffs reached 100%. In the meanwhile numerous non-tariff barriers were also applied. The presence of multiple exchange rates further distorted the economy. This meant that the effective rates of protection were extremely high (far beyond 100%) while they were negative for others (Table 4). Tariff exemptions received by some state-owned enterprises meant effective rates of protection were even higher for these companies. The banking sector was dominated by the state and characterised by financial repression: ceilings set on interest rates regardless of inflation rates led to negative interest rates and there was heavy intervention in the allocation of credit. The regime increased government spending as copper prices went up. A subsequent fall in copper prices however made public expenditure unsustainable. Three-digit inflation, economic contraction and disequilibria, weak governance, as well as the inability to reach political agreements was followed by a coup d'etat.

[5] During 1950-70, the average annual increase in GDP price deflator was close to 35% (Corbo and Meller, 1981).

Table 4: Effective rates of protection by sector

Sectors	1974	1979
Agriculture	*30*	*10*
Mining	*7*	*14*
Non-tradable	*-30*	*-3*
Manufacturing industry (average ERP)	*156.5*	*13.5*
Apparel & Footwear	264	14
Textile	239	14
Paper & pulp	184	17
Food	161	12
Wood products	157	15
Metallic products	147	15
Basic metals	127	17
Electrical & Non-electrical machinery	96	13
Furniture, except metal	95	11
Chemical products	80	13
Plastic	80	13

Source: Aedo and Lagos (1984), in Alvarez and Fuentes (2003), p.7, edited by Secretariat

B. Chile's market reform – phase I (1973[6]-1984)

12. When General Pinochet took over in late 1973, the economy was in a state of disarray. Aggregate production declined in 1972 and 1973; the annual rate of inflation was over 500%; and the fiscal deficit surpassed 20% of GDP. Incentives were misaligned such that there was substantial unutilised production capacity. The economic decline was exacerbated by a drop in world copper prices and modest availability of international credits.

13. The market reforms under the military dictatorship were deeply influenced by a group of technocratic reformers, known as the "Chicago boys".[7] The major objective of their economic program was to transform Chile into a market-oriented economy. This was to be achieved through a number of measures: the reduction of the size and role of the public sector, trade liberalisation, liberalisation of the capital account in the balance of payments, liberalisation of the domestic financial sector and opening of other key markets (Box 1).

14. Manufacturing initially reacted favourably to the liberalisation policies in 1973 and recovered. However the tightening of monetary policy and the severe fiscal stabilisation programme in 1975 with the

[6] This section draws on Hachette (1991), Edwards (1986) and Ffrench Davis (2002).

[7] The "Chicago Boys" were a group of young economists trained at the University of Chicago under the exchange program with the Catholic University in Santiago. The Chicago Boys strongly influenced the formation of policies and after 1975 were placed in responsible positions within the government for their implementation. Teichman (2001) provides interesting analysis on the policy networks in Chile at the time of reform.

aim to constrain inflation led to an overall economic recession and a vast industrial downturn. The government expenditure was reduced by 15 to 25% compared to its initial levels preceding the reform. Most exemptions and subsidies were eliminated, while income taxes were increased by 10%, for both individuals and corporations. The industrial output dropped by 26% while industry's share in the GDP fell by 17% (Ffrench Davis, 2002). The economy gradually recovered thereafter until the downturn in 1982-1983 (Box 1).

a) Trade policy and exchange rate policy[8]

15. Tariff adjustment in this period was implemented in three stages. The first stage lasted from beginning of 1974 until mid-1975. In this period, all quotas and official approvals to initiate import operations were eliminated, and all forms of protection were in principle unified into tariffs. The simple average tariff was cut from 105% to 57% although some tariff rates still reached 120%. In terms of exchange rate policy, the six exchange rates were gradually unified and a crawling peg adjusted exchange rate levels to inflation, which incurred real exchange rate depreciation for the first period.

16. The second stage of tariff reduction took place between mid-1975 and mid-1977. Tariffs were reduced so that they varied between 10% and 35%. In the meanwhile Chile negotiated with Andean Pact countries with a view to reducing the level of common external tariffs which were an obstacle to the unilateral tariff reductions which Chile envisaged. The inability to reach common ground led to Chile's withdrawal from the Pact. The tariff reductions were completed in August 1977 earlier than the announced target date of mid-1978 and an additional objective to cut rates to 10% was set. The final stage lasted from December 1977 to June 1979, where tariffs were reduced on a monthly basis to reach a uniform tariff of 10% for (almost) all imports after June 1979.

17. In the second and third periods, the exchange rate began to be used as a means to slow down inflation. First, the pace of exchange rate depreciation was kept lower than the inflation rate (June 1976-January 1978), followed by the pre-announcement of changes in the exchange rate (February 1978 – June 1979).[9] Finally, the exchange rate was fixed at 39 pesos to the dollar (June 1979-January 1983). This rate was abandoned in 1982 and the peso depreciated rapidly afterwards, first to 46 pesos to the dollar in June 1982, then step by step to 74-80 pesos to the dollar in January 1983. Thus, while the exchange rate policy contributed to lower inflation, the real exchange rate appreciated considerably, especially after the fixation of the exchange rate in 1979 and caused a sharp reduction in the relative price of tradables.

[8] This section draws on Hachette (1991), Edwards (1986) and Ffrench Davis (2002).

[9] The schedule of contemplated adjustment started with 2.5% (roughly the official rate of inflation in the preceding three months) and decreased gradually to 0.75%.

Box 1. A glance at economic policy in Chile between 1973-1984

Macroeconomic policy. The government initially took a gradual approach to macroeconomic adjustment. However in 1975, in reaction to the high inflation which was still out of control, a stringent stabilisation programme was put in place. It led to a severe decline in output and employment. After 1975, following the introduction of the new currency, the peso[I], the exchange rate was used as means to slow down inflation. First the rate of devaluation was adjusted to a lower pace than inflation. Then, from 1978 a pre-announced schedule of depreciation was introduced, and from 1979 the peso was fixed to the dollar at the official rate of 39 pesos to the dollar. A crawling peg was introduced in 1982, which collapsed just 52 days after its initiation and the exchange rate was radically depreciated to 74-80 pesos to the dollar in 1983.

Price and trade liberalisation. Trade and price reform was radical and fast under the military regime.[1] All international trade restrictions other than tariffs were removed immediately in 1973, while tariffs were reduced from an average of 94% to a uniform rate of 10% between 1973 and 1979. Price ceilings and public purchasing mechanisms were eliminated. After a policy reversal in the context of the debt and banking crisis, tariffs were gradually reduced again to 15% by the end of military rule, in 1989 (See below).

Fiscal and Tax Reform. The fiscal deficit was as large as 24.6% of GDP in 1973 but through a radical cut of expenditures by 1975 it was cut to 2.6% of GDP and even recorded a surplus from 1979. As part of the major tax reform in 1975 a value added tax has been introduced.

Financial Reform: Sweeping reforms began in 1975. The banks nationalised pre-1973 were returned to private hands. Interest rate controls and forced credit allocation were eliminated. Reserve requirements were drastically reduced and entry into the banking sector was encouraged. The aim of these reforms was to enhance financial deepening and allow for the entry of more firms offering better lending schemes and credits at reasonable rates. Access to credit was considered a necessary condition for adjustment by the private sector. Securities markets received a major boost as a result of social security reform. However, the weakness of financial supervision allowed for domestic over lending from international markets and led to a banking and debt crisis in 1982. As an outcome, many banks were nationalised to avoid the collapse of the financial system.

Social Security Reform: The insolvent pay as you go scheme was replaced by an individually capitalised insurance system run by private administrators in 1981. This measure improved the fiscal situation and supported the creation of a domestic capital market.

Privatisation: Chile had a large public sector up to 1973 due to extensive nationalisation under the socialist regime. After 1973, corporations were returned to their former owners: banks were privatised first, followed by the privatisation of manufacturing firms. The escalating debt crisis required state intervention and a number of major banks with their associated assets (large companies) were nationalised by the government.

Investment policy. With a few exceptions, in 1974, the Chilean FDI regime was completely liberalised and foreign investments were allowed to play an important role in various industries.

Labour market. An indexation method introduced in the first year of the regime automatically adjusted the minimum wage to inflation rates of the preceding period. This rule was later formally incorporated into labour law in 1979. Labour union activity was repressed especially in the 1973-79 period. Labour regulations were reviewed in the 1980s and led to the reduction of the minimum wage and easier dismissals of workers (capping of severance payments etc.).

Social policy: After 1974, the government redefined its social policy and social spending became much more targeted, with only the very poor receiving support. Even under the macroeconomic crisis of 1975 and 1982-3, when real wages decreased with 30% compared to 1973 and unemployment peaked at 31.3% (1983), the government compensation package covered only 15% of the unemployed.[3] The social costs of the crisis were disproportionately placed on the lower income groups[2], especially the less educated and young people.

I. 1000 Escudos= 1 Peso; 6.40 Pesos= 1 USD

Source: Edwards (1986) and Meller (1992).

1. There were strong dissenting views on the speed of price and trade reform arguing that higher tariffs, slower price reforms and a step-by-step trade opening allowing for foreign import competition would provide the industry with a longer lead time to adjust and thus hinder the unnecessary shrinking of employment and domestic production.
2. The Gini coefficient grew from 46 in 1971 to 58 in 1989. (OECD, 2001)
3. More in particular, 50% of the unemployed received no subsidy at all, while 30% of them received 60% of the minimum liquid income and 20% only 30% of the minimum liquid income (Meller, 1992).

18. While in the initial stage of trade liberalisation, there was no recourse to trade remedies, in 1981 the legal framework for trade remedies were put into place. In 1981, the Subsidies Commission was created with the role of investigating whether imports were being subsidised. Based on these investigations, the Ministry of Finance could increase tariffs on items to the maximum level of 35% in line with Chile's commitments under the Tokyo Round. Likewise the commission was entitled to recommend adoption of minimum customs values. From 1981 to 1985, 90 investigations were conducted leading to 47 cases of definitive measures. The textile sector was predominant with 37% of the measures (all surcharges), followed by electrical products (8%) and metal mechanics (7%) (Saez, 2006).

19. By the end of 1981 a severe recession hit the country accompanied by a decrease in copper prices. A drop in Chilean exports led to a trade deficit. The foreign debt mostly accumulated by the private sector[10], and the reduced availability of foreign capital initiated a severe financial and balance of payments crisis. This was the most difficult period in the history of trade reform in Chile. The "Chicago Boys" had lost their policy credibility, and call for protectionism began to hold sway. The private sector demanded debt relief, lower interest rates, public works projects, increased protection and a realistic exchange rate. They also demanded greater access to economic decision making (Silva 1995). Nationalists in the military requested increased tariff protection and other state measures for private enterprise (Teichman, 2001). The ongoing deterioration of the financial system put pressure for basic changes in the economic model. A number of banks were nationalised and the peso was depreciated several times between 1982-3. The pressure on banks and conglomerates with high exposure to dollar loans increased. The government decided to intervene and offered domestic credits to the banking sector through the Central Bank which brought more than 50% of the financial system's assets under direct government control (Brock, 2000).

20. The military regime responded to the crisis by replacing the economic team, appointing entrepreneurs with expansionary tendencies to key positions. From the middle of 1983, the flat tariff rate was first raised to 20%, and then again in September 1984 to 35%, while the currency was devalued by 23.6% (Hachette, 1991). Additional tariffs were imposed for electronic goods and automobiles and a price band was introduced for certain crops such as wheat, sugar and oil seed.

21. The devaluation of the peso supported the expansion of the exports and by the end of 1982 the trade balance turned to a surplus (Figure 6). However, the expansionary policy of 1982-84 aiming at saving the financial system led to a substantial increase in interest payments, and the current account deteriorated. In 1984 Chile could no longer make its interest payments and requested the rescheduling of its debt payments six times during the period 1985-89. This crisis opened the door to a return to the previous direction of economic policy.

b) Assessment of the effect of trade policy and other complementary policies

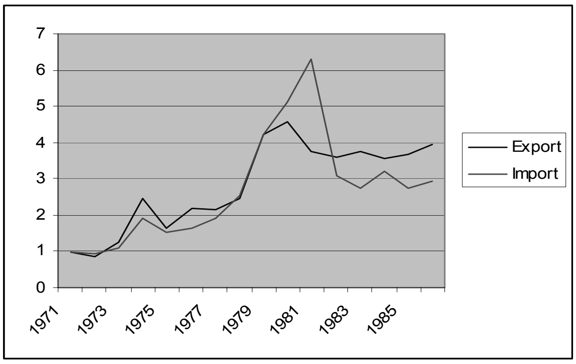
22. Because various market reforms were conducted at the same time, it is extremely difficult to isolate the effect of trade liberalisation on industry. In addition one must take into account that a high inflation rate kept macroeconomic stability a policy priority.

[10] The accumulated foreign debt was the outcome of the financial liberalisation introduced with insufficient regulatory oversight (Box 1).

23. The initial phase of trade liberalisation on industry to mid-1975 (elimination of non-tariff barriers, initial reduction of tariffs, unification of exchange rates) led to an immediate increase in exports. Depressed domestic demand contributed to increased exports of items in excess supply (Ffrench Davis, 2002) and exports especially in natural resources like forestry and wood products or agricultural goods (Figure 7) were stimulated. The negative effect of imports was quite limited as protection levels were frequently unnecessarily high and redundant. The slow depreciation of the currency in real terms moderated that impact of trade liberalisation.

Figure 6. Chile's exports and imports (1970-1984)

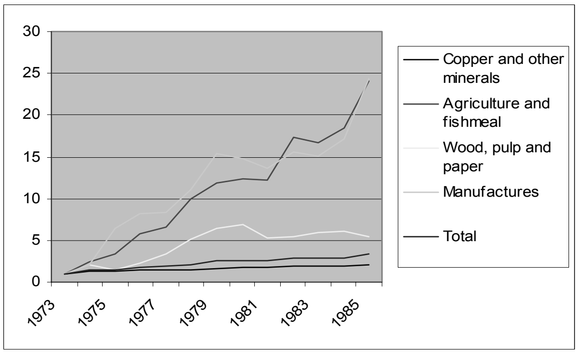
(Million current USD)



Source : WITS database

Figure 7. Export growth by sector (1973-1984)

(1973=1)



Source : Author's calculations based on Agosin (2002)

24. The second and third phases of trade liberalisation (1975-1983) had a greater impact as they were coupled with real exchange rate appreciation, especially in the period where the exchange rate was officially fixed (1979-83). Several aspects of the economic environment and policy steps taken at the time did not facilitate structural adjustment of industry. The "naive" belief that the market will work efficiently and lead the economy to a new state of equilibrium, combined with limited consultations with industry likely led to a systematic underestimation of the negative effect of the major economic reforms. While a new equilibrium was reached, and the change in the composition of the manufacturing industry largely reflected the comparative advantages of the Chilean economy, some sectors faced a much larger decrease than expected by the policy makers[11] while the expansion of the export sector was delayed especially in the latter half of the period. The following reasons contributed to this delay: (i) macroeconomic instability discouraging investments in new areas of growth; (ii) the use of the exchange rate as an anti-inflationary tool decreasing external competitiveness, (iii) an insufficiently developed financial system which impeded efficient allocation of capital and (iv) labour policy which did not facilitate labour adjustment.

25. First, the high inflation rate and macroeconomic instability made it increasingly difficult for industry to make an accurate assessment of the comparative competitiveness of industrial sectors. The appreciating exchange rate coupled with the immature financial market meant that while uncompetitive industries contracted, investment by entrepreneurs into expanding and/or new industries was much more restricted than necessary.

[11] In some industries such as chemicals, glass and glass products, other non-metallic products, machines (non-electric) and transport equipment, a larger reduction in employment and output might have occurred than necessary, however in subsequent years these industries recovered.

26. The second problem was the compatibility between trade policy and exchange rate policy. The exchange rate was initially conducive to adjustment, but its use as an inflation reduction tool led to an overvaluation of the Chilean peso. Incentives towards exports were gradually reduced while imports became increasingly competitive. As a consequence, exports grew at annual rates of 14.4% between 1974 and 1981, while imports grew faster by 22.5% (Macario, 2000).

27. Third, the financial reform starting in 1975 lacked sufficient prudential regulations and ended in the overexpansion of private loans and financial crises in 1982-83. Gradual liberalisation of the capital account starting in 1976 allowed a rapid inflow of foreign capital easing domestic access to capital goods. While this meant wider availability of capital for some sectors, uncertainties in the macroeconomic environment allowed for the misallocation of capital. Most investments went into sectors which were either clearly competitive, or non-tradables such as construction and commerce. Capital was also used to fund imports. This was a realistic strategy for many manufacturers as they could leverage their knowledge of products while not taking the risk of high amounts of investment. Moreover the high real interest rate at the time made the re-adaptation of firms producing for the domestic market or their transformation into export enterprises virtually impossible (Agosin, 1999).

28. Fourth, labour policies, in particular wage policy, did not facilitate labour adjustment. Minimum wages were in place throughout the period with a backward indexation system where nominal wages were automatically adjusted to inflation rate of the previous months. In a period of decreasing inflation, such indexation led to an increase in real wages of 20% (Edwards, 1986). Many companies chose to adjust through the reduction of employment rather than wage reduction. Thus, unemployment levels deteriorated to 26.1% in 1982 and 31.3% in 1983. The increase of unemployment and the elimination of wage indexation in 1982 finally pushed real wages down and slowed the increase of unemployment by the end of 1983 (Meller, 1992).

29. As a result, there are some signs that there were significant adjustment costs, and that the lion's share of adjustment costs were borne by labour, contributing to increased inequality. Meller (1992) identifies a number of policy measures in this context, such as the reduction of public social expenditures, unemployment[12], cuts in real wages and devaluation as having a regressive impact. Ffrench Davis (2002) suggests that tariff reductions may also have had a regressive effect as tariff cuts on luxury goods led to an increase in import of these items.

C. Chile's market reform -phase II (1985-1989)

30. The second period of reform under the military government started in 1985 with return of economic policy to the hands of the "Chicago Boys". The main reasons that the policy framework was able to get back on track was (i) the overarching fear among many entrepreneurs of a return to the situation pre-1973; (ii) the increased support for free trade by new exporters holding significant amounts of vested investments; and (iii) the diminishing support for protection of uncompetitive companies.

31. In February 1985, the new Finance Minister Buchi, within a month of taking office, developed a program for structural adjustment and soon after signed formal agreements for structural adjustment loans with the IMF/World Bank.[13] Although economic policy formulation remained firmly with the Minister of

[12] 75% of unemployed were less than 40 years old, 87.9% of them had secondary education or less and 60% of the unemployed were left without jobs for a period longer than 3 months.

[13] Informal and formal policy discussions between the government and the IMF/World Bank conducted from 1982 opened the way to a USD 2 billion financial package which included a USD 750 million extended fund facility agreement from the IMF, a USD 250 million World Bank structural adjustment loan, completed with USD 1.1 billion of financing facility from private investors (Teichman, 2001).

Finance, the economic policy network now extended much more broadly into the private sector, providing a variety of avenues for consultation, both personal and institutionalised (Teichman, 2001) with the major exception being tariff reductions. In this period, reforms were further advanced in a number of areas (Box 2), while the national currency devaluated in the financial and debt crisis has contributed to improved export competitiveness.

Box 2. An overview of the reforms in the period 1985-1989

Macroeconomic policy. During the first phase of reform, government was concerned with quickly redressing macroeconomic imbalances through tight monetary and fiscal policy, financial liberalisation and reducing state intervention in the economy. The initial orthodox policies were later softened through nominal currency devaluations, restrictions on short-term capital inflows and the establishment of price stabilisation mechanisms. A key concern for policy makers after the debt crisis has constantly been to avoid the appreciation of the exchange rate and large inflows of short term capital.

Price and trade liberalisation. Tariffs were gradually reduced again from 35% in 1985 to 15% in 1989.

Fiscal and Tax Reform. A new bankruptcy law (1982), tax law (1984) with special incentives for saving and investment and banking law (1986) were put in place. Regulatory and supervisory agencies were granted strong powers. In 1987 a copper stabilisation fund was created to isolate the impact of frequent price movements from public finances.

Privatisation: A second round of privatisation was implemented starting with the banks and conglomerates which were nationalised in 1984-1985. Investment law DL 600 introduced the debt-to-equity conversion scheme from 1985. Between 1985 and 1989 the programme generated USD 9.7 billion swaps and from mid-1985 to mid-1987 USD 3.2 billion debt was written down or converted to private equity. (Brock, 2000) The third round of privatisation in 1985-89 focused mostly on public utilities, like electricity, telecommunication and transportation companies. The share of public enterprise production in the GDP dropped from 28% in 1981 to 16% by 1988. This trend was paused with the first democratic government in 1990 (Teichman, 2001; Serra, 1998) and the privatisation of the utilities sector were only restarted from 1994.

Labour market. The major labour reforms implemented by the military regime in 1980 and 1981 had a positive impact on labour expansion experienced during the second half of the decade[1]. These laws reduced the minimum wage and made easier the dismissal of workers (capping of severance payments etc.). The reform package facilitated the new hiring of workers and provided for more flexible hiring on temporary contracts. The comprehensive pension reform reduced employers' social expenditures and improved hiring.

Social expenditure: The social expenditures of the government remained reduced during the fiscal adjustment programme set down in 1986. The lack of redistribution through social spending hit the lowest 40 per cent income group in Chile and was regressive in terms of health care, education and housing. Government focused its social expenditure only on the extremely poor.

Source : Corbo (2005), Edwards (2000) and Meller (1992)

1. This assessment does not take into account the significant social cost on workers in this period.

a) Trade policy[14]

32. In 1985, the second period of the trade reform was initiated. Tariffs were cut back from 35% in 1985 to 20% in 1986 and then cut to a 15% average in 1988. The flat tariff regime was maintained but trade liberalisation of the mid-1980s differed substantially from the initial trade liberalisation in three ways.

33. Firstly, trade liberalisation in this period was much smaller than that in the first period. The end point of the second phase of liberalisation of 15% was higher than the 10% achieved in 1979-84.

[14] This section draws on Hachette (1991); Edwards (1986) and Ffrench Davis (2002).

34. Secondly, the substantial devaluation of the currency promoted exports and a more cautious approach to tariff reduction offered better protection. Therefore when looking at the adjustment of industries in this period, one observes some reversals in the trends of the previous period, i.e. some import substitution industries such as textiles and clothing, transport equipment recouped some of their lost share in manufacturing value added in this period.

35. Thirdly, pragmatism in policy making increased in general and greater emphasis was put on export promotion policies. Export promotion policies played an important role: it facilitated the diversification of exports and provided an incentive to exporters to introduce new export products and move away from the traditional ones. Three export promotion policies are of particular interest:

1) The stronger role played by ProChile, the country's trade promotion organisation in place since 1975. After 1982, and in line with the government's emphasis on export growth to generate trade surpluses, ProChile's budget was increased and more offshore offices were opened. It also pursued more selective export promotion, focusing on supplying information on foreign markets and customers, promoting Chilean exports through generic publicity and targeted missions and working to resolve the administrative problems faced by exporters (Pietrobelli, 1998).

2) The general drawback system put in place in 1988 (Law No. 18708 of 11 May 1988), by which duties paid on imported inputs either incorporated or consumed in the production of exports are recovered after the fact. While somewhat difficult to use for small and medium enterprises due to the required paperwork, this programme was used by larger industries such as the petrochemical and mining industries and promoted exports by these industries.

3) The so-called simplified drawback introduced in 1985 (Law No 18480 of 19 December 1985). Under this system, exporters could receive a cash payment of 3.5% or 10% on their export value in lieu of a regular drawback.[15] Although publicised as a form of drawback, it acted as an export subsidy especially when exporters did not use imported inputs. This measure was not considered WTO-consistent and was modified in 1998 and 2003. Since 2003, a single refund rate of 3% is applied exclusively on exports that include 50% of import inputs.

36. Fourthly, the use of trade remedies increased in this period. The number of applications and investigations grew as tariffs were lowered (in 1985 and 1988) and led to a temporary deviation from the liberalisation objectives.[16] These measures may have "supported trade liberalisation as they gave an option to sectors that were more sensitive or reluctant to embrace trade liberalisation" (Saez, 2006).

b) Assessment of the effect of trade policy and other complementary policies

37. Trade liberalisation was more modest in this period: (i) tariff rates remained close to 1973-79 levels, (ii) the real exchange rate was at a depreciated level and (iii) sectors such as textiles, electronics and metals used surcharges to limit the effects of tariff cuts. Greater coherence between trade and macroeconomic policies supplemented with export promotion allowed for substantial export growth and diversification (Figures 8 and 9) and facilitated structural adjustment. Most industries increased output (Figures 10 and 11) and sectors like the agro-food sector experienced dynamic export growth. During the

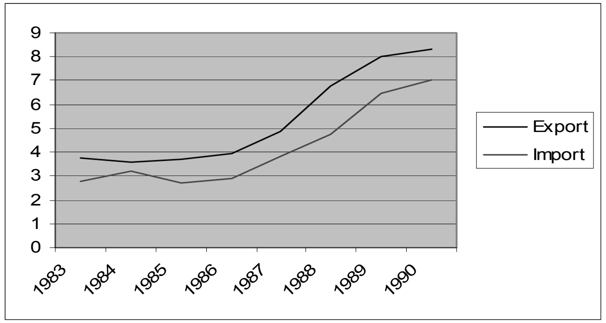
[15] The cash payment depended on the value of exports for the entire tariff line. Initially, 90% of Chile's exports was included in this drawback, about 200 export products such as copper, cellulose, fish flour and fruits. When exports exceeded USD 20 million for a given tariff item, the item was excluded from the regime.

[16] In the period of 1986-92, tariff surcharges were applied in 41% of the investigations that concluded with recommendations, minimum customs values in 53%, and countervailing duties in just 6 percent (http://www.cndp.cl).

structural adjustment recovery period (1983-87), both tradable and non-tradable sectors generated a large number of jobs with annual growth rates of 9.2% and 10.2% respectively (Meller, 1992).

Figure 8. Chile's exports and imports (1983-90)

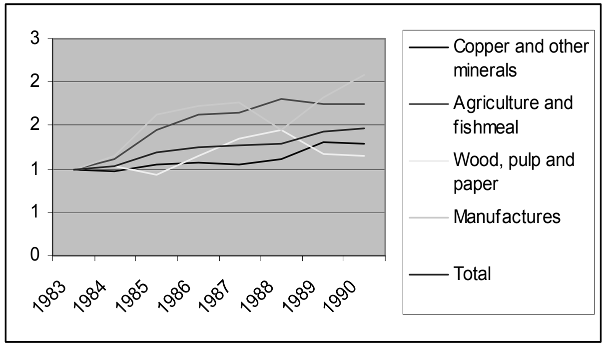
(Million current USD)



Source : WITS database

Figure 9. Export growth by sector (1985-1990)

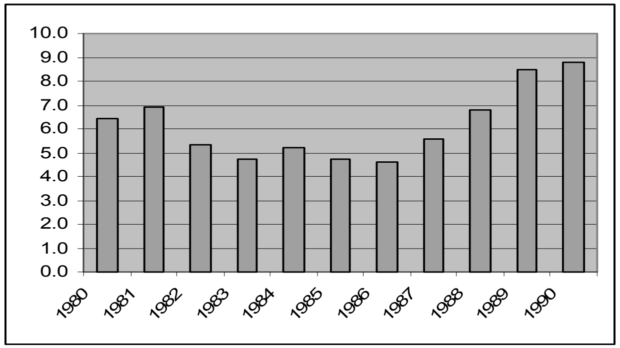
1983=1



Source : Author's calculations based on Agosin (2002)

Figure 10. Value added in total manufacturing

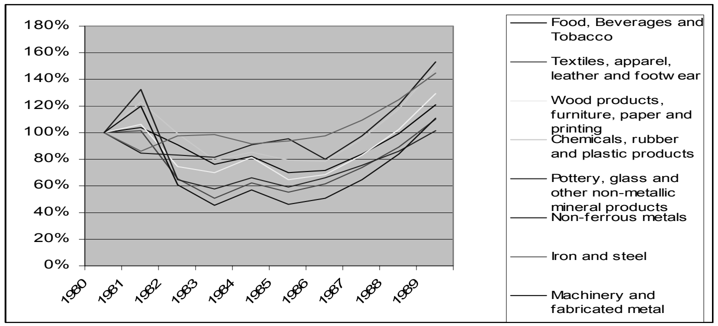
(Billion current USD)



Source : INDSTAT 3, ISIC Rev.2

Figure 11. Evolution of value added in manufacturing for major categories

(Percent, 1980=100%)



Source : INDSTAT 3, ISIC Rev.2 with author's calculation

D. Economic policy after democracy (1990-)

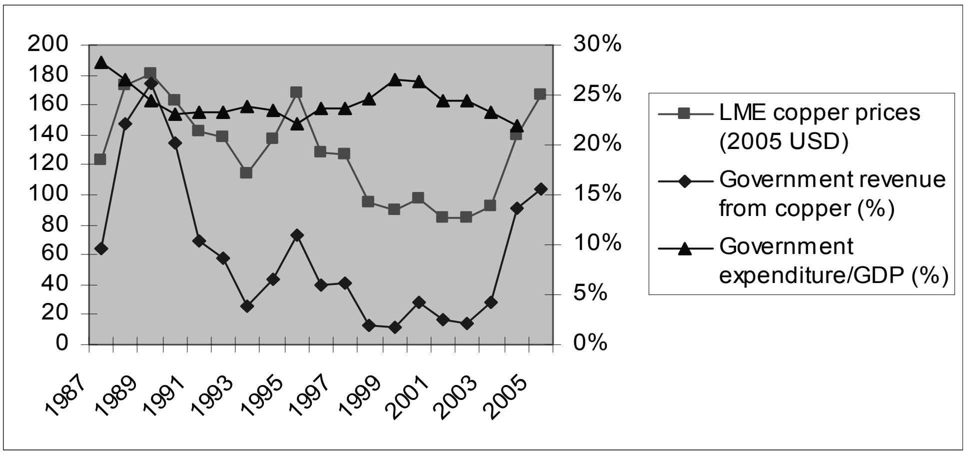
38. The new democratic administration which took over in 1990 stuck to the basic principles of the existing economic policy framework - maintenance of macroeconomic stability and realisation of an open and competitive market economy - while strengthening the social agenda.

39. The Central Bank became independent in October 1989 through a constitutional law. Monetary policy reduced inflation gradually from 30% per annum in 1990 and kept it at single digit levels from 1995 on. A key concern of policy makers after the crisis was to avoid large exchange rate appreciation although this has often conflicted with inflation targets.[17] The exchange rate band approach has been replaced by a mostly clean float since September 1999 (Corbo, 2005).

40. While public debt to GDP ratios rose to as high as 45% in 1990 because of bank bail outs in the 1980s, they have been brought close to 0% in 2006. The cyclically adjusted fiscal surplus of the public sector was kept at 1% of GDP from 2001 and high fiscal responsibility was maintained along the period. A major tax reform was introduced in 1990 to raise revenues for social programs and to decrease government reliance on copper (Figure 12). Fiscal support for social programmes increased by 17% in 1990 as social safety net programmes were increased under the democratic government. Among its first measures, the government improved access to free health care and homeownerships for families without savings. Due to improved economic stability the social spending increased 50% in real terms from 1990 to 1993 (Raczynski & Romaguera, 1995).

41. To further reduce the cyclical impact of copper prices on the economy, a Copper Stabilisation Fund was established in 1987 and reformed in 2006, so that the funds collected can be invested not only in domestic assets but also in foreign securities. This measure aimed to keep the peso from further appreciation in times of high copper prices.

Figure 12. Government revenue and expenditure and evolution of copper prices[18]



Source: Chilean Central Bank database and COCHILCO (2005)

[17] The peso was allowed to appreciate gradually although accumulated appreciation reached 24% during 1990-1996 (WTO, 1997). In general this did not effect negatively the industry, since there was room for appreciation after the debt crisis of the 1980s.

[18] Copper prices from the London Metal Exchange (LME; in Spanish: Bolsa de Metales de Londres (BML)).

42. Privatisation continued in 1991 in the service sector with the sale of the remaining 40% of LanChile (airlines)[19] and privatisation of state sanitation companies. In 1992 a new concession law allowed private sector to finance, construct and operate ports, highways, airports and railways. Most of the public enterprises were privatised with the exception of Codelco (the state copper company), ENAMI (state company marketing copper products), ENAP (the state petroleum company), Empresa de los Ferrocarriles del Estado (State Railways) and Correos de Chile (postal services).

43. A second labour reform was implemented in 1990 and 2000 with the objective of increasing employment protection and the role of unions in collective bargaining, while maintaining a relatively flexible labour code. The real minimum wage was raised by about 20% between 1998 and 2000. Together with the additional funds distributed through social programmes the average real wages got close to their 1970 level by 1992, while the Gini coefficient reached 47 in 1996 compared to 46 in 1971 (ECLAC, 2001). The population living under poverty line declined from 38.6% in 1990 to 14% in 2006.

44. Chile has maintained its liberal FDI regime and in the 1990s a further relaxation of rules led to a take off in FDI (Figure 13), in particular in the mining sector (Box 2 and the section on the mining sector). From 1995, the utilities sector (electricity, gas, water, telecommunication, transport) has captured the interest of investors and a new wave of privatisation started. While in the 1990s, the authorities put in place measures to discourage short-term inflows[20] and reduce exchange rate and stock market volatility, such capital controls were abolished by 2001.

45. In terms of trade policy, one of the first things that the newly elected democratic government did was to propose a tariff reduction from 15% to 11% which received unanimous support in the Congress. The rate of 11% was kept unchanged until 1999 when it was decided to reduce the average tariff by 1% per year to 6% in 2003. The Congress again approved the measure unanimously giving solid political support for trade liberalisation. While there may have been some expectations that the authorities may be inclined to grant protection through trade remedies, after a small increase in 1990 the number of investigations and measures fell to previous levels (Saez, 2006). The relatively muted opposition of industry towards trade liberalisation in this period is likely due to the increased presence of the export industries.

46. The most important change in trade policy in this period is the increased emphasis on bilateral trade agreements. While in the previous periods tariff reduction was implemented on a unilateral basis, all tariff reductions in this period were on a reciprocal basis with the exception of the unilateral reduction of tariffs from 11% to 6%. Agreements were signed with Latin American countries first; Mexico (1991 revised in 1998), Andean Community countries (1993-1998), Mercosur (1996 revised in 2006) and with the Central American Common Market (1999). Preferential Agreements have also been signed with Canada (1997 supplemented in 1999 and 2002), European Union (2002), European Free Trade Association (2003), New Zealand-Singapore-Brunei (2005), Korea (2003), the United States (2003), India (2002) and China (2005). Negotiations are ongoing with Japan and other countries.[21] There has been a visible shift in Free Trade Agreement (FTA) policy towards Asian countries. The rapid growth in these markets and

[19] The government sells 51% of LanChile to private investors in 1989. (https://www.fundinguniverse.com/company-histories/Lan-Chile-SA-Company-History.html)

[20] Under these measures FDI was required to remain in Chile for at least one year and a reserve on short term external credit was imposed. While these measures may have had some positive effect, on the medium term the government could not block efficiently capital flight.

[21] See WTO (2003) for a recent update.

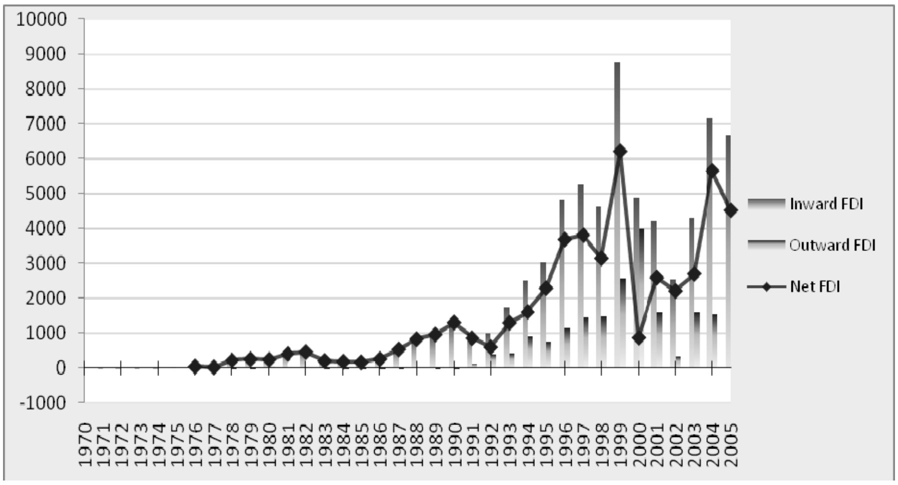
different comparative advantages is expected to have positive effects at least in the short-run due to increased specialisation.[22]

47. The FTA contributed not only to better access to export markets but also to institution building by locking in various reforms under the FTA commitments. This has led to additional benefits, for example, the FTA with the US is to said to have led to a considerable improvement of Chile's credit rating in the financial markets. Agreements with other developed countries have led to an improvement in the regulatory environment of the country, introducing best practices in government procurement, sophisticated protection of intellectual property rights or streamlined customs procedures.

48. While export promotion tools have been brought into line with WTO Agreements and the drawback mechanisms were modified or withdrawn, ProChile has continued to be active in operating programmes aimed at promoting exports and broadening the export base. ProChile mainly supports exporters marketing non traditional products who are exploring new markets through logistic support, market information and financial support to contract the services of specialised consultants if required. The growing number of FTAs has provided a renewed focus as Chile increasingly has placed emphasis on assisting small and medium enterprises to benefit from the new export opportunities. There has also been a shift of focus from export promotion to business promotion. It has 13 regional offices and 58 trade offices in 40 countries worldwide. According to ProChile statistics, 60% of the services fees are covered by the exporters and services are only provided to trade organisations or groups of companies and not to individual companies. Large exporters such as the forestry and some agro-food sectors no longer require the support of ProChile but it remains important for newly growing industries.

Figure 13. FDI inflows and outflows in Chile (1975-2005)

(Million of current USD)

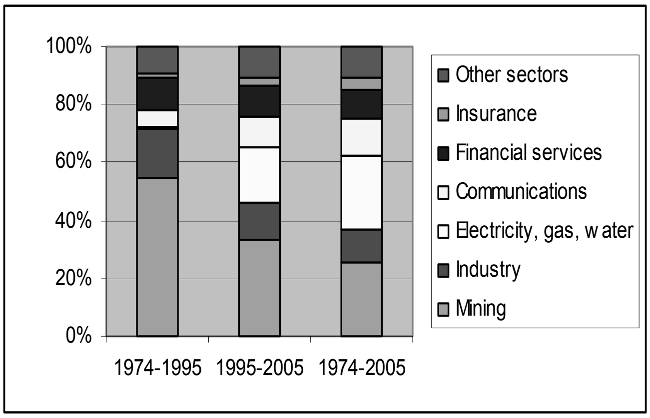


Source : WIR database (2006)

[22] Asian countries specialise in IT, consumer electronics, textiles, leather and clothing, while Chile exports raw materials such as minerals and food products.

Figure 14. FDI inflows by sector (1974-2005)

(Percent)



Source : COCHILCO (2005)

a) Assessment of the effect of trade policy and other complementary policies

49. Trade liberalisation has been accelerated in this period as tariffs have been cut first from 15% to 11% and then from 11% to 6% over a period of five years (1999-2003). Exports have continued to grow at a high pace and diversified (Figure 15 and 16). This trend has further accelerated since 2003.

50. The main reason for sustained growth has been the maintenance of macroeconomic stability. Macroeconomic stability, especially low inflation and the healthy fiscal balance has increased resilience of the Chilean economy and improved investor confidence. Chile has diligently continued in its structural reforms and has continued to improve its institutional framework. While both trade and economic growth flattened out in the period 1998-2002, export and economic growth have accelerated in the past few years being partially pushed by high copper prices.

51. The increasing number of bilateral agreements seems also to have contributed to export growth; exports are increasingly being conducted with countries with which Chile has preferential agreements. Indeed, in 2004 exports to countries with which Chile has preferential agreements were 70.8% of total exports as opposed to 1.4% in 1990 and 4.9% in 1995.

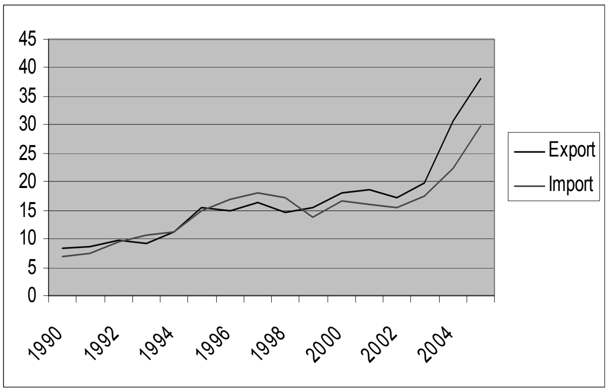
3. Evolution and structure of exports and imports

52. The rapid increase in exports that took place during the past decades in Chile is impressive. Its diversification in products (Figures C and D in the Annex) and destinations (Figure 18) is even more remarkable. Figure 17 shows the dramatic decline in the share of copper in total exports, while new export sectors such as fruits and vegetables, fish and fish preparations (like salmon) have gained share in exports.

53. The share of food products in merchandise exports more than quadrupled from 3.8% in 1973 to 17.9% in 1981. Exports in this sector then grew at an annual growth rate of 16.5% for the period 1982-1990 and constituted 23.7% of merchandise exports in 1990 after which its share in exports remained relatively constant. The traditional copper sector have expanded in absolute terms, but the share of mining products in merchandise exports fell gradually from 89% in 1973 to 63% in 1981 and 41% in 2001. The recent growth of copper world prices however has led to a rebound in its share.

Figure 15. Chile's exports and imports (1990-2005)

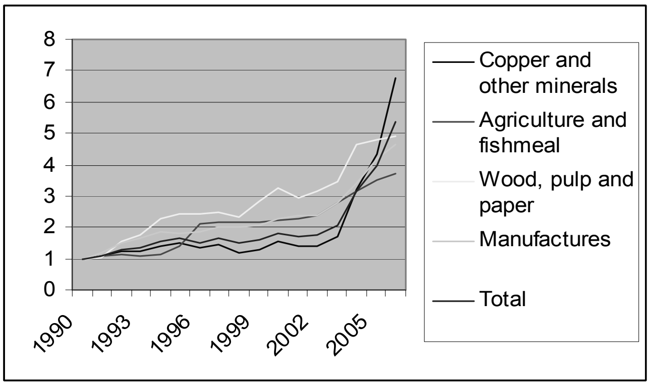
(Million current USD)



Source : WITS database

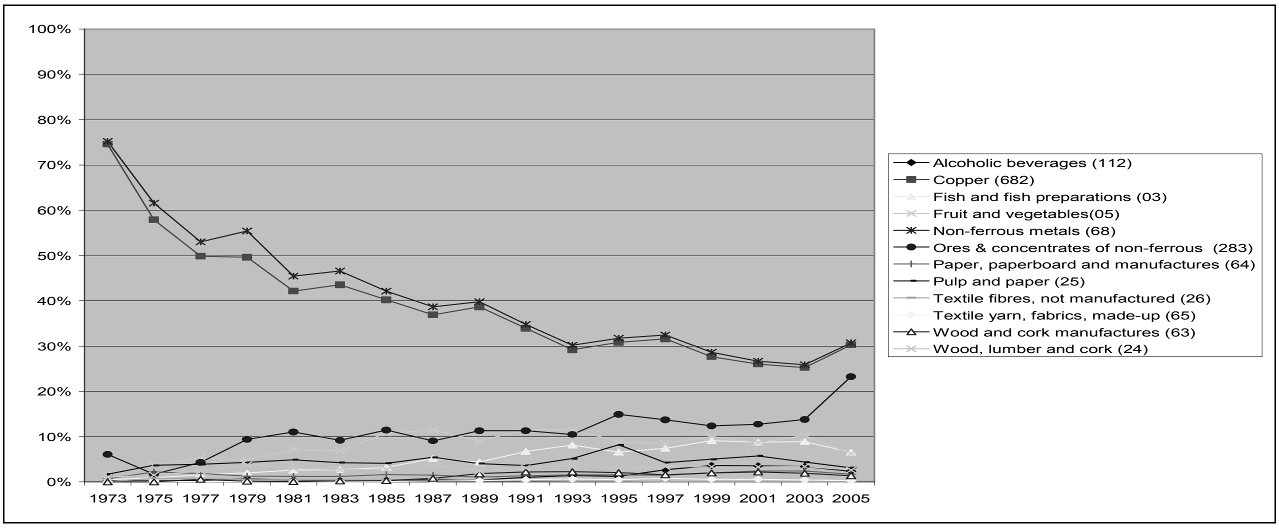
Figure 16. Export growth by sector (1990-2005)

1990=1



Source : Author's calculations using data from Agosin (2002) 1990-95 and the Chilean Central Bank 1995-2005

Figure 17. Diversification of Chilean export products with focus on sub-sectors (1973-2005)

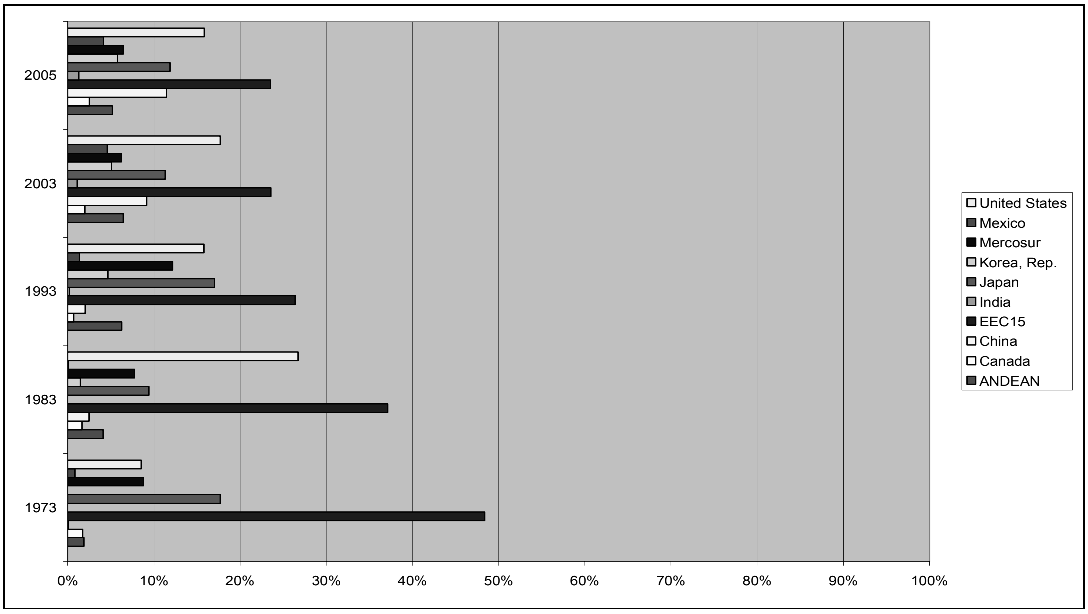


Source : WITS database, SITC Rev.1

54. While in the 1970s exports were concentrated with half of worldwide exports going to European countries, Chile has increasingly diversified its export destinations (Figure 18). FTA partners in the region such as Mexico, Canada, Mercosur and the Andean community have all increased their shares as have Asian countries, Korea, China and India. The diversification of destinations favourably influenced most sectors discussed under section 4.

Figure 18. Diversification of the Chilean export destinations (1973-2005)

(Percent)

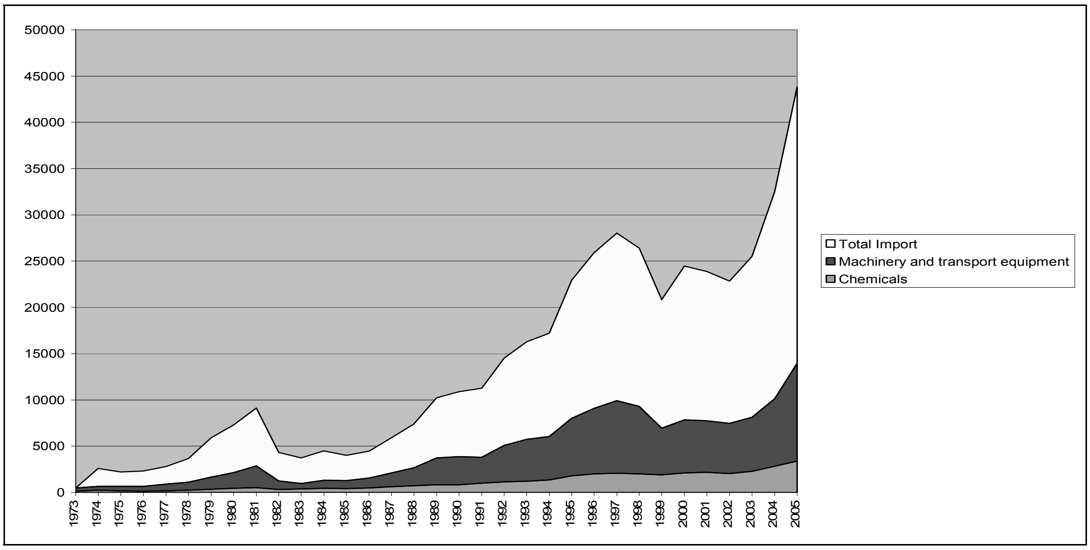


Source : WITS database, SITC Rev.1

55. Imports have generally followed the dynamics of export growth in terms of value. The most penetrating change in the import structure is the relative decrease of the food and wine sector. Machinery and chemicals, the two main import product groups have increased in line with total imports (Figure 19) with the exception of the debt crises of 1982-3 (Figures in the Annex), when investment dropped considerably. The machinery sector and chemicals constituted 36% and 12% of imports in 2005 respectively. The relative increase of mineral fuels in the import portfolio of the country is connected mostly to fuel price variations.

Figure 19. Evolution of machinery, chemicals and total imports (1973-2006)

(Million current USD)



Source : WITS database, with focus on SITC Rev 1 groups 5 and 7

4. Sectoral developments

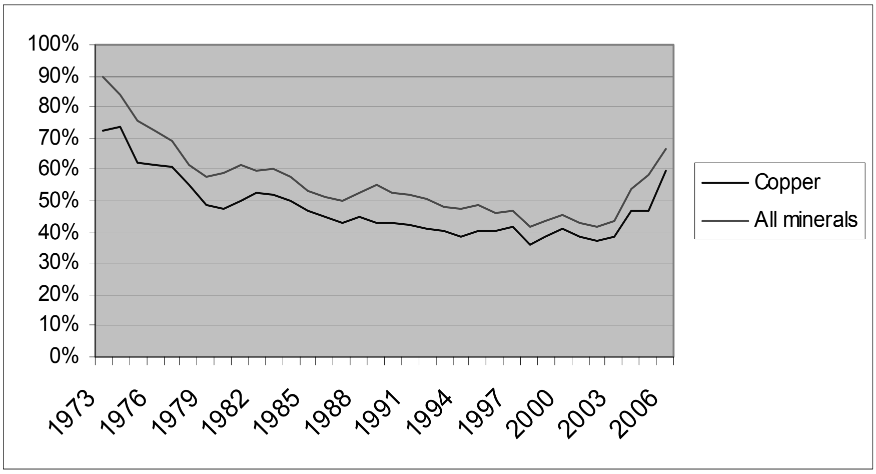
56. In this section we take a more in depth look at the structural adjustment experiences of selected sectors: the mining industry, the agro-food industry; wood and wooden products industry and textiles and clothing industry. The sectors have been selected as they have played significant roles in the structural adjustment process of the Chilean economy. The mining industry is the traditional export sector of the Chilean economy. The agro-food industry and wood and wooden products industry are two examples of new export drivers. The textiles and clothing industry provides an example of industries which has readjusted to cheaper imports by placing greater emphasis on niches and exports.

A. The mining industry (copper)

57. Chile's traditional export industry, the mining industry made up mostly of copper production, continues to be an important sector of the economy. It not only contributed 8.2% to GDP in 2002 but also constituted 15.5% of government revenues in 2005.[23] Chile is the world's leading copper exporter and has 28% in proven global copper reserves while its participation in world copper mining reached 35.5% (2005). Although the share of copper in total exports has decreased from nearly 80% in the 1970s[24] to around 40% in 1994-2003, it has rebounded from 2003 due to higher copper prices (Figure 12 and 20). The long-run decline in share by no way means that the copper industry has been stagnant: production has increased considerably over the years (Figure 21). The sector is of particular importance to the Chilean economy; in the past low copper prices have led to recessions, one example being the recession of 1981-83.

Figure 20. Share of copper and minerals in Chilean exports

(Percent of total exports)



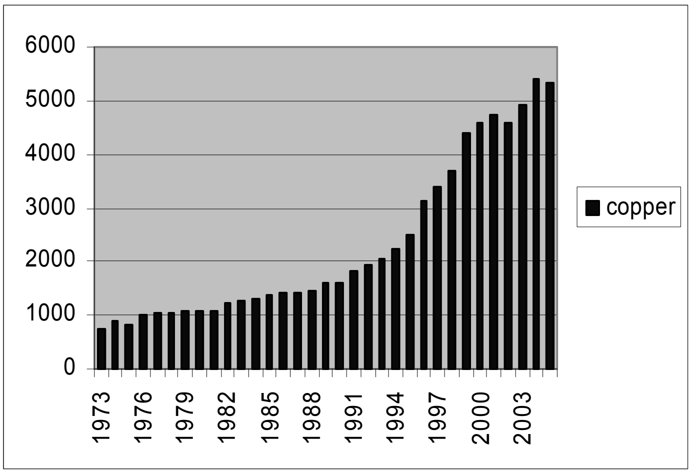
Source: Agosin (2002) for the period 1973-95 and Chilean Central Bank for the period 1995-2006

[23] See the longer trend on Figure 17. The recent increase of government revenues from copper are due to the increase of world prices, which doubled in the last couple of years from around USD 80 cent/lb to around USD 165 cent/lb (COCHILCO, 2005).

[24] In 1972 the share of copper was almost 80% of the total export goods (Agosin, 2002).

Figure 21. Evolution of refined copper production

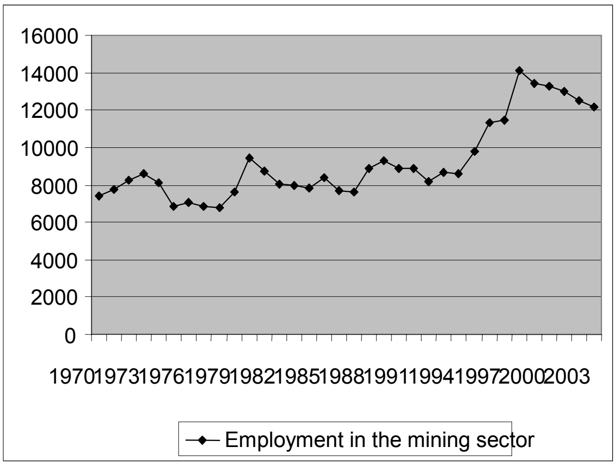
(1000 metric tons of copper content)



Source : Meller (2002), COCHILCO (2005)

Figure 22. Employment in the mining sector (1970-2003)

(Number of employees)



Source : PADI, database

58. The relative shrinking of the copper sector in Chile's exports started as early as the mid-1970s when tariff liberalisation began to favour the non-minerals sector contributing to the strengthening of non-copper exports. The industry reached one of its lowest outputs during the financial crises of 1982-83 and its export share hit one of its lowest historical levels in 1985. During the second half of the 1980s the industry recovered: its production level increased, while the employment that dropped in 1982 by 21%

climbed back to previous levels at the beginning of 1990s (Figure 22).[25] The sector reached a rather stable level in the export composition of the country between 38-46% during 1985-95 and grew to slightly higher levels at the turn of the century.

59. The relative decrease in the share of copper does not imply that growth in this sector has been low. Exports in the copper sector have grown from 1.36 million metric tons in 1985 to 5.34 million metric tons in 2005. Several factors have been key to growth in the sector: (i) a clear regulatory framework, (ii) the opening of the sector to foreign direct investment and (iii) the efficient functioning of the state owned company in this sector.

60. Firstly, Article 19, No.24 of the Chilean constitution has provided a clear and stable regulatory framework stipulating that the state is the sole owner of the minerals independently of who owns the surface land. Mining concessions have been slowly opened to both domestic and foreign private investors. Foreign companies were allowed to explore for or exploit minerals and granted national treatment under a concession price unrelated to actual production. As in other sectors, foreign investors in Chile's mining industry can opt for a contract with the State of Chile under Decree Law No. 600, an investment law that protects invested capital for a period of 8 years extendable to 12 years offering suspension from taxation and taxation invariability.[26]

61. The second factor contributing to the growth of the sector has been the presence of foreign investment. The first decree on foreign investment was enacted in 1974. Although FDI in the sector stayed at relatively low levels in the initial period increasing at a yearly average of USD 90 million for 1974-89, it grew to USD 803 million in 1990 (Spilimbergo,1999). The further relaxation of foreign investment rules (1992) allowed private capital to enter the copper sector through joint ventures with CODELCO. Mining received more foreign investment than any other sector (Figure 14). These new investments were mainly driven by the abundance in copper of the country and improved macroeconomic stability (WTO, 2003). The additional capital coming from private sources contributed to the growth of the sector. The private companies, starting from low export volumes of 0.16 million metric tons in 1985, now contribute to 3.43 million tons in exports in 2005 (COCHILCO, 2005).

62. The third factor to the Chilean "copper success" has been the well-run state-owned enterprises: Chile's Copper Corporation (CODELCO) and the National Mining Company (ENAMI) are the world's first and eighth largest copper exporters. While the relative importance of the public ownership in the copper sector has been eroded from 75% in 1965 to 32% in 2005 (COCHILCO, 2006), these public companies remain important in terms of government revenue and are expected to stay under public ownership. Some state that competition between the private sector and the state mining companies has been one of the drivers that ensured the effective operation of the sector.

63. One interesting feature of the development of this sector in Chile is that the "Dutch disease" problem although present has been relatively well managed through the Copper Stabilisation Fund. While in the past, copper prices had a big effect on the macroeconomic stability of the country (e.g. during the early 1970s and between 1982-3 during the debt crisis), after the creation of a Copper Stabilisation Fund in 1987 the Chilean government has alleviated some of the negative effects induced by the copper cycle. The Fund allows for the collection of surplus in times of high prices and their withdrawal when prices are lower and the sector experiences an economic downturn.

64. Thus the copper industry has played an influential role in the economy and its continued growth remains key, the main challenges it faces are twofold: (i) to develop a more diverse copper cluster and (ii)

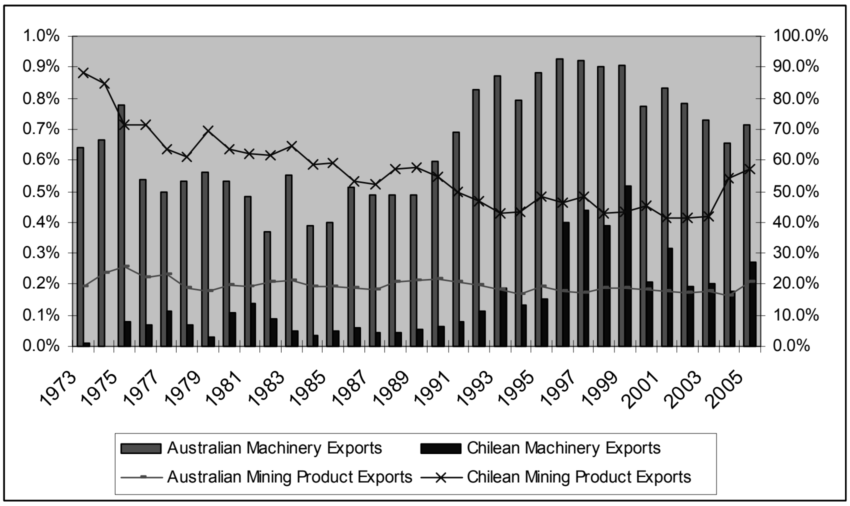
[25] The copper employment dropped radically twice: once in 1975 and in 1983.

[26] Suspension on Income Tax Law applies only to contracts signed before 1 December 2004.

environmental issues. Some criticise the Chilean copper sector development saying that while the sector pioneered in the expansion of physical capital it did not create a real engineering tradition (Meller, 2002). Therefore, to develop a more diverse sector, Chile needs to expand towards high-end products like mining consultancy or development of mining machinery as did Australia, another exporter country of mining products (Figure 23). Moreover, the sector should increase in the long run its currently low R&D expenditure and invest more in human resources and education. The growth of the industry has led to an emerging environment problem. The industry has to meet higher environmental standards and reduce current pollution levels in order to co-exist with other sectors (e.g. agro-food industry) which are more reliant on the environment.

Figure 23. Chilean and Australian mining exports and related machinery exports (1973-2005)

(Percent of total exports)



Source : WITS database, SITC Rev. 1 author's calculation.

Note: left scale for machinery products, right scale for mining products

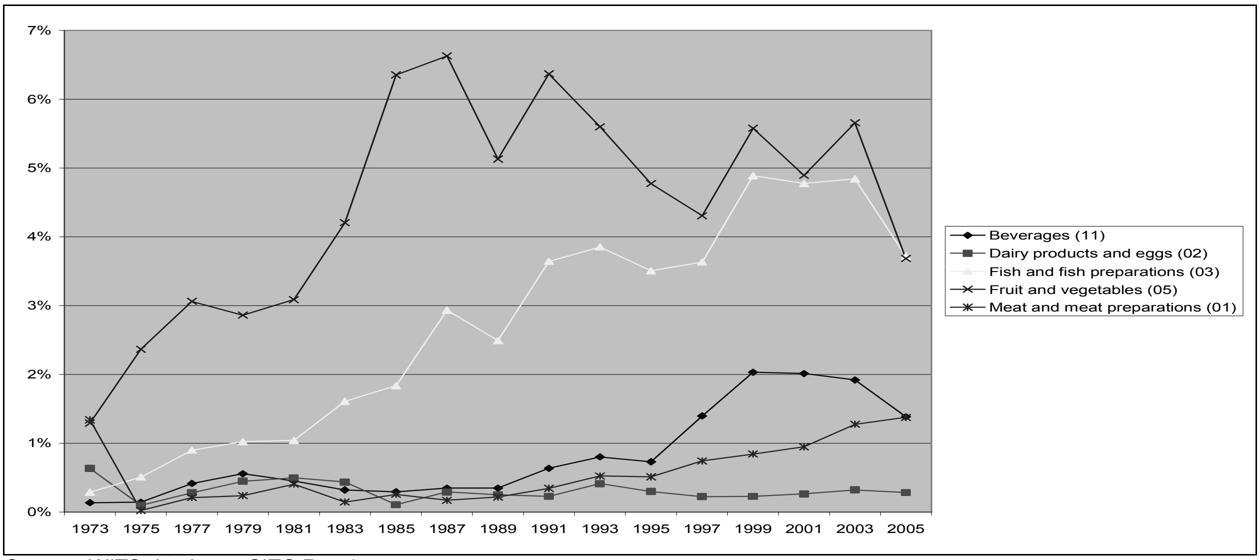
B. Agro-food industry

65. As highlighted in OECD (2005), the Chilean agro-food industry has been one of the key sectors driving the diversification of the economy and one of the greatest beneficiaries of the trade liberalisation (Figure 24). It has shown dynamic growth and extensive diversification in exports both on a product basis and geographical basis. Over 1973-90, the sector reached more than 4% per annum value added growth and a twenty fold increase with respect to the dismal 0.2 rate of the 1960s (Valdes, 1993; Belfor, 2000). It accounted for around 11% of GDP and 43% of total exports[27] and employed approximately 14% of the labour force during 1998-2002. Thanks to its backward (supply of inputs, including pesticides and machinery) and forward linkages (food-processing, distribution, and the service industry, including hotels) the agro-food cluster has a high employment creation potential, which has contributed to spread the benefits of growth, increase the employment of women and reduce poverty. (Belfor, 2000; Lavelle, 2003).

[27] Average for 1998-2000 (Brooks and Lucatelli, 2004).

Figure 24. Evolution of the agro-food export sector (1973-2005)

(Percent of total exports)



Source : WITS database, SITC Rev.1

66. The early reforms in land and water rights, labour regulation, import and export marketing with the combined involvement of public institutions and private organisations under tight macroeconomic policies unlocked the potential of the agricultural sector. Exports, mainly processed in nature, concentrate on three products – fresh fruit, wine and salmon – which make up half of agro-food exports (Brooks and Lucatelli, 2004; OECD, 2005). Chile has continued to pioneer new products such as olive oils, pig meat and other agricultural products to new geographical markets utilising its FTA strategy. Chile has recently been placing an emphasis on high quality in order to increase the value added of its exports in this area.

67. In the area of **fruits and vegetables**, Chile mainly takes advantage of its geographical location to export fruits and vegetables which are counter-seasonal in comparison to other major export markets (French-Davis, 2002). The country is currently the leading world exporter of fresh grapes and the fifth largest exporter of apples. Exports in fruit and vegetables totalled USD 1.6 billion in 2002, equivalent to over 10% of total export earnings. Although the foundations of the industry can be traced back to the mid-1960s, the spectacular growth in the fruit sector dates back only to 1975. Due to Chile's competitive advantage in the agrofood sector, trade liberalisation and the real exchange rate depreciation doubled production and contributed to an increase in export earnings of 19% a year up to 1983. After the deep recession of 1983, export growth slowed down to around 10% per year until 1989, and 4.6% a year between 1990 and 2002. Technology upgrading also led to the success of the sector combining the agricultural research of private companies with new technologies from abroad, notably from California.[28] In recent years, diversification into new product lines such as berries, the introduction of special packaging technologies and the diversification of export destinations have proved to be important success factors.[29]

68. While **wine** making in Chile dates back to the mid-19th century, Chile's success as a wine exporting country is quite recent. In spite of the country's ideal climatic conditions and huge vineyards free

[28] Government favoured private investment in research and development. Private expenditure on agricultural research increased 19 times to about 13% of total spending on agricultural research between 1973 and 1990.

[29] Modified Atmosphere Packaging (MAP) made possible to use cheap sea transportation in order to reach various Asian destinations.

from disease the sector floundered during the import substitution era (Fischer, 2001). Exports took off only at the beginning of the 1980s, when regulations were eased. Foreign investors with capital and new technologies were key to the industries' growth although domestic investment remained dominant. Through a period of sectoral adjustment, small producers disappeared while larger wineries that modernised became export-oriented (Torrealba, 1999).[30] Substantial improvements in the quality of grapes and in methods of wine production contributed to an impressive growth of exports making Chile the world's fifth largest wine exporter with a 4.2% market share[31] and exports figures reaching USD 610 million in 2002. The increasing number of local oenology students has also served as useful basis for quality improvements.

69. Chile today also qualifies as the world's top exporter of farmed **salmon** accounting for USD 1.2 billion in exports in 2003. This result is all the more remarkable considering that Chilean salmon farming only began in 1979 and salmon is not a native species to the country (Iizuka, 2004; Bjørndal, 2002). Although many essential factors for building competitiveness (domestic markets and knowledge) have not existed from the outset, the government supported by international co-operations[32] decided to start up salmon farming in the mid-1960s placing the production mostly in the Southern regions of the country. The strategy formulation and implementation was provided by dedicated government agencies distributing loans to local firms and supporting the development of aquaculture (Fischer, 2001; Iizuka, 2004).[33] Following the strong growth of the 1990s the market consolidated and became more diversified with salmon producing firms outsourcing their non-core processes to other market entities out of which few grew independent after a couple of years. The producers and producers' organisations[34] in general strengthened during this period and government support became more indirect in the salmon sector.

C. Wood and wooden products industry[35]

70. The forestry cluster is another important contributor to exports, export increase and GDP. While the forestry sector reached about 3.5% share in GDP in 2004, wood processing and wooden products together with the paper industry accounted respectively for about 1.3 and 2.7% of GDP. Chile is the world's third largest exporter of woodchips and also exports nearly 50% of its saw timber, panels and softwood pulp output. While the pulp industry remains the most important processing activity, forestry

[30] Deregulation led to an initial increase in production, without a corresponding increase in demand, which caused a reduction in prices. The crisis spurred adjustment and upgrading. Yields were lowered and growers started to produce higher quality wines for export, initially targeting the regional market. Additional investment, mainly thanks to foreign capital, in modern technology and quality improvement of the vineyards, was needed to meet North American and European consumers' tastes.

[31] In 1984, only 2% of the total production volume was exported, 7% in 1989, and in 63% 2002. This is the fastest growth recorded for New World wine producers during this period (Iizuka 2004).

[32] In the "experimental period" (1960s to 1973), donor agencies from Japan, USA and Canada lent financial and technical support to government agencies to survey areas and potentials for salmon farming. In the "learning period" (1974 to 1984) government agencies underwent structural change and local and foreign private initiatives for salmon and trout farming emerged. The "forming period" (1985 to 1989) witnessed a large increase in the number of local salmon farming firms and the first attempt at collective action from the local private sector. See Iizuka, 2004.

[33] The semi-public *Fundación Chile* played a particularly important role through the establishment in 1980 of the first modern farming centres – demonstrating the technical and commercial feasibility of large-scale salmon farming in the country – focusing on research and the implementation of new technology and by providing technical assistance to other firms.

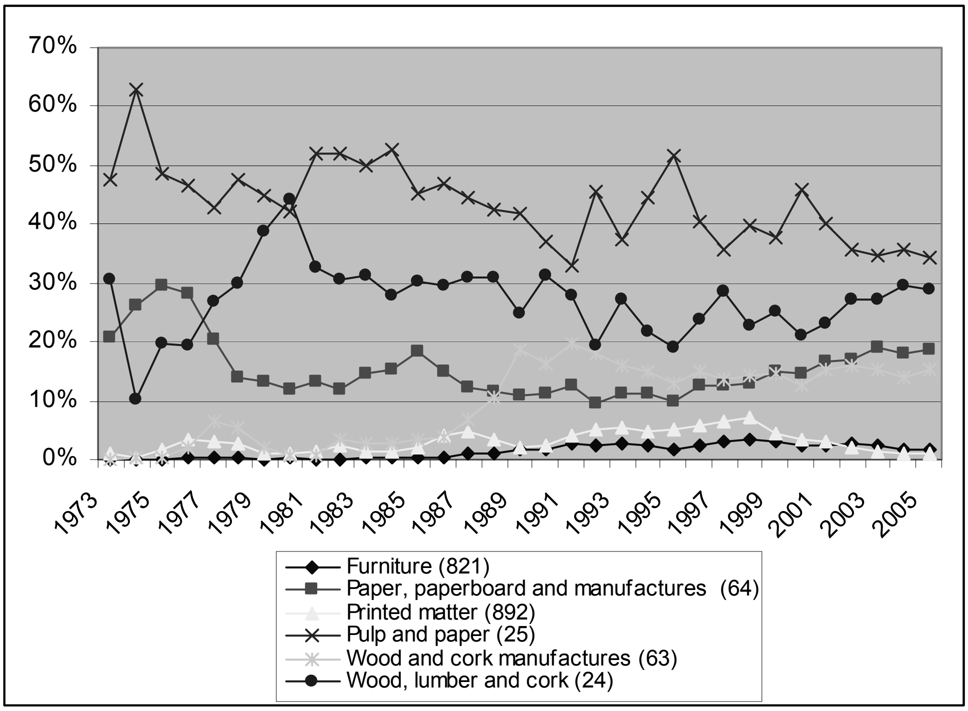
[34] For instance, the private sector took the lead in promoting the establishment of quality certification, with support from a government agency (Maggi, 2002, quoted in Iizuka, 2004).

[35] This section draws heavily on Agosin (2002); WTO(1997) and WTO (2003).

exports have diversified from pulp, round wood and chips in the 1980s to window frames, sawn wood, wood panels, newspaper, wood pieces, planned wood, furniture and other manufactured goods at present (Figure 25). The exports of this group of industries have increased almost thirty-two fold from USD 105 million to USD 3.3 billion between 1974 and 2004 (Agosin, 2002 and Chilean Central Bank National Accounts). The net export of Chile in this product group is largely positive: exports in 2005 amounted to USD 3.5 billion compared to USD 747 million of imports. It should be noted that Chile also imports a sizeable amount of paper different from what it produces domestically.

Figure 25. Structure of the forestry, wood and paper exports (1973-2005)

(Percent of total wood and wooden products exports)



Source : WITS database, SITC Rev.1, author's calculations

71. Chile has a comparative advantage in forestry. Climate and soil conditions ensure the rapid growth of certain species of trees, particularly radiate pine. One characteristic of Chile's forestry sector is that it relies on forestry plantations as opposed to natural forests. Plantations cover 2.1 million hectares, equivalent to 2.8% of the national territory and 18% of the total surface covered by forests. Approximately 10 years are necessary from planting to harvesting. In view of this natural resource endowment, during the 1950s, two public universities began to offer degrees in forestry engineering to bring up specialists for the industry. This provided the necessary basis in terms of human capital when the sector began to develop.

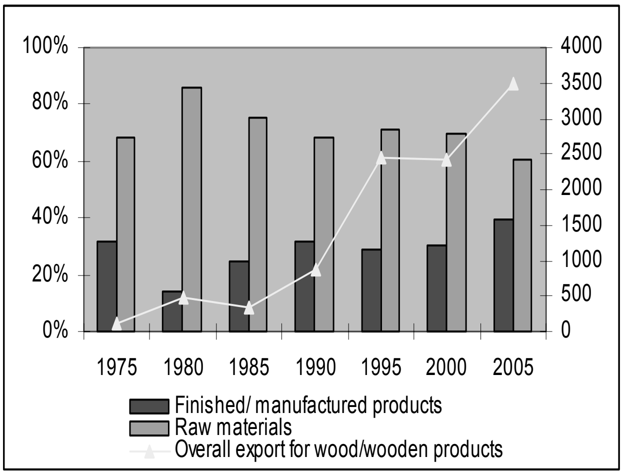
72. Public forestation and reforestation programs date back to the 1960s but the sector took off after a change in the policies implemented in the 1970s. In 1974, a subsidy of 75% of tree planting costs was instituted for the first two years of forestation (Decree Law No. 701). At the same time, it was declared that privately planted land used in the forestry sector could not be expropriated. Furthermore, the sector was exempted from real estate tax, and a 50% tax on profits was only collected at harvest time. The prohibition on cutting trees less than 18 years of age was repealed, and exports of raw wood in any form were authorised. This legal framework encouraged private investment and allowed vertical integration in the sector, so the companies became profitable (Rossi, 1995). In addition, between 1975 and 1979, the

Chilean Central Bank provided private commercial banks and the State Bank (a commercial bank catering to the needs of small depositors and business firms) with a special line of credit for on-lending to forest development projects with particularly favourable conditions to Chilean nationals and small firms.

73. Chile's natural resource advantages, a stable legal framework together with some sector specific policies have allowed the wood and forestry sector to grow into the second important exporting sector for Chile. The sector remained highly concentrated with three companies accounting for 46% of exports and some sub-sectors like pulp production reach even higher concentration ratios. Some state that the potential of this sector has not been fully realised as can be seen in the relatively low share of high end products such as furniture and various printed products compared to other countries such as Finland (Figure 26 and 27).

Figure 26. Structure of Chilean wooden product exports (1975-2005)

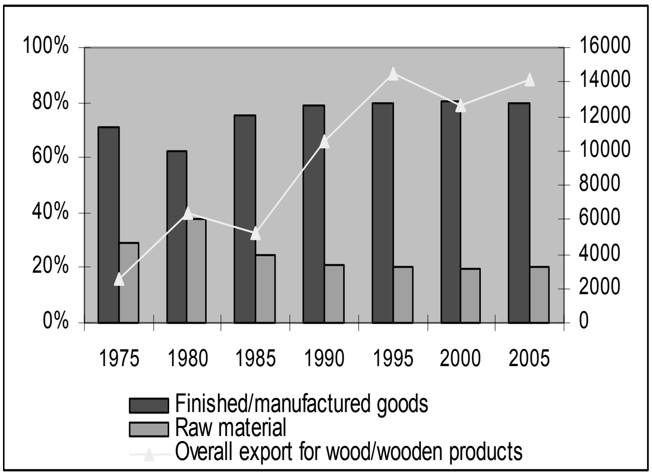
(Percent (left scale): million USD (right scale))



Source : WITS database, SITC Rev1, author's calculation

Figure 27. Structure of the Finnish wooden product exports (1975-2005)

(Percent (left scale); million USD (right scale))



Source : WITS database, SITC Rev 1, author's calculation

D. Textiles and clothing industry

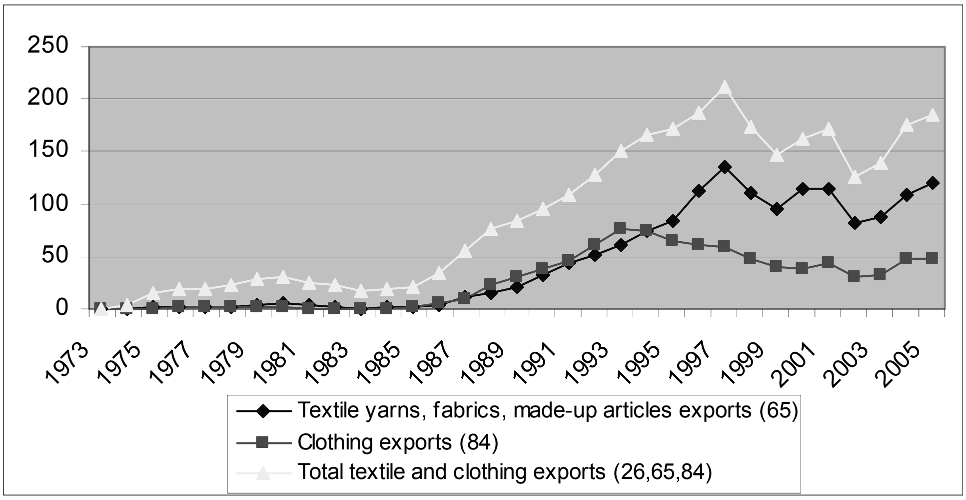
74. The textiles and clothing sector in Chile has been one of the sectors where Chile did not have a comparative advantage and where production and employment has decreased as trade liberalisation progressed. The textile sector was the largest employer in the manufacturing sector with 15.2% of manufacturing employment and the second largest after food processing in terms of value added with 8.3% of manufacturing value added in 1970. Between 1970 and 1973 a considerable number of factories was nationalised and although soon after they were returned to their former owners much damage was done to the facilities in that period.

75. This sector was one of the most affected ones by the trade liberalisation of the 1970s. While tariffs were cut rapidly, the relatively high exchange rates did not facilitate exports and the industry brought up on a 40 year-long import substitution tradition remained very much focused on the domestic market. Composed of relatively small family owned businesses of less than 50 employees, the Chilean textile sector specialised mainly in cotton and wool textiles. Increasing import competition led to the close-down of many companies. Some were sold to other businesses, others became importers or entered other lines of business like banking. Share of textiles and clothing in manufacturing therefore decreased rapidly both in terms of output and employment in this period, but especially in terms of employment. Over 25,000 jobs were lost in this sector in two stages: between 1975-78 and 1981-84. It should be noted that a great number of these job reductions should be attributed not only to increase in imports but rather to the introduction of new labour saving technologies aiming to satisfy the higher quality requirements. In addition before 1981 there was no legal framework for recourse to trade remedies.

76. From 1981, a tariff surcharge system was put in place and the textile industry became one of its main beneficiaries. The most affected sub-sectors were cotton knits, cotton yarn and cotton apparel. After the crisis, in the late 1980s to early 1990s, the industry gradually recovered. As the domestic market has become increasingly competitive, there has been an increasing focus placed on exports in order to maintain production levels. Exports in this sector have increased from USD 3 million in 1985 to USD 200 million in 1997 thanks to the ongoing diversification of export destinations (Figure 28 and 29). However, in the 1990s the acceleration of imports led to the further contraction of the industry and an increasing degree of specialisation focusing on finished products and special materials: denim, high quality wool fabrics and apparel, acrylic fibres and textiles, polyester viscose are the remaining sub-sectors.

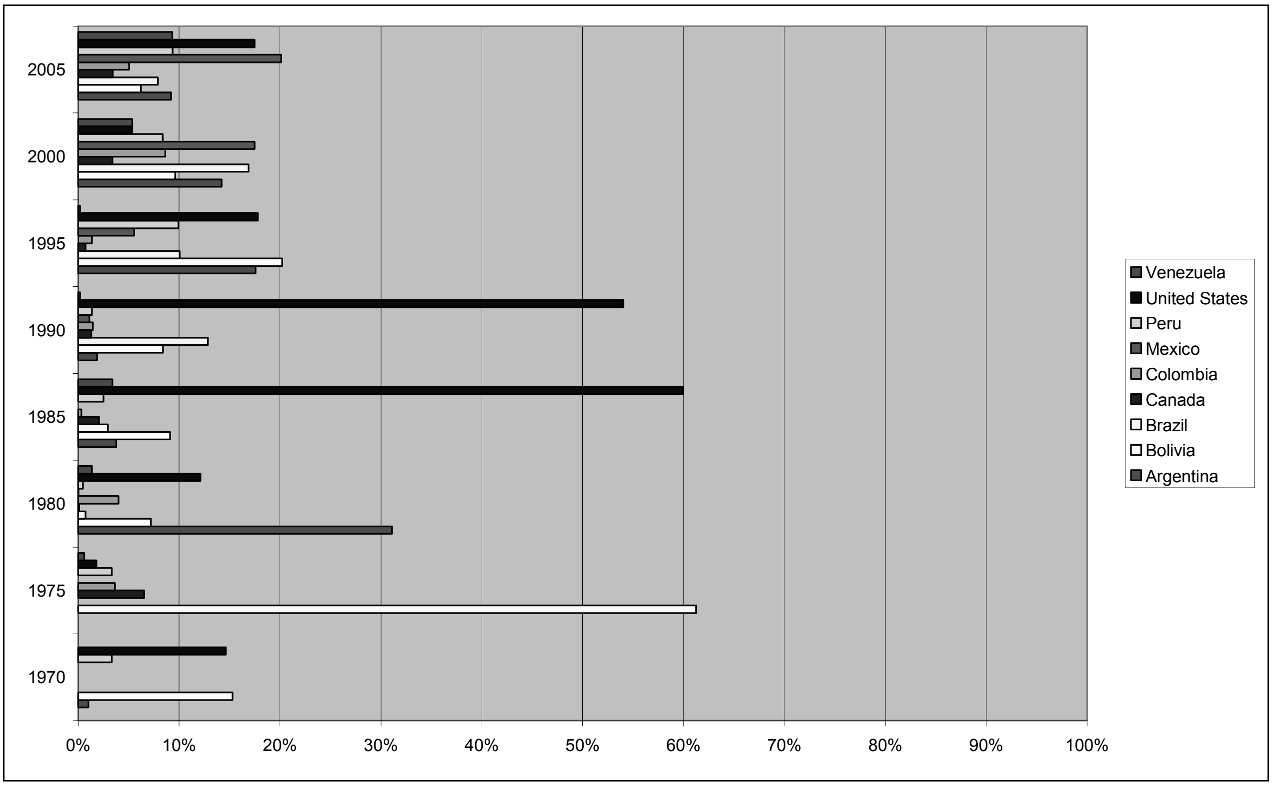
Figure 28. Textile and clothing exports (1970-2005)

(Million USD)



Source: WITS database, SITC Rev 2, product groups 26, 65, 84

Figure 29. Diversification in destination of Chilean textile exports (1970-2005)



Source : WITS database, SITC Rev1, Finished products: Textiles, yarn-fabrics, made-up articles (65) and Clothing (84)

Note: Percent to the sub-group totals

77. The combination of good infrastructure, close access to markets in the Western hemisphere and a relatively skilled workforce has allowed Chile to remain competitive in niche markets despite increasing pressure from low cost suppliers. In the wake of the Asian financial crisis in 1997, an increase of interest rates severely damaged the industry. The number of enterprises decreased from 167,000 in 1995 to 117,000 in 2005. Exports have gradually decreased from USD 200 million in 2000 to USD 182 million in 2005, and the appreciation of the peso made the industry increasingly uncompetitive. While the sector has shown a gradual decline, a few companies have been able to adjust by placing a greater focus on exports. In 2001-02 two companies were responsible for more than 30% of the Chilean textile and clothing exports while only six firms accounted for half of the exports (Carlson, 2005). Some of these exporters have also created importing subsidiaries. While as a result of increased imports from China and other FTA partners, the sector expects further decrease in the number of companies and in terms of employment the strategy is to focus on areas of competitive advantage, like high quality niches and closer export markets where Chilean export products could be successful.

5. Lessons learnt

78. The liberalisation measures of the 1970s and 1980s initiated a major transformation of the economy from import substitution towards successful export orientation. Besides the traditional copper products, the fresh fruit and other food sectors have emerged as drivers of growth.

79. The liberalisation experience of Chile provides some key lessons:

- The importance of a stable macroeconomic environment for investment into new growth activities. High inflation rates distort price signals making it difficult for industries to assess the relative competitiveness of their sector and make investment decisions. The experience of Chile in the 1970s and 1980s suggests that macroeconomic instability does even deter industries from investments with a clear competitive advantage, and this is even more so for industries, which are at the borderline. The increased macroeconomic and political stability along with improved policy coherence has supported investments in a wider range of sectors in the 1990s.

- Trade reform has been essential for realigning the incentive structures triggering resource reallocation in line with comparative advantage. The initial elimination of quantitative restrictions and tariff reduction to 35% was key from this point of view. The rapid pace of trade liberalisation (from extremely high levels to 10% in 5 years from 1973-78) no doubt entailed significant costs to domestic industry. It is difficult to assess whether the liberalisation in the first phase was too fast or not as it is extremely difficult to isolate the effects of trade reform from other areas of reform. However, it is widely believed that the negative effects experienced by industry in the late 1970s and early 1980s were in part due to inappropriate complementary of macroeconomic policies especially such policies as exchange rate policy, financial policy and labour market policy.

- The flat tariff has ensured that effective rates of protection are relatively equal across industries. This has created a sense of equity, minimised lobbying efforts and enhanced support for trade liberalisation. The absence of tariff exemptions had the effect of garnering support for a lower flat tariff as user industries producing for both the domestic and exporting markets have supported trade liberalisation.

- The importance of a coherent exchange rate policy in times of trade liberalisation was found to be especially important. A relatively depreciated exchange rate at the early stages of trade liberalisation in the 1970s was essential for initial export response. The appreciation of the currency when the exchange rate was used as an inflation anchor proved detrimental to industry. This was especially evident in the period of the fixed rate (1979-1983).

- Sound domestic capital and financial markets assure the efficient allocation of financial assets to profitable investments. The coherence of policies plays again an important role. In the Chilean case, inconsistency between exchange rate policy and financial market policy led to severe crisis. The financial liberalisation under weak supervision in the late 1970s attracted an uncontrolled amount of capital inflows. The overvalued exchange rate provided strong incentives to investment in non-tradeables leading to an asset bubble. These lessons have been reflected in post crisis policies where a wide range of policies to manage capital inflows and lending were introduced. These policy measures have been withdrawn as Chile's financial system has become stronger.

- Sound institutional framework, clear regulations, rule of law improve the functioning of the market, contribute to macroeconomic stability while reduce the vulnerability of the economy to external shocks. The strengthening of regulatory oversight in the financial sector allowed for stable growth during the 1990s. Similarly, the creation of the Copper Stabilisation Fund served to diminish the impact of copper price volatility on the economy. Continued regulatory reform has further improved institutions and functioning of the economy.

- Tariff commitments under the GATT served as a lock in mechanism limiting policy reversals. Chile has also used commitments under FTAs to lock in continued improvement of its institutional framework.

- Promotion of exports played a key role in the success of Chile's trade liberalisation efforts although most export promotion policies were not sector specific. The emergence of a critical mass of exporters at an earlier stage in liberalisation enabled the liberal trade policy to be continued even in the face of setbacks in the early 1980s. Following the recovery after the crisis, from the 1990s, free trade and preferential trade agreements contributed to the geographical diversification and growth of exports. The increasing diversification of exports has in turn supported macroeconomic stability.

- The protection of private property against expropriation contributes to the creation of competitive sectors. The example of the forestry sector showed how the assurance of property rights against expropriation has been one of the important factors in attracting investment into the sector,

- Allowing foreign capital to invest in various sectors proved fruitful in the case of Chile. The salmon farming provides an excellent example when foreign investments led to the creation of a new export industry. In the traditional copper sector the presence of competing private investments stemmed for the efficient functioning of the state-owned company. The privatisation of utilities in the mid-1990s provided for the upgrading of the Chilean infrastructure.

- Flexible labour market policies contribute to the faster adjustment of industries and reallocation of capital into competitive sectors of the economy, while labour adjustment follows capital reallocation. In the Chilean experience trade liberalisation preceded comprehensive labour market reform and this delay coupled with the financial crisis slowed down the labour adjustment at the early stage of trade liberalisation and led to enormous unemployment in the early 1980s.

- An increased emphasis on social equity under democratic rule with enhanced safety net provisions has led to diminished inequality and has contributed to sustained support for reforms.

- The sector-specific studies draw attention to the fact that additional efforts are necessary to increase value added by improving productivity and enhancing quality through upgrading of technology. Education and improvements in the innovation framework are considered key to achieve this goal. Greater investment in human capital may open the door for the economy to diversify. The sector-specific studies on the wine and forestry sector show how investment in education could contribute to the increase of new sectors.

ANNEX

Table A Changes in value added in the manufacturing industry

		1970	1980	1990	1995	2000	2003	Sectoral ranking 1970	Sectoral ranking 2003
300	Total manufacturing	100%	100%	100%	100%	100%	100%		
	(Millions USD)	5035.11	5719	7501.16	10677.1	11290	11880.8		
372	Non-ferrous metals	27.9%	17.0%	17.5%	10.0%	9.0%	9.1%	1	3
311	**Food products**	**11.3%**	**17.7%**	**19.0%**	**22.7%**	**21.5%**	**21.5%**	**2**	**1**
321	Textiles	8.3%	5.1%	4.1%	2.9%	2.2%	1.8%	3	16
384	Transport equipment	5.4%	2.7%	1.8%	1.4%	2.2%	1.9%	4	17
371	Iron and steel	4.8%	3.8%	3.2%	3.2%	3.6%	3.6%	5	10
381	**Fabricated metal products**	**4.4%**	**4.0%**	**4.8%**	**4.8%**	**5.3%**	**5.5%**	**6**	**7**
352	**Other chemicals**	**3.8%**	**6.5%**	**7.0%**	**8.5%**	**9.2%**	**9.5%**	**7**	**2**
383	Machinery, electric	3.7%	1.9%	1.4%	1.3%	1.2%	0.8%	8	19
313	**Beverages**	**3.3%**	**5.4%**	**4.1%**	**5.0%**	**5.5%**	**5.6%**	**9**	**5**
382	Machinery, except electrical	2.9%	2.2%	2.0%	3.4%	3.3%	3.2%	10	12
314	Tobacco	2.6%	3.9%	3.0%	2.6%	3.0%	2.9%	11	14
341	**Paper and products**	**2.4%**	**5.1%**	**5.8%**	**6.9%**	**4.9%**	**5.5%**	**12**	**6**
342	Printing and publishing	2.3%	3.7%	2.6%	3.6%	3.1%	3.0%	13	13
369	Other non-metallic mineral products	2.1%	2.9%	2.5%	3.7%	3.9%	4.0%	14	9
355	Rubber products	2.1%	1.2%	0.8%	0.6%	0.6%	0.8%	15	20
324	Footwear, except rubber or plastic	1.9%	1.5%	1.4%	1.2%	0.7%	0.6%	16	22
322	Wearing apparel, except footwear	1.9%	2.5%	2.1%	1.8%	0.9%	0.6%	17	24
353	**Petroleum refineries**	**1.8%**	**3.4%**	**4.8%**	**5.6%**	**6.7%**	**6.5%**	**18**	**4**
356	**Plastic products**	**1.4%**	**1.3%**	**2.6%**	**2.3%**	**3.3%**	**3.5%**	**19**	**11**
351	**Industrial chemicals**	**1.3%**	**1.3%**	**3.2%**	**3.3%**	**4.5%**	**4.4%**	**20**	**8**
331	**Wood products, except furniture**	**1.2%**	**3.1%**	**3.4%**	**2.0%**	**2.5%**	**2.6%**	**21**	**15**
323	Leather products	0.8%	0.6%	0.5%	0.3%	0.2%	0.2%	22	26
362	Glass and products	0.7%	0.7%	0.5%	0.8%	1.1%	1.2%	23	17
390	Other manufactured products	0.5%	0.4%	0.3%	0.2%	0.1%	0.1%	24	27
332	**Furniture except metal**	**0.5%**	**0.9%**	**0.7%**	**0.8%**	**0.7%**	**0.7%**	**25**	**21**
361	Pottery, china, earthenware	0.4%	0.3%	0.1%	0.2%	0.2%	0.2%	26	25
354	Misc. petroleum and coal products	0.1%	0.6%	0.8%	0.7%	0.7%	0.6%	27	23
385	Professional & scientific equipment	0.1%	0.1%	0.1%	0.2%	0.1%	0.1%	28	28

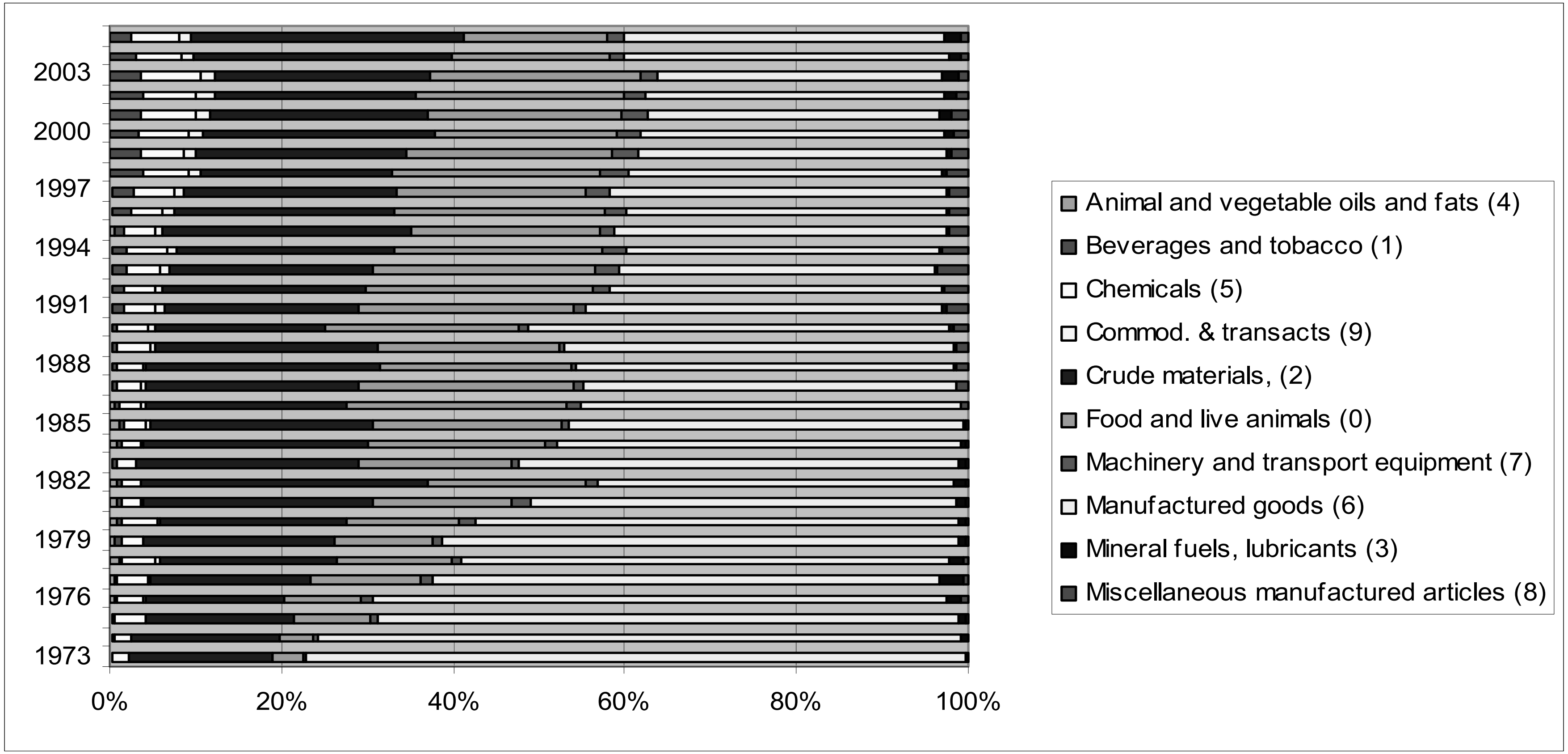
Source : PADI database, ISIC Rev 2

Table B Changes in employment structure in the manufacturing industry

		1970	1980	1983	1990	1995	2000	2003	Sectoral ranking 1970	Sectoral ranking 2003
300	Total manufacturing	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%		
	(in thousands of employees)	243.5	206.5	151.2	298.2	337.6	304.9	346.3		
321	Textiles	15.2%	10.9%	9.5%	8.8%	6.4%	6.4%	4.3%	1	7
311	**Food products**	**13.8%**	**19.5%**	**24.1%**	**25.2%**	**27.1%**	**27.1%**	**32.1%**	**2**	**1**
384	Transport equipment	8.4%	3.4%	1.6%	2.9%	3.2%	3.2%	2.6%	3	13
381	Fabricated metal products	7.4%	6.8%	5.4%	7.1%	7.2%	7.2%	8.2%	4	2
382	Machinery, except electrical	5.2%	3.9%	4.6%	4.2%	3.6%	3.6%	2.5%	5	14
371	Iron and steel	4.5%	3.9%	3.9%	2.7%	1.9%	1.9%	1.4%	6	18
331	**Wood products, except furniture**	**4.4%**	**7.0%**	**6.4%**	**7.1%**	**6.8%**	**6.8%**	**6.0%**	**7**	**4**
352	Other chemicals	4.1%	5.2%	6.3%	5.5%	5.4%	5.4%	6.0%	8	3
322	Wearing apparel, except footwear	3.9%	5.6%	4.1%	5.8%	5.3%	5.3%	3.5%	9	9
383	Machinery, electric	3.8%	2.7%	1.8%	1.3%	1.5%	1.5%	1.0%	10	20
324	Footwear, except rubber or plastic	3.7%	2.8%	3.1%	3.8%	3.3%	3.3%	2.1%	11	15
342	Printing and publishing	3.2%	3.8%	4.2%	2.9%	3.2%	3.2%	3.2%	12	10
313	**Beverages**	**3.2%**	**4.0%**	**4.7%**	**3.4%**	**3.3%**	**3.3%**	**5.0%**	**13**	**5**
372	Non-ferrous metals	2.9%	4.4%	5.1%	2.9%	2.8%	2.8%	3.5%	14	8
369	Other non-metallic mineral products	2.3%	2.3%	2.1%	2.0%	2.4%	2.4%	2.8%	15	11
341	**Paper and products**	**2.3%**	**2.9%**	**3.4%**	**3.0%**	**3.6%**	**3.6%**	**2.6%**	**16**	**12**
355	Rubber products	1.8%	1.7%	1.5%	1.0%	1.2%	1.2%	1.2%	17	19
362	Glass and products	1.6%	1.0%	0.6%	0.7%	0.7%	0.7%	0.6%	18	21
351	Industrial chemicals	1.6%	1.2%	1.0%	1.2%	1.4%	1.4%	1.8%	19	17
356	**Plastic products**	**1.4%**	**1.8%**	**2.0%**	**3.6%**	**4.5%**	**4.5%**	**4.7%**	**20**	**6**
323	Leather products	1.1%	0.8%	0.8%	0.6%	0.6%	0.6%	0.5%	21	22
332	**Furniture, except metal**	**1.1%**	**1.2%**	**1.0%**	**1.7%**	**2.1%**	**2.1%**	**2.1%**	**22**	**16**
353	Petroleum refineries	0.9%	0.8%	0.8%	0.4%	0.4%	0.4%	0.3%	23	23

Source : UNIDO Industrial Statistics 3 digit (2006) ISIC Rev 2, and PADI database for 2003

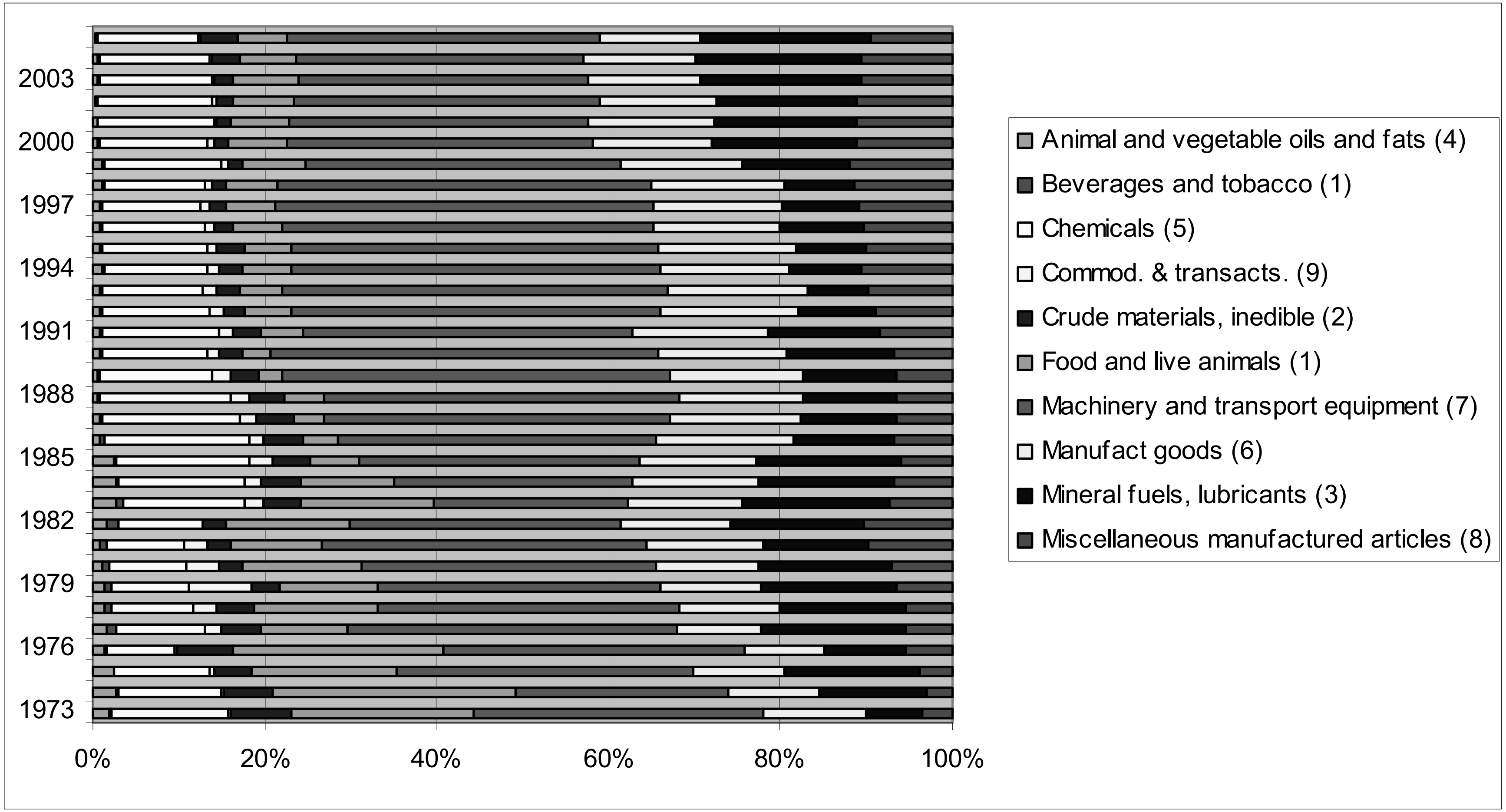
Figure C Structure of exports (1973-2005)



Source: WITS database, SITC Rev 1, all SITC classes represented from 0 to 9;

Note: Manufactured goods cover both refined copper and certain wooden products

Figure D Import structure (1973-2005)



Source : WITS database, SITC Rev 1, all SITC classes represented from 0 to 9;

Note: Manufactured goods cover both refined copper and certain wooden products

REFERENCES

Agosin, M.R. (1999), "Trade and Growth in Chile", *CEPAL Review* No.68, UNECLAC, Santiago, Chile

Agosin , M.R. (2002), "Export Performance in Chile: Lessons for Africa" in G.K. Helleiner (ed) *Non-Traditional Export Promotion in Africa: Experience and Issues,* United Nations university, Palgrave, NY, USA

Alvarez, R. and R. Fuentes (2003), "Trade Reforms and Manufacturing Industry in Chile", *Central Bank of Chile Working papers* No. 210, Central Bank of Chile, Santiago Chile

Blázquez-Lidoy, J, Rodríguez J, Santiso J (2006): "Angel or Devil? China's Trade Impact on Latin-American Emerging Markets", OECD Development Centre, *Working Paper No. 252*

Brock Ph. L. (2000), "Financial Safety Nets: Lessons from Chile", *The World Bank Research Observer*, vol.15, nr.1 (February), pp 69-84

Buchi Buc, H. (2006), "How Chile Successfully Transformed Its Economy", *Backgrounder No. 1958,* Heritage Foundation, Washington D.C., USA

Carlson, B. (2005), "Macroeconomic policies, sector performance and firm response: the case of Chile's textile goods market", *Serie Desarrollo Productivo 161,*ECLAC, Santiago de Chile

Chile Foreign Investment Committee website, http://www.foreigninvestment.cl

Comision Chilena del Cobre (2005): *Annuario Estadisticas del Cobro y Otros Minerales, 1986-2005*, http://www.cochilco.cl/#

Comision Chilena del Cobre (2006): Current and Future Situation of the Copper Industry in Chile, *ICSG Meeting*, Lisbon, http://www.icsg.org/

Corbo, V. and P. Meller (1981), "Alternative Trade Strategies and Employment Implications: Chile", in A. Kueger et al (eds.) *Trade and Employment in Developing Countries,* National Bureau of Economic Research, The university of Chicago Press, USA

Corbo, V. and J. de Melo (1985), "Scrambling for Survival – How Firms Adjusted to the Recent Reforms in Argentina, Chile and Uruguay", *World Bank Staff Working Papers* No.764, World Bank, Washington D.C.

Corbo, V (1992), "Economic Transformation in Latin-America – Lessons for Eastern Europe", *European Economic Review, vol.36*, pp 407-416

Corbo, V. (1998), "Reaching One Digit Inflation: The Chilean Experience", Journal of Applied Economics, Vol.1, No.1, pp 123-163

Corbo, V. (2005), "Monetary Policy and Central Bank Independence in Chile", paper prepared for the Banco de Mexico Conference, Nov 14-15, 2005

Corbo, V (2007), "The Chilean Economy: Institutional Build-Up and Perspectives", presentation at the conference hosted by OECD Development Centre on 29 January 2007

De Gregorio, J. (2004), "Economic Growth in Chile: Evidence, Sources and Prospects", *Central Bank of Chile Working Papers* No. 298, Central Bank of Chile, Santiago, Chile

De Mello, L. (ed) (2006), *Challenges to Fiscal Adjustments in Latin America – The Cases of Argentina, Brazil, Chile and Mexico*, OECD, Paris

Diaz-Alejandro, C. (1985), "Good-Bye Financial Repression, Hello Financial Crash", Journal of Development Economics 19, pp 1-24.

ECLAC (2001): "Social panorama of Latin America 2000-2001", ECLAC, 2001 September

Edwards, S. (1986), "Stabilisation with Liberalisation: An Evaluation of Ten Years of Chile's Experience with Free Market Policies, 1973-1983" in Choksi, A. and D. Papageorgiu (eds) *Economic Liberalisation in Developing Countries*, World Bank, Basil Blackwell Ltd. UK

Edwards, S. (1996), "A Tale of Two Crises: Chile and Mexico", *NBER Working Paper Serie*s No. 5794, National Bureau of Economic Research, Cambridge, USA

Edwards, S. and Lederman D. (1998): "The Political Economy of Unilateral Trade Liberalisation: The Case of Chile", *NBER Working Paper Series,* WP 6510, National Bureau of Economic Research, MA, USA

Edwards, S. and A.C. Edwards (2000), "Economic Reforms and Labor Markets: Policy Issues and Lessons from Chile", *NBER Working Paper* 7646, National Bureau of Economic Research, USA

Ffrench-Davis, R. (2002), *Economic Reforms in Chile – From Dictatorship to Democracy*, University of Michigan Press, U.S.A.

Ffrench-Davis, R. (2002), "The impacts of exports on growth in Chile", *CEPAL Review* No.76, UNECLAC, Santiago, Chile

Goldsbrough, D et al (1996), "Reinvigorating Growth in developing Countries – Lessons from Adjustment Policies in Eight Economies", *IMF Occasional Paper* No. 139, International Monetary Fund, Washington DC, USA

Hachette, D. (1991), "Chile: Trade Liberalisation since 1974" in Shepard, G. and C. G. Langoni (eds) Trade Reform: Lessons from Eight Countries, International Center for Economic Growth, USA

Jadresic, E. and R. Zahler (2000), "Chile's Rapid Growth in the 1990s: Good Policies, Good Luck, or Political Change", *IMF Working Paper* No. 153, IMF, Washington D.C. USA

Kuwayama, M, Duran L. J., Silva V (2005) : Bilateralisma and Regionalism: Re-establishing the primacy of Multilateralism: a Latin-American and Caribbean Perspective, ECLAC, Serie Comercio International nr.58, Santiago, Chile

Le Fort, G. (2005), "Capital Account Liberalisation and the Real Exchange Rate in Chile", *IMF Working Paper* No. 132, IMF, Washington D.C. USA

Macario, C. (2000), "Chile: In Search of a New Export Drive" in Macario, C. (ed) *Export Growth in Latin America: Policies and Performance,* Economic Commission for Latin America and the Caribbean, Lynne Rienner Publishers Inc., USA

Meller, P. (1992), *Adjustment and Equity in Chile*, OECD Development Centre, Paris

Meller, P (2002), *El cobre chileno y la politica minera*, Universidad de Chile, Chile

OECD (2003), *OECD Economic Surveys – Chile,* OECD, Paris

OECD(2004), *Trade and Competitiveness in Argentina, Brazil and Chile – Not as Easy as ABC*, OECD, Paris

OECD (2005), *OECD Economic Surveys – Chile,* OECD, Paris

Raczynski, D., Romaguera, P. (1995): "Chile: Poverty, adjustment, and social policies in 1980s", in Lustig, N. (ed): *Coping with austerity: Poverty and inequality in Latin America*, Brookings Institution and the Inter-American Dialogue, Washington D.C., pp 275-333.

Robinson, James A. (2001): "Where does inequality come from? - Ideas and implications for Latin America", *Development Centre Working Paper n°188*, OECD, Paris

Saez, S. (2006), "Keeping Animal Spirits Asleep: The Case of Chile" in Finger,J.M. and J.J. Nogues (eds.) *Safeguards and Antidumping in Latin American Trade Liberalisation – Fighting Fire with Fire,* Copublication of Palgrave Macmillan and the World Bank, USA

Schmidt-Hebbel, K. (1998), "Chile's Takeoff: facts, Challenges, Lessons", *Central Bank of Chile Working papers* No. 34, Central Bank of Chile, Santiago Chile

Serra, P (1998), "*Regulation, Competition and Privatisation – Evidence from Utility and Infrastructure Privatisation in Chile*", OECD Advisory Group on Privatisation in co-operation with the Finnish Ministry of Industry and Trade, Twelfth Plenary Session on 17-18 September 1998, Helsinki

Spilimbergo, A. (1999), "Copper and the Chilean Economy, 1960-98", *Working Paper of the International Monetary Fund, WP 99/57,* USA

Teichman, J.A. (2001), The *Politics of Freeing Markets in Latin America – Chile, Argentina and Mexico,* University of North Carolina Press, USA

Zoffoli, J.P. (2002), *The Apple Industry and Cherry Industry of Chile*, Paper presented at the Washington Tree Fruit Postharvest Conference*,* USA, http://postharvest.tfrec.wsu.edu/PC2002M.pdf

World Trade Organisation (2003), Trade Policy Review: Chile – Report by the Secretariat (WT/TPR/S/124), World Trade Organisation, Geneva