

ICTSD Series on Trade-Supported Strategies for Sustainable Development



# Globalization in Chile:

## A Positive Sum of Winners and Losers

By Victor. E. Tokman



International Centre for Trade  
and Sustainable Development

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## LIST OF ACRONYMS

AFP	Administrators of Pension Systems
CEPAL	Comisión Económica Para América Latina y el Caribe (Economic Commission for Latin America and the Caribbean)
EFTA	European Free Trade Association
EU	European Union
FEES	Fondo de Estabilización Económica y Social
FRP	Fondo de Reserva de Pensiones
GDP	Gross Domestic Product
GNI	Gross National Income
IMF	International Monetary Fund
OECD	Organisation for Economic Co-operation
PPP	Purchasing Power Parity
UK	United Kingdom
URR	Unremunerated Reserve Requirement
US	United States
USD	United States Dollar
WTO	World Trade Organization

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## FOREWORD

Structural reforms and the liberalization of foreign trade and investment have occurred all over the world. The majority of developing countries have embraced reforms that differ regarding the timing and speed of implementation but not in character. The economic model pursued has combined adjustment and stabilization reforms with the liberalization of foreign trade, increasing the level of competition in international markets.

As a result of their increased integration into the world economy, developing countries today are more exposed to the risks associated with external shocks. Indeed, most of them have suffered greatly from the decrease in global demand, the drying up of trade finance and the decline in investment and remittances resulting from the recent financial and economic crisis. While several developing nations have shown early signs of recovery, the crisis may have reversed modest progress towards poverty alleviation. Furthermore, social indicators suggest that natural rates of unemployment are likely to be higher in the future, prompting concerns about possible jobless growth.

The Chilean experience represents a unique case of integration in the world economy. Indeed, Chile was an early starter in opening trade and financial services in the early seventies, when the military regime took place. Since then, despite fundamental political changes within the country, the main elements of this economic strategy have been maintained for almost four decades. In the long term, this strategy has resulted in positive changes for the Chilean economy, including a rapid increase in per capita GDP and a reduced income gap with developed countries. During this period, significant progress towards reducing poverty were made and access to durable goods, housing and basic services and infrastructure also increased substantially. However, this process of integration has also had some costs. Many people have lost their jobs as a result of trade opening and increased competition. Income distribution did not improve until recently and inequality is still higher than it was in the sixties. Moreover, the recent crisis affected every country in Latin America, including Chile, which also experienced income losses and an increase in unemployment. Interestingly, throughout the past few decade Chile has improved its public policies to cope with the negative effects of trade liberalization and limit the harmful consequences of the crisis.

This paper on ‘Globalization in Chile: a Positive Sum of Winners and Losers’ by Victor E. Tokman (Advisor to the Comisión Económica para América Latina y el Caribe), analyzes the trade liberalization strategy followed by Chile since the early seventies and discusses the impact of these reforms on the Chilean economy, with a focus on growth, poverty, welfare and employment.

With this paper, which was published in combination with three other case studies (Mexico, India, and South Africa), ICTSD aims to contribute to a knowledge based debate on the impact of trade liberalization and the economic and financial crisis on the trade and labour market sectors. These studies also aim to inform the debate on whether development assistance and aid for trade in particular, can help to mitigate different impacts of the trade liberalization process and the crisis on the labour market.



Ricardo Meléndez-Ortiz  
Chief Executive, ICTSD

## 1. INTRODUCTION<sup>1</sup>

The objective of this paper is to analyze the strategy followed by Chile as it restructured its economy according to the globalization scenario prevailing worldwide. The Chilean experience is known particularly for two main features. The first is that it was an early starter in opening trade and financial services in the early seventies, applying policies that one decade later were packaged as the Washington Consensus and became the guidelines for the economic reforms promoted by Washington based multilateral organizations. The second is that despite fundamental political changes within the country, the strategy has been maintained for more than three decades. As the political conditions changed, economic policies were adapted to the new conditions and to confront the main failures produced by the globalization process.

This paper is organized in seven sections apart from the introduction, and concentrates on identifying winners and losers that emerged from the Changes in Chile. The first section will briefly identify the country scenario and the different periods associated to changes introduced that correspond to the shift from orthodoxy to policy innovation. The second and third sections will deal with the effects of

trade and identifying some of the innovations introduced after 1990 in the management of macro-economic policies. The fourth section makes an overall evaluation of the results on growth, poverty and welfare in order to determine whether the Chilean people were winners or losers as a whole. The fifth section deals with winners and losers in a relative perspective compared to other groups of Chilean society. This is undertaken by looking into the economic reforms and the restructuring of production that took place as the economy adapted to better perform in the increasingly open world environment. In particular, the transformation of main sectors will be reviewed both in relation to changes in their contribution to domestic output and with regard to employment creation. Several other aspects are also examined, especially the effects on product markets competition, the performance of enterprises of different sizes, the shift from public to private employment, informality and unprotected labour. Furthermore, policies to promote equality are analyzed and evaluated. The sixth section briefly identifies the effects of the recent financial crisis and those more affected. Finally, the seventh section presents some conclusions.



## 2. A PROCESS OF TRADE OPENING: FROM ORTHODOXY TO INNOVATION

Chile represents a unique case of integration to world markets, specifically because of its initial conditions: the combination of an authoritarian regime with an economic advisory team with a liberal tendency that allowed for the changes introduced and the resulting strategy of market liberalization. In September 1973, when the military regime took power, the economy was defined by the import substitution strategy introduced in the late 1950s. Chile had a highly protected economy which combined a theoretical average import tariff of 94% (ranging from 0% to 750%) and a wide variety of non-tariff barriers applied to the majority of goods, including a requirement of a prior deposit of 60% of all imports, among other measures. The authoritarian regime that lasted until March 1990 was based on a repressive government run by the army and a group of Chicago trained economists handling the economy that constituted an extremist coalition

in politics and economics. The strategy they followed was to introduce a shock treatment to open the economy and liberalize markets, while the army handled any kind of opposition. Paradoxically, this made Chile a pioneer in the openings that took place in the rest of the Latin America during the following decade of the 1980s, after the debt crisis of 1982.

The strategy selected used a package of a unilateral tariff reduction accompanied by a significant devaluation of the rate of exchange to promote exports and to introduce competition with domestic production through imports, particularly in manufacturing industries.<sup>2</sup> Two sub-periods need to be distinguished due to the different visions introduced in the application of the strategy in order to appreciate its implications. The first period lasted from 1973 to 1981 and the second, from 1982 until March 1990.

**Table 1: Average tariff and real exchange rate, 1990-2009**

Period	Average tariff (%)	Real exchange rate (1986=100)
1976	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
1999-2000	9,5	84,1
2001-2002	8,5	96,3
2003-2005	6,0	99,5
2006-2009	6,0	94,4

Source: Ffrench-Davis (2003) and Central Bank of Chile

Orthodoxy prevailed at its extreme during the first period. The goal during the time was to reduce tariffs from the 94% average prevailing at the end of 1973 to a uniform 10% by mid 1979 (Table 1). This was followed by a liberalization of foreign exchange and capital markets and the elimination of all non tariff restrictions. A gradual reduction was envisaged to allow for the restructuring of domestic production, while exports were expected to increase as a result

of a significant devaluation.<sup>3</sup> It is also important to consider that the new tariff level introduced was very low compared to other developing countries and in addition, its uniform structure did not allow for selectivity. This left the authorities without an important instrument to guide the process. The compensation would come in the future, or so the economic authorities believed, through the devaluation of the exchange rate as tariffs were reduced.

However, this did not occur mainly because of the presence of substantial capital movements, attracted by the freezing of the nominal exchange rate to the USD as a consequence of the application of the monetary approach of the balance of payment. Contrary to what was expected, parallel to the tariff reduction the real exchange rate appreciated and hence, effective protection decreased leading to a significant impact on the competitiveness of tradable goods and therefore on the production of import substitutes.

Between 1977 and 1981, the Chilean economy adjusted to rising levels of external capital inflows that slowed in late 1981. Nevertheless, the external deficit continued to widen and the reserves that had been accumulated during the previous period began to be depleted rapidly. The debt crisis of 1982 found Chile highly indebted, with a misaligned exchange rate and an economy that was not performing as expected, particularly with regards to domestic production. Also, exports were not increasing as fast as they had during the earlier period of the trade reform.

A major change of orientation was needed and a second trade reform was introduced by a new economic team, incorporating some degree of protection for imported goods and incentives to non traditional exports. In order to push domestic output a series of devaluations occurred between 1982 and 1984, along with a progressive increase of the import

tariff, reaching 35% by 1984. Later on, several reductions were applied reducing the tariff to 15% in 1988. The trade policy also changed actively using anti-dumping measures to protect the economy against unfair trade practices and introduced a system of price bands for three major agricultural products (wheat, sugar beet and oilseed). All of this implied a departure from the uniform tariff.

With the return to democracy in March 1990 a new economic period started lasting until the present day. In spite of the different political orientation of the new democratic government, the main principles of the existing trade policy were maintained. The uniform tariff level was reduced to 11% in 1991 lasting through 1999 and then decreased gradually to 6% by 2003, and has since remained at that level. After almost two decades of a unilateral and non discriminatory strategy, the search for new markets for Chilean exports was pursued through a bilateral trade policy of free trade agreements. As Chile was already an open economy and the world was organized into trade zones and economic blocks, it was thought that further unilateral openings would only result in small gains and that reciprocal free trade agreements would allow for greater benefits, while trade deviation costs would be low. This did not mean that Chile would abandon its active participation in the multilateral negotiations at WTO. It would, however, allow faster change without introducing major distortions in the economy.

**Table 2: Free trade Agreements**

Country or Group of Countries	Type of Agreement	Signature Date	Effective Date
European Union (1)	Economic Association Agreement	18 November 2002	1 February 2003
P4	Economic Association Agreement	18 July 2005	8 November 2006
Canada	Free Trade Agreement	5 December 1996	5 July 1997
Central America	Free Trade Agreement	18 October 1999	
China	Free Trade Agreement	18 November 2005	1 October 2006
Costa Rica (TLC Central América)	Free Trade Agreement	18 October 1999	14 February 2002 (Bilateral Protocol)
EFTA (2)	Free Trade Agreement	26 June 2003	1 December 2004

Table 2: *Continued*

Country or Group of Countries	Type of Agreement	Signature Date	Effective Date
El Salvador (TLC Central América)	Free Trade Agreement	18 October 1999	1 June 2002 (Bilateral Protocol)
Guatemala (TLC Central America)	Free Trade Agreement	18 October 1999	23 March 2010 (Bilateral Protocol)
Honduras (TLC Central America)	Free Trade Agreement	18 October 1999	19 July 2008 (Bilateral Protocol)
Korea	Free Trade Agreement	15 February 2003	2 April 2004
Mexico	Free Trade Agreement	17 April 1998	31 July 1999
Nicaragua (TLC Central America)	Free Trade Agreement	18 October 1999	Negotiation ended
Panama	Free Trade Agreement	27 June 2006	7 March 2008
United States	Free Trade Agreement	6 June 2003	1 January 2004
Bolivia	Economic Complementation Agreement N° 22	6 April 1993	7 July 1993
Colombia	Free Trade Agreement	27 November 2006	8 May 2009
Ecuador	Economic Complementation Agreement N° 65	10 March 2008	25 January 2010
MERCOSUR (3)	Economic Complementation Agreement N° 35	25 June 1996	1 October 1996
Peru	Free Trade Agreement	22 August 2006	28 February 2010
Venezuela	Economic Complementation Agreement N° 23	2 April 1993	1 July 1993
Cuba	Partial Scope Agreement	20 December 1999	27 June 2008
India	Partial Scope Agreement	8 March 2006	17 August 2007
Japan	Economic Association Agreement	27 March 2007	3 September 2007
Australia	Free Trade Agreement	30 July 2008	6 March 2009
Malaysia	Free Trade Agreement		Negotiating agreement
Thailand	Free Trade Agreement		Joint Study Group finished
Turkey	Free Trade Agreement	14 July 2009	Parliamentary proceeding pending
Vietnam	Free Trade Agreement		Negotiating agreement

Source: DIRECOM

(1) The countries that participate as members of the European Union are: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Portugal, Spain, Sweden, the Netherlands, and the United Kingdom. As from May 1, 2004, the new member countries are: Cyprus, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Slovakia, and Slovenia.

(2) The European Free Trade Association (EFTA) is formed by: Iceland, Liechtenstein, Norway and Switzerland.

(3) MERCOSUR is formed by Argentina, Brazil, Paraguay and Uruguay. Chile participates as country associated to the Agreement, as well as Bolivia.

The list of free trade agreements signed by Chile since the early nineties till the present is shown in Table 2. The first steps were taken at the regional level by signing agreements with the countries of the Andean Community (Bolivia, Venezuela, Colombia, Ecuador and Peru) and joining MERCOSUR (integrated by Argentina, Brazil, Paraguay and Uruguay). More recently Mexico, Canada and the Central American countries were also included. During the present decade Chile has signed free trade agreements with the US, the EU, South Korea, New Zealand, Singapore, China, Japan, Australia, and Turkey, while negotiations are advancing with Malaysia, Thailand and Vietnam. This trade policy strategy has implied that in practice the tariff paid by Chilean importers is well below 6% and it is estimated that by the end of 2009 it was as low as 1.4%.<sup>4</sup> In fact, seventy percent of exports went to trade partners and this percentage is expected to reach 90% when the new agreements and particularly, the one with China become fully operational.

The free trade agreements opened new markets for exports, particularly for non traditional goods and services. They also carried some significant costs due to the loss of customs revenues, the restrictions to capital controls and the regulation of the use of patents, among other things. Indeed, they limited the degrees of freedom to manage national policy, but alongside other policy innovations

introduced, it is considered to be an adequate strategy to achieve a full integration to the world economy as a means to development for a medium size country such as Chile.

The previous analysis shows the evolution and differences in design of an apparently constant strategy of insertion to the world economy. The option is not one of moving from an import substitution to an export promotion strategy nor is it one of introducing a package of trade and financial liberalization, withdrawing the capacity of government to actively guide and intervene in development policies. As we will see in next section, the orthodox economic package introduced in early stages, including a misconceived macroeconomic policy, reached the objective of expanding exports, but also flooded the country with imports. Incentives to shift domestic production were not strong enough nor were the timing adequate to allow for industrial readjustment required to compete under the new conditions. Instead of increasing the capacity to penetrate world markets and reallocate domestic resources to be able to compete in national markets, the success on the export front was accompanied by a de-industrialization process. The strategy followed in the second trade reform forced by the debt crisis allowed for more room to promote development and that was the approach adopted by the democratic governments after 1990.

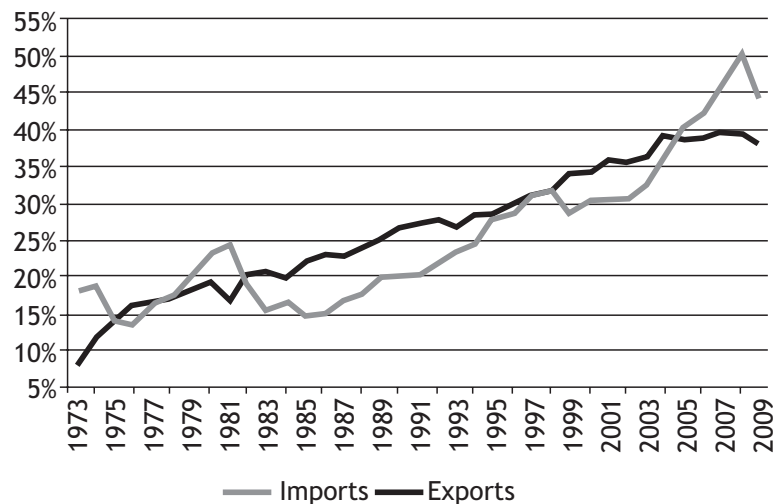
### 3. TRADE OPENING, GROWTH AND MACROECONOMIC POLICIES

The analysis on the effects of opening trade requires differentiating between the pre and post 1989/1990 periods. This section will show the relation between the evolution of trade and growth performance during the period and will analyze expected and actual outcomes. Macroeconomic policy innovations introduced after 1990 will also be reviewed and their main effects on volatility and other key variables affecting performance will be identified.

The importance of the structural change introduced is clear when the evolution of the

open trade coefficient (exports plus imports as percentage of GDP) is examined. During the early 70s, before tariff reductions, the coefficient was around 25%, while during the first period up to 1989 it jumped to an annual average of 36% and continued to expand in the more recent period registering an average of 58%. The averages, however, hide the continuous increase in the degree of opening of the Chilean economy. By 1981 the coefficient reached near 42% and in 2008 it was close to 90%, but decreased during the financial crisis in 2009 to 82%.

**Graph 1: Export and Import Evolution 1973-2009 (% GDP)**



Source: Central Bank of Chile.

Exports (measured by the export coefficient) increased from 7% in 1973 to 19% in 1982, 24% in 1990 and reached 40% in 2005, but then stabilized at that level afterwards and decreased in 2009. A similar evolution is observed on imports, although with less intensity and concentrated particularly at the beginning of the process from 1974 until 1981. The import coefficient (measured by the ratio between imports and GDP) passed from 18% in 1973 to 26% in 1981 falling to around 20% after the debt crisis and recovering after 1990 reaching 50% by 2008 and then decreasing during the 2009 crisis to 45% (See, Graph 1).

The annual rates of growth of exports and imports denote the magnitude of the opening process during the whole period. Exports grew

at 10.6% per annum from 1973 to 1989, while the rate during the 1990-2009 period was 7.2%. A different pattern is observed in relation to imports since during the first sub-period they grew only a 3.6%, while it accelerated after 1990 registering a 10.6% annual rate during the second sub-period. The slow growth in the first sub-period hides a very rapid expansion during the beginning of the tariff reduction. From 1973 to 1981 imports expanded and grew at an annual rate close to 14%, concentrated in consumption goods such as, perfumes and cosmetics, automobiles, television, alcoholic beverages and cigarettes, etc... mostly due to the increase demand of middle and upper incomes groups (R. Ffrench Davis, 2004). Changes experienced in the export structure

during the period went in one direction, independently of the sub-periods. There was an increase in the share of non elaborated basic products from 20% in the 70s to 33% on average during the 2000-2004 period. Semi-elaborated basic products decreased from 74% to 55% during the same period and manufacturing products (not including non elaborated basic products) increased their share from 6.5% to almost 13% of the exports. Today the main markets for Chilean export, in order of importance are the EU, Latin America, US and Asia, but more than two-thirds (68%) of manufactures go to Latin America.

According to theory, this trade dynamic should result in a related period of rapid growth. This was not true for all of the period, with significant variations in the performance between the sub-periods considered (Table 3). During the 1974-89 sub-period, the rate of growth of GDP was 2.9% per year, while from 1990 to 2005 the economy grew at 4.9% per year. As noted above, this difference is not apparently consistent with the export performance that during the former period grew at 10.6%, and during the latter at 7.2% per year. In the most recent period the dynamics of exports resulted in faster economic growth.

**Table 3: Main Macroeconomic Indicators**

Variable	1974-89	1990-2009
PGB Growth (%)	2,9	4,9
Export Growth (%)	10,6	7,2
Inflation Rate	79,9	7,0
Unemployment	18,1	8,7
Real Wages Growth	0,3	3,0
Fixed Gross Investment (%GDP)	13,6	21,6

Source: Ffrench-Davis (2004) and Central Bank of Chile

The 1990 - 2009 experience not only differs significantly from the first phase of trade opening in Chile, but also from the rest of the Latin American countries. In fact, the elasticity of output to export growth increased significantly between the sub-periods passing for 0,275 to 0,680. This elasticity is even higher than the one registered by the best performer in Asia during the 1989-2000 sub-period (S.M.Shafaeddin, 2005).<sup>5</sup> In the Chilean case, exports are mostly based on natural resources with an increasing share of agriculture and fishery products. The increase of the elasticity coefficient also responds to the growth of non-tradable output that has tripled the rate of growth during the last sub-period. This, in turn, relates to the recovery of domestic demand and to macroeconomic policy innovations, reviewed below.

The experience of the 1973-1989 sub-period presents similarities to the rest of the Latin American Region. Fast export growth but a disappointing performance in the growth of output.<sup>6</sup> This result occurred due to the

strategy followed that combined a trade opening shock affecting mainly the import side, although exports also showed a rapid expansion. In addition, the macro economic package was very restrictive and the adjustment worked through a contraction of effective demand, which harmed mostly non tradable (R. Ffrench-Davis, 2004). As important was the de-industrialization that resulted from the tariff shock, since imports competed with manufacturing industry and production linkages weakened. The timing and the intensity of the shock did not allowed for an industrial restructuring, while the reduced domestic demand reinforced the growth constraints, particularly in the non tradable sectors. The share of manufacturing value added on total value added decreased from 25-26% registered before 1974 to around 18% by 1989. The recovery that took place after 1990 was not fast enough to improve the situation. The share of the industrial sector during the last decade was 15.5% of GDP, showing a continuous loss of production capacity.

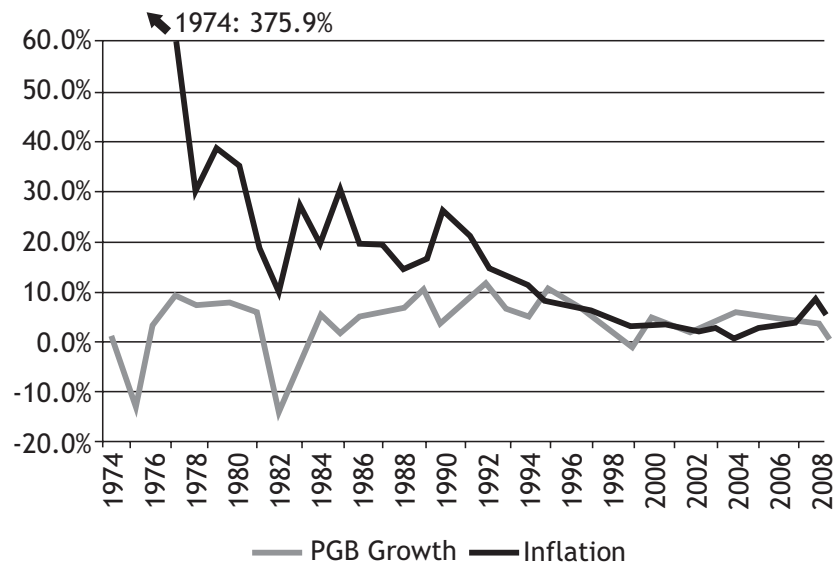
A third component of the Chilean story is the change in macroeconomic policies and the building of new institutions. This process began after the debt crisis of 1982-3, but major innovations were introduced from 1990 onwards.

The depth of the 1982-3 debt crisis revealed various important shortcomings of the macroeconomic management and regulatory institutions. The fixed exchange rate regime was replaced and new laws for banking and bankruptcy were introduced in the mid 80s. The Central Bank was granted full independence late 1989 and by law it was precluded from financing the government. The successive democratic governments maintained monetary and fiscal discipline but added several new instruments. In particular, inflation targeting, an unremunerated reserve requirement for foreign capital, a floating exchange regime and a fiscal rule of a 1% structural surplus were introduced. More recently two funds were created. FEES (*Fondo de Estabilizacion*

*Economica y Social*) was introduced in 2007 to ensure fiscal financial stability accumulating resources during years of fiscal surplus and contributing to finance deficits if necessary. In fact, FEES constitutes a complement to the structural balance policy. FRP (*Fondo de Reserva de Pensiones*) was created in 2008 to contribute to financing fiscal obligations associated to solidarity pensions, old age, handicaps and others, when needed. These instruments played an important role in reducing inflation, softening the intensity of the cycles and providing incentives for growth.

High inflation, a common feature of the Chilean economic history, was reduced from annual rates of 350% in the mid 70s to 20% in the late 80s and stabilizing between 2000 and 2009 at a level around 3%. The rate of output growth doubled the rhythm of the first period of opening reaching 4.9% from 1990 to 2009. The investment coefficient also increased from 14 to 22% between the same periods.

Graph 2: Growth and Inflation, 1974-2009



Source: Central Bank of Chile.

As already mentioned, among the innovations introduced during the period were the introduction of an unremunerated reserve requirement (URR) for foreign credits and a rule for the fiscal balance based on a target of a structural surplus. The first instrument was designed to shield the economy against unwanted short run volatility due to speculative movements of capital from abroad

while the second reduced fiscal policy discretion limiting the fiscal expenditure response to revenue volatility.

The URR increased the cost of bringing speculative capital from abroad when the exchange rate appreciated and contributed to maintain a higher exchange rate to protect exports. This requirement was originally

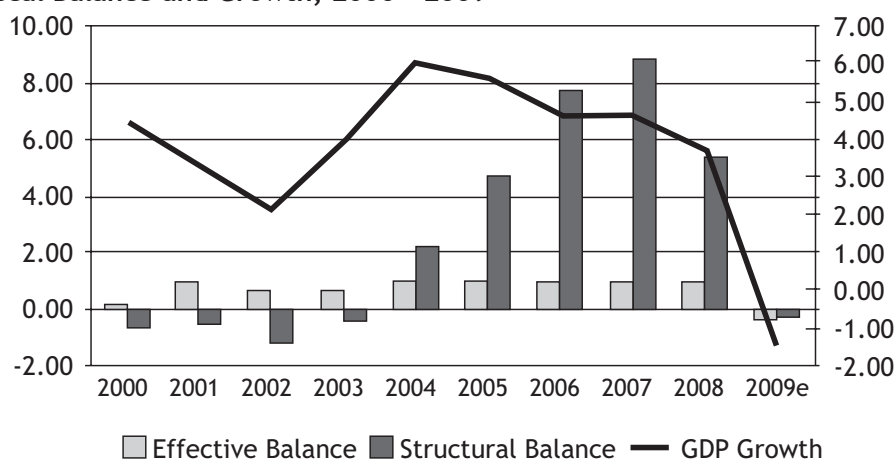
established at a 20% of all foreign credit that had to be on deposit at the Central Bank between a minimum period of 90 days and a maximum of a year, depending on the time frame of the operation. Later on, in 1992 when foreign credit increased, the requirement was raised to 30% and the coverage was enlarged to include deposits in foreign exchange and open market issues by Chilean firms in foreign countries (R. French-Davis, 2004). The measure was interrupted in 1999 when the Asian crisis deeply affected the economy. Indeed, the use of this instrument was not welcome by the IMF, since it implied a control on capital movements. However, while it lasted it helped sustain the exchange rate without raising interest rates.

Another instrument introduced was a rule that guided the management of fiscal policy considering structural and conjuncture factors. The budget was designed according to potential output and the long run price of copper, the main export and a crucial source of public income. Revenues and expenditures were defined according to this criteria and a structural target of 1% surplus was created. The rule was introduced when the effects of the late 90s crisis were still present and allowed the government to play a counter cyclical role, increasing expenditure beyond what would have been the case if fiscal policy continued to be

defined on the basis of the current situation. This would have resulted in a reduction of fiscal expenditure to compensate for decreasing revenues and hence, in a deepening of the recession. The opposite would happen during the recovery since to be credible the financing during the downswing would have to come from the additional revenues coming in the expansionary phase. As the cycle is judged on the basis of structural parameters and the potential capacity of the economy, this allowed for positive results.

The rule applied during the last six years produced several outcomes. Fiscal policies played an anti-cyclical role contributing to stabilize growth. It contributed to sustain the exchange rate by increasing public savings in the expansionary phase of the cycle and hence, supporting exports. It reduced interest rate volatility and increased the credibility of the government in economic management and as a consequence, a substantial decrease of sovereign risk and interest rates was registered. Access to foreign funds was easier and less expensive. This allowed for a reduction of the public debt and improving the financial conditions of private debt. Lastly, and just as important, it allowed expanding the level of public social spending even when the economy was in a downward cycle.

**Graph 3: Fiscal Balance and Growth, 2000 - 2009**



Source: Chilean Budget Office.

The two recent innovations contributed also to diminish volatility and to ensure the sustainability of the structural fiscal rule. FEES helped in particular, by investing abroad when copper prices had a rapid expansion avoiding

excessive demand and inflationary pressures and as a result, it contributed to moderate the appreciation of the exchange rate. This instrument as well as FRP contributed to soften the impact of the recent financial crisis.



#### 4. GLOBALIZATION: A POSITIVE SUM FOR CHILE

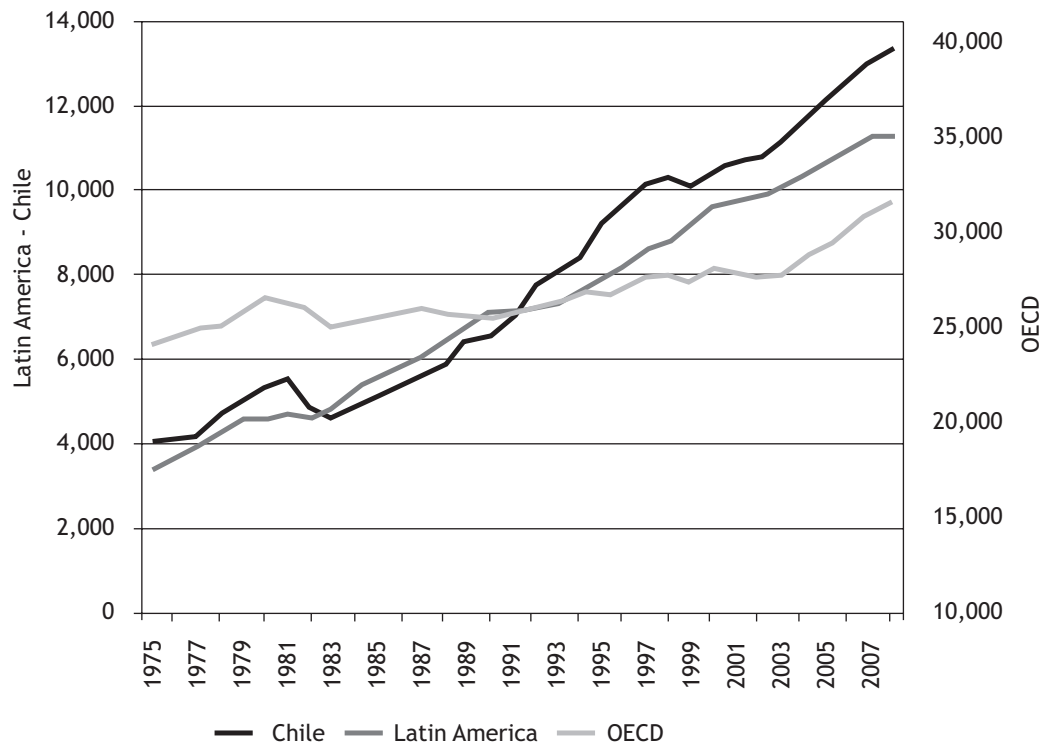
The analysis made in previous sections shows the road followed by Chile in its integration to the world economy. The orientation of the strategy chosen continues up to the present, but the specific design introduced in the earlier stages significantly differs from the one progressively adopted after the mid 80s and especially from 1990 onwards. From orthodox shock management of trade opening and macroeconomic policies, the country evolved to reintroduce the use of instruments that could improve selectivity. This was done maintaining the main objective of integration to the world economy. This option was adopted recognizing that it constitutes the best alternative for a medium size country as Chile.

The paper turns now to its main objective, to identify winners and losers during the process described above. As in all major economic changes some sectors or social groups win, while others pay the costs. However, it is

necessary to assess the results for the country as a whole and particularly for the Chilean people. To address this question, growth performance and evolution of per capita income will be examined, focusing mainly on the period starting in 1990. The analysis will then turn to the poor and assess the outcomes in their well being during this period.

Economic growth since trade liberalization reform has been sustained and accelerated, particularly after 1990. The result has been a substantial increase of per capita income<sup>7</sup> from USD 4.067 in 1975, to USD 5.636 in 1989 and reaching USD 13.333 in 2008. This performance denotes a significant expansion compared to the historical record of but also in comparison to Latin American and even, the OECD countries. Chile's per capita increased 3.3 times since the beginning of trade opening (1975-2008), compared to a factor 1.5 and 1.9 registered for Latin America and OECD respectively.

**Graph 4: Evolution of per capita GNI PPP, Chile, Latin America and OECD: 1980-2008**



Source: World Bank World Indicators

Growth since 1990 onwards is also impressive. In fact, the increase in per capita income amounted to 1.5 times the rate of increase for Latin American

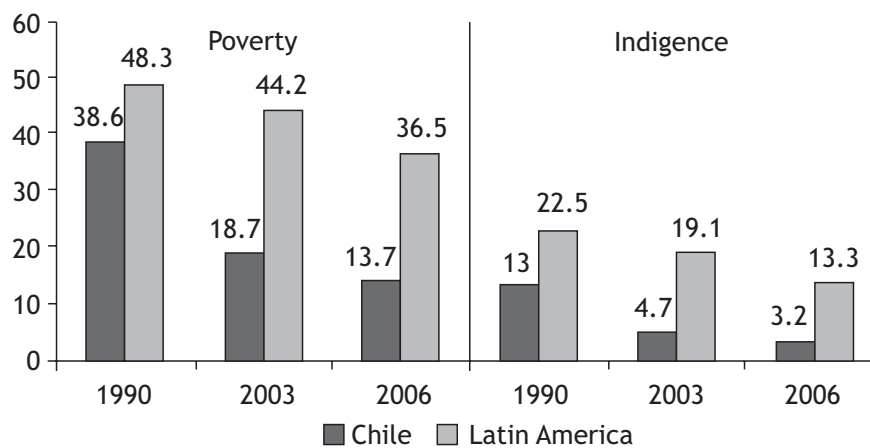
and in OECD countries. Consequently, not only did the income gap decrease during the period, relative to Latin America it became positive.

Latin American income per capita was 36% higher than in Chile in 1975; the gap was reduced to 9% by 1989 and by 2008, the Chilean income was 36% higher the Latin American. Income gaps with OECD countries also diminished from 77% to 62%, but the distance is still large.<sup>8</sup>

The expansion of per capita income illustrates the evolution of the average citizen's purchasing capacity. In addition there has been a substantial improvement of the poor from 1990 onwards. Poverty, measured by the percentage of popu-

lation below the poverty line, was reduced to less than half during this period. Between 1990 and 2006 it decreased from 38.6% to 13.7%. The population below the indigence line, the extreme poor, also decreased from 13% to 3.2% during the same period. It should be mentioned that during the same period both indicators also decreased for Latin America as a whole, but progress has been slower. Poverty and indigence in Chile is the lowest of the region and its lead has been growing in the past couple of years, indicating a faster progress in this area.

**Graph 5: Poverty and Indigence in Chile and Latin America, 1990 and 2006**



Source: CEPAL, 2009

Another important dimension to be taken into account is whether income growth resulted in an increase in welfare for the population. During the period 1992-2002, welfare progress measured by the respective population censuses indicates a notorious general improvement in the country, especially in the case of the poor. By the end of the period, the housing shortage had decreased by 43%, with 75% of the population living in private residences, and 73% of those where considered being of good quality. Access to basic services such as electricity, drinking water and sewage also increased, particularly for the poorest 20% of the population. Access to appliances and electronic equipment also increased, with more than 80% of the households owning a refrigerator, laundry machine and colour TV. More than 50% had access to a fixed or mobile telephone and 35% owned a vehicle. Although access of the poor still lags behind national averages, the increases in the decade considered was significant. In 1992 only 8% of poor households had a refrigerator,

while 45% of them owned one ten years later. The same happened with laundry machines, the percentage jumping from 0.3% to 46% (E.Tironi, 2005, E. Ottone and C.Vergara, 2006).

Globalization in Chile has had a positive impact on the population. Their income per capita is considerably higher; the growth was significant and access to consumer goods relative to neighbouring and developed economies either reversed or increased. The positive effects of the process have also reached, to a greater extent, the poor. The percentage of the population living in these conditions is smaller and extreme poverty has almost been eradicated. National and personal incomes have increased as has access to basic goods and services. Nevertheless it is important to point out that these substantial gains could not have been accomplished if the globalization reforms and economic strategies had not been accompanied by a strong and comprehensive growth and equity policy.

## 5. WINNERS AND LOSERS DURING THE PROCESS OF GLOBALIZATION

Global economic indicators show that on average, all of the population including the poor gained from globalization. However, during the process there have been relative winners and losers. This section attempts to identify them by analyzing the changes in the production structure and labour insertion, concentrated in the most recent period from 1990 to the present.

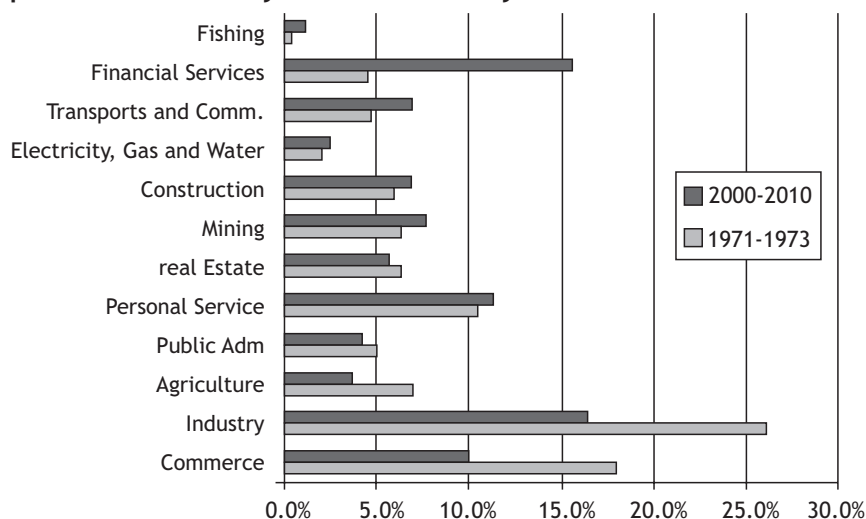
### 5.1 Globalization, Economic Reforms and Production Restructuring

Globalization and economic reforms in an environment of fundamental political change led to a significant transformation in the production structure. Restructuring produced changes between and within sectors. Looking at these changes helps to identify winners and losers. The policy package applied in the first stage responded not only to trade opening, but as explained above, it was accompanied by an orthodox macroeconomic policy and a major ideological change that implied dismantling some of the previous economic structures, particularly agrarian reform and State involvement in production activities. It is in this context that the productive structure changes will be analyzed.

The main winners of the process are the sectors that increased their share in GDP. The most evident winner is the financial services sector whose share increased three and a half fold, rising from around 4.5% to 15.6% from the

1971-73 period to the 2000-2009 period. The end of government intervention in financial institutions, the opening of financial markets and the reforms of the pensions and health system in the early eighties created strong incentives to invest in the sector. In fact, the latter reforms created a guaranteed market since it was fed by compulsory contributions from all workers. In parallel, trade liberalization proved to be a powerful incentive to increase production of fishery exports, a sector in which the country possesses a comparative advantage. Although it only contributes to 1.2% of GDP, this represents 4 times the share this sector had at the beginning of the process. Today, Chile is a major player in world fish markets, particularly with salmon, but also with fish flour and sea food in general.

Transport, communications and energy expanded its contribution to national output responding to the incentives introduced to attract foreign investment in sectors where technological change and global networking are fundamental. Mining also increased its contribution to GDP as a result of the end to the public monopoly on basic minerals. The new Constitution of 1980 also produced incentives introduced to attract foreign investment and a more conducive economic environment for exports. These sectors show the impact of major reforms, since they have a discontinuous jump in their contribution to domestic output coinciding with the timing of the reforms and later on, maintained their growth at rates similar to the average growth of the economy as a whole.

**Graph 6: Participation in the GDP by economic activity. 1971-1973 and 2000-2005**

Source: Central Bank of Chile.

Naturally, not all economic sectors turned out to be net winner of the structural reform. Three sectors that originally contributed a combined 51% of GDP saw their share decrease to 30% during the more than three decades analyzed. These sectors include agriculture, manufacturing, industry and commerce. Explanations and performance differences resulted from specific factors in each sector. All of them registered major intra-sector transformation during the period.

Agricultural performance shows a substantive expansion after the introduction of new policies during the mid seventies. This resulted from recognition of property rights to landowners that had been either expropriated or occupied by peasants during the successive land reforms that started in the mid sixties but became more radical during the 1971-1973 period. Agri-business growth became another key feature of Chile's success story during the period. Growth of exports heavy products concentrated in fruits, particularly, apples, oranges, grapes, pears, melons and kiwis, with avocados and berries registering the fastest growth. Investment from nationals' entrepreneurs accounts for most of the resources, including the portfolio diversification of financial and industrial companies, but also foreign investment and close links with international traders were established. Stirring away from family exploitation, this activity is now led by commercial ventures run as modern enterprises

along with technological development and opening markets supported by government.

However, commercial agriculture subsisted with traditional agriculture; while the former benefited from access to world markets, the latter could barely survive with competition from imported agricultural products. Traditional agriculture has historically concentrated in small sized unit production of cereals, particularly wheat. In part, their survival was possible because government introduced price bands to sustain key products like wheat and sugar beet. Yet, this instrument is under question, both internally and internationally by WTO.

Actions taken by wheat and sugar beet producers to survive competition brought by the liberalization process clearly illustrate two different models of restructuring. In the first case, even though the land area devoted to wheat production decreased, production increased as yields per hectare expanded. This was the consequence of different processes: concentration of land by commercial enterprises, improvement of technology and the partial destruction of traditional farming. In the case of sugar beet the situation was characterized by the existence of IANSA, a quasi monopoly in processing sugar, a former State enterprise that also had its own production fields, IANSA constituted the main buyer of produce from small producers. In this case, land use has increased as well as production and yields.

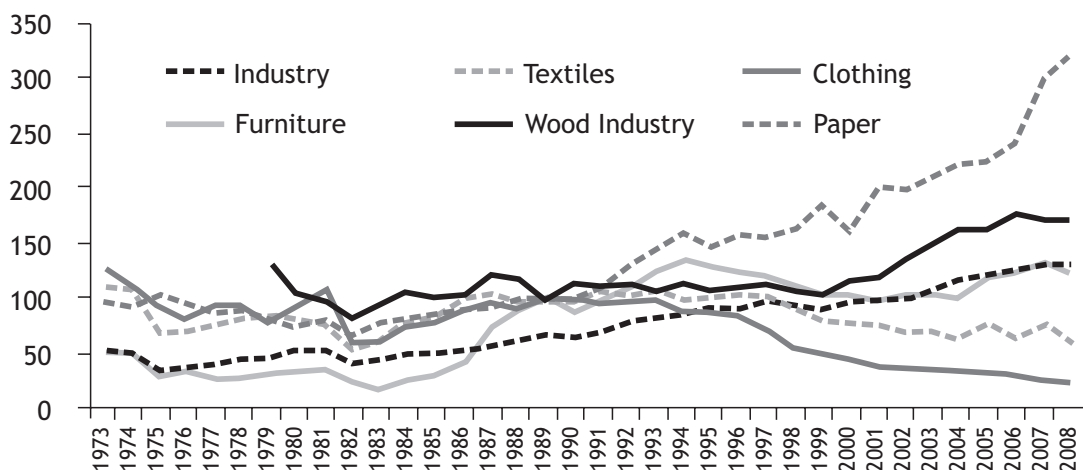
As mentioned, the market is also protected against competition by imported sugar.

Another segment of traditional agriculture accepted the challenge of adapting to the changing economic structure by shifting from vegetable production for domestic markets to fruit production for exports. Chilean fruit exports were booming, particularly after the debt crisis and up to the end of the 80s. This led the small agricultural producers to move from traditional products commercialized in the domestic markets to production for large export companies. During the 70s the sector was dominated by three domestic firms, but given the incentives offered by government and rapid expansion, foreign companies entered the sector. They acquired a dominant market position and many small scale growers were incorporated into the system as the number of export firms expanded rapidly.<sup>9</sup> After successful transformations small producers confronted an increasing debt level with traders and a tightening of the conditions which led to a forceful compromise of producers to the export company. Some of them sold land, given that prices increased with the change in the use of soil. Land concentration followed as a result of acquisition of land by traders or by new large investors of rural or mostly urban, origin. On the other hand, many small growers who opted out of business due to debt problems have little alternative than to turn to poorly-paid seasonal

labour and informal activities (W. Murray, 1998). There were winners and losers in agriculture, but clearly the small growers ended off worse than when they started.

A different pattern can be identified for the manufacturing industry where the decrease has been a continuous one since trade opening began. The share of manufacturing in GDP fell from 26% to 16% during the period. In particular, half of the loss in the share was registered in the early period of trade opening given the intensity and timing of the tariff reduction. This especially affected industrial branches of textiles, clothing, leather, shoes, furniture, automobile assembly and spare parts and electrical machinery that accounted for nearly one-fourth of output and a larger share of employment. Some branches, however, managed to expand their production, based on imported inputs thus reducing domestic value added and destroying backward production linkages. Other branches expanded by adding value in the processing of basic agricultural products. This was the case of wood and wood processing particularly, pulp and paper, and food processing including packing and conservation of sea food and fish and fruits and the wine industry. The aggregate result was, however, a de-industrialization process that affected not only branches but also small and medium enterprises specialized in the most affected products. In industry, therefore, there were more losers than winners.

Graph 7: Industry Growth, 1974-2008



Source: Central Bank of Chile

Lastly the decrease in commerce's share of GDP was not a direct consequence of trade liberalization, but due to changes occurring inside the sector, particularly in retail commerce. Commerce traditionally involved a large number of small shops that were not affected by trade opening since they adapted to the changing origin of the products. However, these shops were subject to competition in increasingly concentrated markets from firms that simultaneously perform the role of importers, distributors and sellers.

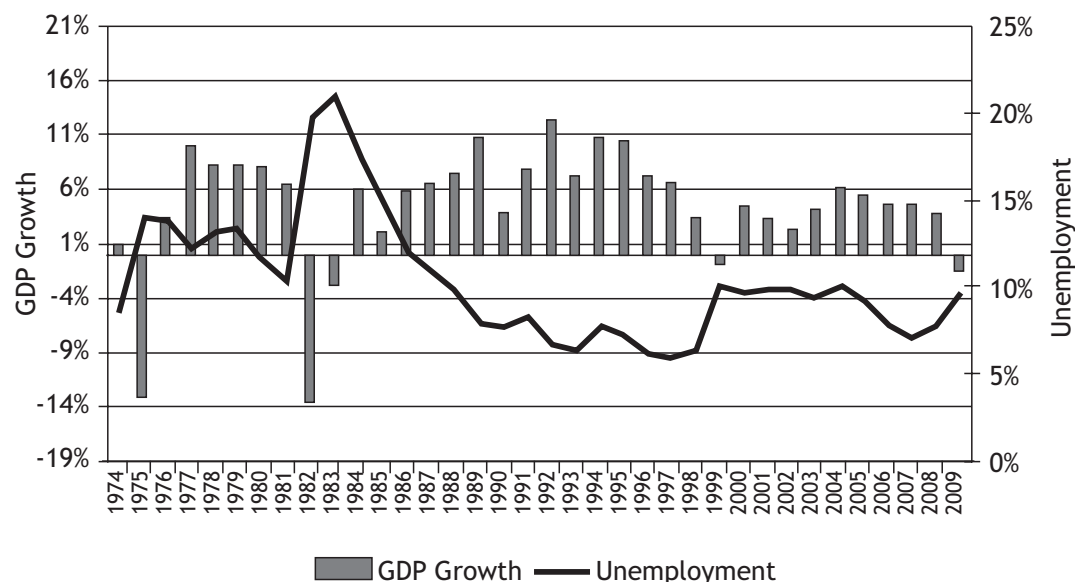
Competition initially started with the penetration of supermarkets into the retail market. Later on supermarket became suppliers of the products to be sold by small shops and then introduced product diversification, incorporating clothing as well as all types of consumer goods. Finally, they moved on to developing own financial instruments (like credit cards), and more recently, to complete their integration, they have created their own banks. It should also be added, that through the investment in shopping centres they also became main actors in the real-estate business.

For small shops the relation was dependency among unequal partners. This is also the case for small industrial enterprises that were suppliers of main retailers. Winners and losers clearly emerge in this process. The similarity between the three sectors denotes the importance of going beyond this analysis to incorporate the changes in the performance of productive units according to their size.

## 5.2 Productive Restructuring, Employment and Labour Markets

Determining changes in production structures is important to identify those who gained and lost throughout the process. It is also necessary to analyze how globalization affected employment and working conditions. This section reviews first, the correlation between growth and employment creation; and second, how the situation of those employed in small and medium enterprises was affected by restructuring. Lastly, an analysis of the transformation of the employment structure will be made.

Graph 8: Growth and Unemployment, 1974-2009



Source: Central Bank of Chile

Growth performance after opening the economy has been better than in the past exceeding the growth exhibited in neighbouring countries. The rate of growth accelerated particularly since the second half of the 80s and reached its peak level in the nineties, evolving from a 2.9% annual rate of growth during 1974-89 to a rate of 4.9% during the 1990-2009 period. Growth was, however, volatile and vulnerable to foreign shocks such as the debt crisis in 1982 and recurrent crisis during the nineties, as well as more recently, by the financial crisis. Nonetheless, unemployment decreased as growth increased. During the first period the rate of unemployment was 13% on average, while in the more recent period it decreased to 8.2%.<sup>10</sup>

The relationship between growth and unemployment has been asymmetrical. While negatively correlated, the elasticity is higher during the recession than in the recovery phase of the cycle. Furthermore, during the nineties the return to the unemployment level registered before the Asian crisis took a longer time than what was originally anticipated. Partly this is explained by the increased volatility due to a more vulnerable open economy that had been subject to recurrent crisis during the 1990s. This had led to a slower recovery in the employment rate given that hiring decisions are restricted when uncertainty about sustainability of recovery exists. Another important factor in the recovery has been that the contribution to employment creation of small and medium enterprises deteriorated during the restructuring process.

As shown previously, small enterprises in agriculture, industry and commerce were most affected by the opening shock and demonstrated a limited ability to adapt to more demanding economic conditions. Although only fragmentary information is available, there is evidence that important sectors were forced

to close their activities during the early period because of increased competition both from imports and larger sized domestic enterprises. Some of them however, managed to increase efficiency and recover their employment capacity after the debt crisis. This was partly feasible because of the softening of the opening strategy to protect these groups against import competition allowing them a longer period for restructuring.<sup>11</sup>

More complete and consistent data available from 1990 to 2006 allows for a more systematic analysis of that period (R. Infante, 2006 and E. Román, 2006).<sup>12</sup> Small enterprises (6 to 49 workers) and medium size enterprises (50 to 199 workers) were responsible for around 43% of total employment between 1990 and 1996, reaching a peak at 48% in 1996. As can be seen in table 4, small sized enterprises increased their contribution to employment creation up to 2006 while medium size enterprises maintained its share around 13%. Large size enterprises (200 or more workers) contributed around 13% in 1994 and reached 19% by 1998, at the beginning of the Asian crisis.

Those not covered above were employed in the informal sector, constituted mostly by self employed, workers and employers of micro enterprises (1 to 5 workers) and domestic services. They gradually decreased their level of employment during the period, particularly in micro enterprises and to a lesser extent, self employment.

It must be noted that large enterprises adjusted their level of employment before the 1998 crisis, being able to recover and expand labour absorption at a sustainable rate. A different pattern is observed in relation to small enterprises that were able to increase employment prior to the crisis but had to adjust during the crisis reducing their level of employment until 2006.

**Table 4: Employment structure according to size of enterprises, 1990-2003**

	1990	1992	1994	1996	1998	2000	2003	2006
Enterprises	55.1	55.1	55.9	57.0	56.9	58.0	57.9	59.7
Large (200 and more employees)	12.4	12.4	13.3	9.3	19.9	19.6	22.5	23.3
Medium (50 to 199 employees)	13.0	13.0	12.6	12.7	12.8	12.7	12.5	13.3
Small (6 to 49 employees)	29.7	29.7	30.0	35.0	24.2	25.8	22.9	23.1
Informal sector	43.4	43.4	42.2	41.3	41.4	40.0	40.2	38.0
Micro (1 to 5 employees)	14.5	14.5	13.6	14.3	15.2	13.1	12.1	10.6
Own account workers	22.6	22.6	22.4	21.0	20.4	20.6	21.3	21.2
Domestic Service	6.3	6.3	6.1	6.0	5.8	6.4	6.7	6.2
Others	1.5	1.5	1.9	1.6	1.8	1.9	1.9	2.2
Total occupation (in thousands)	4,201.1	4,658.0	4,762.3	5,095.9	5,158.8	5,149.4	5,560.2	5,960.2

Source: Infante (2006b). Based on CASEN surveys

By 2006, large enterprises' contribution to total employment had increased to 23%, eleven percentage points higher than in 1990. Medium size firms maintained their contribution at around 13%, while small enterprises reduced their share from 30% to 23% during the same period and by 12 percentage points compared to 1996.<sup>13</sup> This can be explained by the loss of market share experienced by small enterprises and by the financial impact of the substantial raise of interest rates, a measure adopted by the monetary authority to adjust to the crisis.

Data on sales by size of enterprise during the 1994-2000 period show that small firms saw their level of sales as well as their market share decrease, while large enterprises captured an increasing portion of the market as they constantly raised their sales. The lost experienced by the small enterprises amounted to 1.7 percentage points in their market share while big firms increased their share by 3.6 percentage points, capturing nearly 77% of the total market by 2000 (E. Román, 2006).

Another significant factor was access to credit during the period for small and micro enterprises. In 1994 small enterprises accounted for 12% of total sales, while they received around 14% of credits granted by the

banking system. However, only 63% of small enterprises received a credit while 84% of large enterprises did.

As the Asian crisis hit Chile, large enterprises promptly reacted during 1998 by adjusting to the prevailing conditions and reducing employment until the year 2000, only to recover and expand their labour absorption by 2003. On the contrary, small firms could not adjust by reducing employment and postponed it until 2000 facing more expensive financing conditions, resulting in insolvency for many. The effects of this on the recovery of the sector can be seen even today.

Due to the circumstances described above, small enterprises were losers not only during the initial liberalization reform but also continued to be subject to a less favourable environment even after they adapted to the new economic conditions. Neither the policy to facilitate their access to credit nor the policy response to the crisis that strongly adjusted short term interest rates took into account the situation of small enterprises, or more importantly, the significance of their contribution to employment and incomes of middle classes. On the other hand, there was an insufficient recognition of the heterogeneity



of production that determines the different adaptation capacities. Therefore, unless the unlevelled playing field is recognized and incorporated in policy design, increased competition throws small players out of the market leading to concentration.

This is the case in Chile. The retail business is under rapid expansion and concentration. Mergers and acquisitions have transformed competitive markets in which small scale businesses were able to successfully compete into markets dominated by a few retail corporations covering things such as supermarkets, department stores, warehouses and financing. While ten years ago two large supermarkets covered 26% of the market, today the same two plus the entrance of one department store into this activity cover 70% of total sales. Concentration has affected small commerce and national suppliers since the uneven bargaining power is exercised through practices that are close to unfairness including sales below costs, inadequate promotion of branches, promotional discounts, credit facilities and unilateral changes in paying terms, among others. This led to a demand that the National Economic Prosecutor (*Fiscal Nacional Económico*) and the Free Competition Tribunal (*Tribunal de Defensa de la Libre Competencia*) introduce a regulation accepted by all actors involved that takes into account good practices and particularly, the obligation to inform actors of any new acquisitions. At the same time, in response, suppliers and small shops created alliances to strengthen their bargaining power.

A similar situation also occurred in retail through department stores. Four big department stores dominated the entire market, three among them also being main actors in the supermarket business. The broadening of market shares included warehouse businesses. Ten years ago there were 5000 operators, while today only 2000 survive. Concentration in pharmacies through three main operators that cover 96% of the market has also seen the reduction of small pharmacies today to one-third of their level fifteen years ago. In 1990

there were 1620 independent stores; today only 500 remain (Estrategia, 2006).

Clearly globalization and operation in open markets requires moving to larger scale production and hence, concentration of markets. In the case of Chile, it also meant the internationalization of businesses. Chilean retailers are also main actors in other Latin American nations such as Argentina, Peru, Colombia, Brazil and Mexico. There are, however, at least two problems that have to be confronted. First, ensuring fair competition exists to allow for small business development. Second, there is a need to have a policy to facilitate the adaptation of small businesses to the new market conditions, particularly in relation to credit access.

Assets of companies owned by the main economic groups constituted around 250 different stocks exchanged on the market with a value that was equivalent to 75% of GDP in 2000. The 20 big economic groups were owners, directly or indirectly, of 84% of the enterprises quoted in the stock market with the top five groups owning 47.6% and the largest owning 20.5% (F. Lefort and E. Walker, 2004). At present, the five big retailers are the sector with largest weight in the stock market, reaching 23% of the stock exchange index in 2007 as compared to 2.3% in 1992 and 6.3% in 2000. They displaced the energy and communications sector, another highly concentrated sector, which account for 22% of the index.

Property concentration is a reality that leads to the existence of few big players in most economic sectors. It is particularly evident when examining the concentration in the financial sector: Banks, Administrators of Pension Systems (AFP), and Health Insurers. Excluding the *Banco del Estado* (the only public bank in the system), the three largest private banks manage 60% of the credit operations of the system, mostly lending to mega enterprises or big firms (81%). On the other hand, the three largest AFP manage 70% of the pension funds and their investments take up more than 8% of the stocks traded in the market. In the health

sector eight of the private providers (ISAPRES) managed the health insurance of almost 18% of the population of the country, equivalent to 88.5% of the dependent workers affiliated in 2003. Seven of the 18 ISAPRES captured 91.8% of the total beneficiary portfolio representing 93.4% of the contributions to the system (S. Molina, 2005).

Concentrated financial and technology markets are naturally linked to world businesses under globalization. It is, however, necessary to ensure competition and promote access of new players. A sound regulation and control is also required to ensure the protection of consumers and employment creation when the traditional sources, namely small enterprises, are under heavy transformation pressures.

### **5.3 Changes in Labour Market Structures: Privatization, Tertiarization, Informalization and Precarization**

Changes of the employment structure can be analyzed from different perspectives. One such perspective is the relation between employment and the public sector share on employment. Chile, as most of Latin American countries, registered a decrease in the public sector contribution to employment from 12-13% in the early seventies to 8-9% in the early 2000s. This is consistent with the privatization process and with the successful policy of reducing fiscal deficits by containing wages in a first instance, but later through promoting voluntary retirements and while reducing new hiring. The share reached the minimum level by the mid 80s and from there on there was progressive expansion under the democratic governments, but still no return to previous levels.

The reduction of public employment can either result in a loss or a benefit for the people affected. If the result is unemployment, then those affected constitute losers. However, often the firing was accompanied by financial incentives that promoted the creation of new businesses, making the former public employee an independent worker. The change of job nonetheless implies a loss of status and security

given the protection and stability associated to public service jobs, but not necessarily less incomes since public salaries strongly deteriorated during the 80s and were usually below the alternative incomes paid in the private sector. Albeit this, the changes in the public sector employment had a significant effect on the middle class. Public employees constitute the middle classes and a factor of homogeneity in societies where income gaps are large. In particular, full social coverage was guaranteed for the employee and his or her family as well as access to own a house and to education for their children. This was no longer available and introduced uncertainty to those affected.

There is also a significant group of Chileans employed in the public sector that were forced to leave not only their jobs but the country after the 1973 takeover by the army. Emigration reached its peak in the 70s and 80s, particularly during the former decade, explaining 60% of all the Chilean born emigrants with residence abroad since 1950 to the present. Political reasons were the cause of migration for 25% in the 70s and for 10% in the following decade. If family reasons, mostly migrating after to reunite the family, are added they explain more than half of the motives to emigrate (Solimano, A and Tokman, V.E. 2006). Although labour insertion in the receiving countries meant on average upward labour mobility, this in most cases could not compensate for the human costs suffered.

A second process of change is in relation to whether the new jobs created are in the production of goods or in service activities. In Chile labour absorption since 1990 has been concentrated in services, while it has decreased in the production of goods. Seventy per cent of new jobs created during this period were in service activities. The jobs were concentrated in high productivity services, particularly in the financial services, compared to low productivity personal services. The share of employment of agriculture and manufacturing industry decreased. This evolution differs from the Latin American average during the same period where 90% of the new jobs created were in services, but mostly concentrated in

low productivity activities. However, as will be seen below, this gave place to new labour problems associated to the employment relation used in these activities.

A third process affecting the employment structure is the evolution and importance of the informal sector.<sup>14</sup> The share of employment in this sector compared to urban employment increased in Latin America from 49% to 52% during the last decade. The evolution of the informal sector in Chile shows a different trajectory than that taken by regional averages and trends. The share of the sector on urban employment decreased from 43% to 38% between 1990 and 2006, a reduction that can be observed in all its components and particularly, in micro enterprises and self employment. Incomes in the informal sector have also expanded from the equivalent of 4.8 times the poverty line in 1990 to 5.3 times in 2006 (CEPAL, 2009). It must be noted that Chile registers the smallest sized and the highest incomes in the informal sector in the Region. In addition, the size of the sector diminished and the incomes expanded. All this differs from aggregate averages and performance of most countries in the region.

A fourth process relates to the changes in job quality as defined by the existence of a written labour contract and the entitlement to social security coverage (pensions). On average, for the country as whole 79.6% of men and 72.6% of women workers in 2006 had written labour contracts and 79.5% among them (90.4% for public employees and 77.8% private employees) contributed to social security. Quality is clearly lower when examining the working conditions in the informal sector. Fifty-three percent of waged workers in the sector do not have legal recognition of their employment relationship and only 35% of informal employees contribute to social security (V.E. Tokman, 2006). Although job quality on average in Chile is better than the average for Latin America, there has been little improvement.

Decentralization of production and labour processes also resulted in a weakness of labour

contracts and labour hiring without contracts or under employment relationships that are not subject to existing laws. According to a survey of the Labour Office (*Dirección del Trabajo*), 50% of Chilean enterprises externalized part of their production processes and 20% subcontracted labour to undertake core activities in 2004. It estimates that 35% of labour is not directly contracted by the enterprise but through subcontractors or personnel suppliers. The employment relation is not legally recognized and more importantly, the responsibility for complying with labour obligations is diffused giving way to elusion. The main incentive for using this form of decentralized employment is cost reductions and the weakening of the bargaining power of workers and trade unions. The affected workers are precarious, both because of their lack of tenure of their jobs and because, in absence of legal recognition of their labour relation, their coverage of labour and social protection is lower. Although workers are hired by larger enterprises in leading sectors, they do not receive full protection. Highly dynamic sectors, as finance, communications and retail and even extractive industries, as mining, resort to these arrangements. The workers are winners if they are able to move out of the informal sector or of unemployment, but they are unable to become full winners because of their precarious insertion.<sup>15</sup>

The three processes mentioned usually overlap, since for Latin America tertiarization means an increasing concentration in low productivity services, a large and increasing informality that is poorly remunerated and of low working conditions. Whatever definition is adopted, the result is that on average, those affected are losers of globalization. However, the analysis of Chile as described above differs clearly in relation to the type of services that are expanding and in the evolution of the informal sector as regards to size and incomes. It is less clear in relation to quality and particularly to labour and social protection. Although better than the average situation in the region, labour conditions did not improve in spite of significant economic growth.

## 6. INCOME DISTRIBUTION: WINNERS AND LOSERS IN A RELATIVE PERSPECTIVE

As has been shown, there clearly have been winners and losers during the transit to a market oriented-open economy. Even winners that improved their condition in absolute terms should be evaluated relative to other winners. This will be done by discussing the changes in the distribution of incomes during the period. The section is divided into three parts. First, changes in income distribution will be analyzed and explained. Second, some characteristics of income distribution in Chile will be highlighted. Finally, employment conditions and labour income differentials will be examined to explain changes in equity.

### 6.1 Three Decades of Changes in the Distribution of Income

As in previous sections, it is convenient to separate the analysis in the two sub-periods.<sup>16</sup> The distribution of income in the sixties and early seventies can be characterized by an income differential coefficient between the top and bottom quintiles (V and I) of around 13; that is, incomes of the richest quintile were 13 times those of the poorest. The GINI coefficient during the same period was around 0.5, lowering to 0.475 during the 1970-73 period.<sup>17</sup>

The early period of the opening process resulted in a sustained increase of both coefficients during the seventies and eighties. The income differential jumped to 15.9 and the GINI to 0.527 during the first shock, from 1974 to 1981,

as the result of the destruction of production capacity and the negative effects on wages and employment in a context of slow growth. In addition, two factors reinforced the substantial change towards income concentration. One was privatization of most enterprises managed by government during the previous years. The second was a major tax reform introduced in 1975 that included the elimination of taxes on wealth and on capital gains as well as a reduction of the tax on corporation's profits. This was followed by the introduction of a value added tax and the abolition of exemptions of basic consumption goods from sales tax. The objective pursued was to reduce the tax burden and to concentrate on "more neutral and efficient" taxes, while reducing the importance of a progressive system. Labour legislation was also substantially reformed, facilitating layoffs, reducing the level and coverage of minimum wages and benefits. Trade unions were interdicted and their leaders persecuted. Collective bargaining was suspended and was only re-established in the following decade, but only at the enterprise level.

Although tariffs and exchange rate policies were modified after 1985, the main orientation of the policy, the instruments used and the political conditions continued encouraging further increases in the concentration of income until the end of the decade. During the 1987-90 period, the income differences coefficient surpassed 20 and the GINI coefficient reached 0.586.

**Table 5: Evolution of equity, 1957-1996**

Period	GINI	Ratio QV/QI
1957-63	0,483	12,42
1964-69	0,506	14,18
1970-73	0,475	12,62
1974-81	0,527	15,94
1982-86	0,577	20,25
1987-90	0,586	10,36
1991-96	0,538	16,28

Source: Larrañaga (2001). It refers to Gran Santiago

A similar trend is observed in family budget surveys available every ten years, covering 1969, 1978 and 1988. They indicate a clear deterioration of the lowest 40%'s expenditure, going from a share on total income from 19.4% in 1969 to 14.5% in 1978 and 12.6% in 1988. The upper quintile improved their share from 44.5% to 51.0% and to 54.9% in the same years. It was the only quintile that increased their expenditure per household during the period, while the poor 40% lost one-third of their share in total expenditure. The coefficient measuring differences between the expenditure of the lowest and the highest quintiles went from 5.9 to 12.5 between 1969 and 1988 (R. Ffrench-Davis, 2005).

Starting 1990 the situation changed substantially. The democratic regime re-established basic rights and freedoms, including a labour reform towards a more balanced framework of work relations and trade unions activities, but without going back to the pre-74 situation. In particular, collective bargaining was maintained at the enterprise level and strike regulations were not modified. A tax reform was also introduced to collect additional resources to finance an expansion of social expenditure, but although the progressiveness of the tax system increased, taxes on wealth were not reintroduced. The value added tax was maintained at its heightened level. Growth recovered and employment and wages improved.

More recent data on household budgets show an increased share on expenditures of the bottom 40% in Great Santiago area reaching 20 and 20.6% percent in 1997 and 2007 respectively. On the contrary, the share of the upper quintile decreased to around 40% of total expenditure as compared both in Santiago and in the country as a whole. Differences between expenditure

shares of the top and bottom quintiles also decreased to around 4, 7 times in 2007. This ratio is comparable to the one registered at the end of the 1960's. The distribution of incomes also improve because of an increase in the share of the bottom 40 percent from 13.1% in 1996-97 to 14.6% in 2006-7 and a decrease in the share of the top quintile from 53.4% to 51.9% in Great Santiago area. The distribution of incomes for all urban areas during the latter year also registers a similar improvement.

A new set of national household surveys (CASEN) shows the evolution of income distribution in the renewed context. The reduction of poverty and indigence during the period was significant (see again graph 5). Poverty was reduced to a third and indigence to one-fourth from 1990 to 2006. Income distribution also improved, but changes became more resilient particularly when measured by the GINI coefficient on the basis of autonomous incomes. The coefficient that measures income per capita differences between the V and I quintiles, moved from 18.1 in 1987 to 17.3 in 1990 and continued to decreased to 15.7 by 1992. The coefficient maintained its level during the 1998-2000 crises and decreased to 13.3 in 2006. The GINI coefficient remained stable varying around 0.58 but registering a significant improvement reaching 0.54 in 2006. Although not entirely comparable with the data examined for the previous period, this evolution suggests that income distribution improved relative to the first period of adjustment, but concentration is today higher than in the sixties. Taking into account the significant increase in income per capita and the reduction of poverty, the lowest income population improved their situation both in absolute and relative terms particularly during after 2000. However, concentration of income and income differences are still high.

**Table 6: Income Distribution by quintiles, 1987-2006**

quintiles	1987	1990	1992	1994	1996	1998	2000	2003	2006
I	3,4	3,5	3,8	3,7	3,6	3,7	3,7	3,9	4.1
II	6,7	7,0	7,1	7,2	6,9	8	8,2	8,3	8.8
III	10,6	11,0	10,9	11,4	10,9	11,7	12,2	12,1	12.6
IV	17,9	17,9	17,9	18,7	18,2	19,3	18,4	19,1	19.8
V	61,4	60,6	60,4	58,1	60,5	57,3	57,5	56,5	54.6
Inequality index Ratio QV/QI	18,1	17,3	15,9	15,7	16,8	15,5	15,5	14,5	13.3
Gini		0,58	0,57	0,58	0,57	0,58	0,58	0,57	0.54

Source: MIDEPLAN based on CASEN household survey. It refers to household autonomous incomes per capita

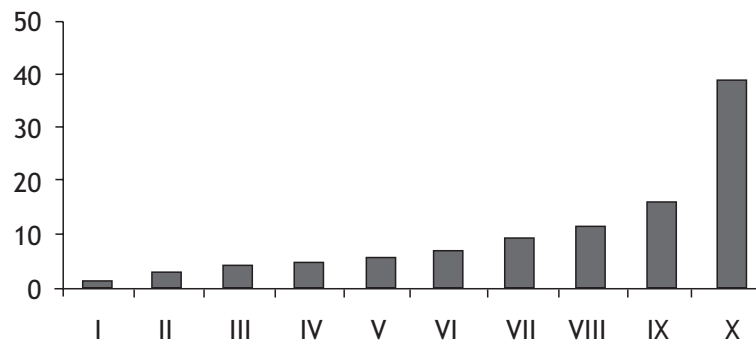
## 6.2 Relative Winners in a Dynamic Scenario

Although the successful performance in the reduction of poverty places Chile as the country with least amount of poverty and indigence in Latin America, concentration of income measured by the GINI coefficient places the country within the high concentration group within the region and worldwide. A 0.54 GINI coefficient exceeds the 0.51 regional average and places the country in the sixth position among 18 neighbouring countries (CEPAL, 2005). According to the World Bank (2000), Chile is in the 12th position relative to 127 other countries worldwide. This position is not consistent with the positions occupied in different world rankings on growth, income per capita level and other indicators.

Inequity in Chile, as in most of Latin American countries, is explained mainly because the wealthy are too rich, rather than because the poorer are too poor. Income per capita of the richest quintile in Chile is equivalent to the income per capita in the most developed countries in Europe. The share of total income of the highest 5% in Chile is twice the share registered in industrialized countries. The concentration can be seen more clearly when looking at the differences by deciles. The income share of the highest decile reaches 38.6% and the difference between the top and the average of the four bottom deciles is

12.6 times. Profits, interests and dividends are concentrated in the top quintile and unequally distributed with a coefficient between the extremes quintiles reaching more than 500 times. If the GINI coefficient is re-calculated excluding the top deciles, income distribution improves significantly and Chile becomes the most egalitarian country in Latin America, even more than the US (IDB, 1998 and CEPAL, 2004).

A second feature of income distribution in Chile is mobility. Access to the top of the distribution is very limited; those who are there do not move out and those who come from lower incomes find strong barriers to enter. Fifty-six percent of those who were in the tenth decile in 1996 were still there in 2001, while those who moved out were mostly in the ninth decile in the last year. Very few acceded to the X decile from below the VIII deciles during this period. There is a discontinuity in average incomes between the IV and V quintiles, and particularly between the IX and X deciles. Mobility is higher at the bottom of the distribution. Only the 35% of the very poor (first decile) in 1996 stayed there, while 24% moved to the second decile in 2001, 17% to the third and the rest upwards in a decreasing proportion up to the VI decile. Of those in the second decile in the first year, 29% were still there five years later, 16% moved downwards to the first decile and the rest move out of poverty (Contreras, Herman and Neilson, 2004).

**Graph 9: Income distribution by deciles, 2006**

Source: MIDEPLAN, 2006

Another characteristic is that in spite of a high concentration in autonomous income (from labour, pensions, leases and capital), inequality decreased if government provided income is included. This additional income is constituted by subsidies and transferences (cash transferences) and by non cash subsidies in education and health. Chile allocated around 14% of GDP in 2008 to public social expenditure with a focus on lower income groups, representing 67% of total public expenditure. This compensates partly for the differences emerging from autonomous incomes, diminishing inequity. Monetary subsidies represent around 13% of total incomes in the first decile, decreasing to 5% in the second and becoming insignificant after the fourth decile. A similar progressiveness is found in non cash subsidies, going from contributing 50% of total income in the first decile's waged workers, diminishing to around 32% in the second and continuously decreasing up to the VII decile.

Income differences between the upper and bottom quintiles decreased significantly. In 2006 the difference in terms of autonomous incomes was 13.1, while when it included monetary transfers it decreased to 11.2 and when education and health subsidies are incorporated, the difference is further reduced to 6.8. An efficiently targeted social policy makes a substantive contribution to equity, reducing the gaps by almost half. Social expenditure management in Chile has an important impact, furthermore this impact has been increasing as can be seen by comparing the gap in 2000 of 8.3 to a 6.8 six years later. The losers are then better off in relative terms in comparison to the primary distribution

and their probability of moving upwards is significantly higher although still restricted to a limited range of income. The winners in the upper incomes are protected by their assets and their position is reinforced by their returns on those assets.

Present inequity in stratified societies tends to be transmitted through generations. The probability that the incomes of a son or daughter can be predicted on the basis of the income of the father at his same age is notably high. In Chile and Brazil the probability is 60%, compare to coefficients of 40% in the US and the UK and 13% in Sweden and Finland (J. Nuñez and C. Risco, 2004). Merits are not entirely recognized since socioeconomic class and even surname origin, matter. Another study following the performance in the labour market by economic graduate students in the University of Chile arrived at the following conclusions (J. Nuñez and R. Gutierrez, 2004). When separated by origin of surnames, used as proxy to identify upper socioeconomic origin and middle classes and by their performance as students in the university, those belonging to the first group obtain higher incomes than their peers from middle classes. This was independent of their grades as students. In fact, the worst student of the upper group earned 25% more than the best student in the latter group. On average the gap amounted to 35%. It must be noted that performance as student was positively associated to incomes for the middle class group, while the relation in the case of the upper class was also positive but less pronounced. The challenge then becomes more difficult since unless merits are recognized, inequity will continue to prevail.

The strong relation between education and income performance, however, opens a new avenue to be explored below.

### 6.3 Inequality of Incomes and Levelling Opportunities

If capital is concentrated and constitutes an important source of the unequal distribution of incomes, the obvious policy prescription should be to redistribute assets. This is clearly out of the agenda of Chile, as a major difference to the sixties and early seventies when structural reforms included agrarian reform, nationalization of foreign assets and active government participation in the economy particularly as owner of large strategic enterprises. The strategic decision adopted was to follow the model associated to globalization not only in trade and financial opening, but also moving in a path of development based on private investment, free markets and sound macroeconomic management. This was, in turn, based on ensuring the protection of property rights.

The above does not exclude the regulation of asset income. This is done by different instruments like regulation of market concentration, ensuring competition and particularly, regulating monopolies; improving credit access of small enterprises; promoting capital risk coverage and encouraging the entrance of new actors, among others. Tax reforms should also be revisited, in spite of the present orientation of moving towards value added taxes because of their simplicity and effectiveness in collection and the poor experience on progressive income taxes. In fact, taxes on profits and new methods of controlling elusion of the fiscal obligations through the use of enterprises, limit its application mostly to high paid dependent employees. An expansion of collective bargaining and an increasing role for trade unions can also contribute to improve the distribution.

There are, fortunately, effective ways to modify the distribution by improving opportunities of generating labour incomes. In fact, for

all income quintiles, labour income provides 80% of waged workers autonomous incomes (A. Repetto, 2005). Labour incomes depend on the human capital of workers and the characteristics of their employment. Human capital is linked to coverage and quality of education, while employment depends of the quantity and quality of jobs available. Access to both presents a segmented structure according to the level of income of the households.

Education coverage has increased, and includes compulsory education of 12 years. In addition, a recent proposal to extend universal coverage from a pre-kindergarten level will extend the public guarantee of education to 14 years. Years of education of those 15 and older increased from 9 to 10.1 years between 1990 and 2003. The beneficiaries were largely the young of low incomes households that are registering 2.5 times more schooling than their grandparents and 1.5 times that of their parents.

Primary education reached universal coverage for all independently of the income of the household. Between 1990 and 2003 there has been an increase in coverage of secondary education reaching almost a universal level for those in households belonging to the three upper income quintiles. Those in first and second quintiles expanded from 73.3% to 87.5% and from 76.3% to 91.7% respectively during the same period. Coverage at university level increased from 40 to 74% for the upper quintile, while for the young people belonging to the poorest quintile the increase was from 4.4% to 14.5%. More than one-third of the new students at the university are the first generation in their respective families to reach tertiary education. In spite of progress in coverage of all education levels given their starting position, the advantages given by tertiary education are still largely captured by the higher income household's young. This paradox is explained by the fact that when universal coverage is reached at primary level the segmentation was transferred to secondary level; while at present a similar situation is observed at the university level.



Educational level matters to determine wage differentials. A person with university education earns 3 times more per hour than one without one. This gap has increased between 1990 and 2000. In the first year a worker with university education earned 4.1 times more than one with basic education; in the latter year the gap was 5.2 times (A. Mizala and P. Romaguera, 2004). There are increasing returns to education and that determines income differentials. Those coming from upper income households benefit more, given their higher access to tertiary education; compared to those coming from lower income households that in spite of the progress made, only a small percentage has reached the university level.

On top of coverage differences by households according to their level of income, quality of education also matters. At the three levels of education there are different providers: public municipal schools, private subsidized schools and private schools without public funds support. At the tertiary level there are public and with and without public subsidies. The type of establishment attended by the students is strongly linked to the income of the household. The majority of those coming from upper income household belonging to quintile V attend private schools and university without any governmental support. At the other extreme the majority of those belonging to the poorest households of quintiles I and II attend public schools, although a significant proportion is also in private schools with subsidies. As income of the household increases the majority preferably attend to private subsidized but still attendance to public schools is high. The exception for the four first quintiles is at university level since the preferred choice are universities that receive public funding. The standard tests applied at different levels, particularly as a requirement to enter to the university, show a large positive gap in the results of private school students and small differences between those who attend the other two types of schools.

Education is, according to international experience, an important factor in achieving more homogeneity in talents and incomes.

However, even in a situation of rapid progress such as in Chile, a segmented education in a stratified society tends to weaken this effect. Nevertheless, given the increase in educational coverage as compared to what parents had access to, the intergenerational predetermination of incomes will tend to diminish. Differentiating by cohorts the elasticity of education of the son in relation to education of the father decreases as the son is younger since it possesses more years of education than the older ones. For those between the ages of 43-55 the calculated elasticity is 0.47 and the average schooling is 11.67 years; for those between 33 and 45 years old the coefficient decreases to 0.38 and the years of schooling increases to 12.68; for those less than 35 years old, with an average schooling of 13.39 years the elasticity is 0.32. This lower elasticity of education also results in a reduction of the intergenerational probability of incomes predetermination between father and son. For those between 43 to 55 years old the probability that the son will have the same income as your father at similar age was 0.63. For those less than 35 years old the probability decreases to 0.46 (J. Nuñez and C. Risco, 2004).

Labour insertion constitutes a major determinant of incomes and its distribution. The lower the income of the household the poorer is the labour insertion in terms of job quantity and quality. The demographic characteristics of the household also matter, since poor households have more members than richer households, although the different size is explained by the higher proportion of young people that are not active in the labour force.<sup>18</sup> Job creation performance and especially access to well paid jobs, is heterogeneous in their effects according to the income status of the household.

Participation in the labour market and degree of success in finding a job increases with the income of the household. Participation rates of the poor and the average high income households were 49.2% and 70% in 2006 and occupation rates were 42.6% and

67.9% respectively. The result is twofold. First, unemployment has a greater incidence in poor families. The unemployment rate in these households more than tripled compared to that of the richer households; while more than 36% of the unemployed come from poor households, only 17% belong to richer households. A notable difference from the past, the majority of the unemployed comes from middle income households (47%). Second, the

types of jobs available also differ according to incomes. Well paid jobs, with written labour contracts and protection in high productivity enterprises are mainly occupied by members of high income households. The opposite happens at low incomes households were 40% are in jobs with low wages and little or no protection. This can be observed in any given year and contributes to explain the income differences between households.

**Table 7: Use of labour capacity by household income per capita, 1990-2006**

Year	Components	Total per capita income level			
		Lower income(1)	Middle income(2)	High income (3)	Total
1990	Population with working age	100,0	100,0	100,0	100,0
	Inactive	55,8	48,7	42,0	48,4
	Economicly activ population	44,2	51,3	58,0	51,6
	Employed / Employment Quality	35,5	47,5	56,3	47,3
	-High	0,1	5,5	29,6	10,7
	-Midium - High	1,8	10,0	12,8	8,9
	-Medium-low	18,7	21,6	9,9	17,9
	-Low	14,9	10,4	4,1	9,8
	Unemployed	8,7	3,9	1,7	4,3
1994	Population with working age	100,0	100,0	100,0	100,0
	Inactive	54,7	46,0	38,6	45,8
	Economicly activ population	45,3	54,0	61,4	54,2
	Employed / Employment Quality	38,1	50,8	59,9	50,5
	-High	0,2	7,3	33,7	13,1
	-Medium - High	1,9	10,8	14,3	9,8
	-Medium - Low	20,8	22,8	8,8	18,4
	-Low	15,3	9,9	3,1	9,2
	Unemployed	7,2	3,3	1,5	3,7
1998	Population with working age	100,0	100,0	100,0	100,0
	Inactive	53,3	44,1	37,6	44,4
	Economicly activ population	46,7	55,9	62,4	55,6
	Employed / Employment Quality	35,1	51,3	60,2	50,1
	-High	0,1	6,4	32,7	11,8
	-Medium - High	1,3	9,7	12,8	8,5
	-Medium - Low	17,5	23,7	10,3	18,8
	-Low	16,3	11,5	4,5	10,9
	Unemployed	11,6	4,6	2,2	5,6

Table 7: *Continued*

Year	Components	Total per capita income level			
		Lower income(1)	Middle income(2)	High income (3)	Total
2003	Population with working age	100,0	100,0	100,0	100,0
	Inactive	53,2	43,4	35,0	43,3
	Economicly activ population	46,8	56,6	65,0	56,7
	Employed / Employment Quality	35,7	51,7	62,8	51,1
	-High	0,0	6,3	34,9	12,2
	-Medium - High	1,5	9,2	12,5	8,3
	-Medium - Low	19,0	25,0	11,1	20,1
	-Low	15,2	11,3	4,4	10,5
	Unemployed	11,1	5,0	2,2	5,6
2006	Population with working age	100,0	100,0	100,0	100,0
	Inactive	50,8	39,5	30,0	38,9
	Economicly activ population	49,2	60,5	70,0	61,1
	Employed / Employment Quality	42,6	57,1	67,9	57,5
	-High	0,3	7,7	35,4	14,7
	-Medium - High	2,6	10,5	16,5	10,7
	-Medium - Low	18,1	24,1	10,2	18,7
	-Low	21,6	14,8	5,8	13,4
	Unemployed	6,5	3,4	2,0	3,6

(1) Lower 60% of medium income

(2) 60% of medium income

(3) Higher than medium income

Source: R. Infante (2006), based on Casen survey

However, to identify losers and winners during globalization it is also important to analyze changes in their relative employment position. The data available from 1990 to 2006 is useful to confirm that the period is characterized by sustained growth up to 1998, when the Asian crisis hit the economy, there was a slow recovery up to 2003 but it accelerated after the boom in commodity prices. On average unemployment went down from 1990 to 1994, it increased in 1998 and then remained constant until 2003 in spite of the recuperation, decreasing afterward during the more sustained expansion. Average participation and occupation rates also show a moderate but sustained increase during the period as a whole. The effect on the households differs according to their income

level. The poor households benefited from the fall in unemployment reducing their rate by 1.5 percentage points, but they were also significantly affected by the adjustment in 1998 that resulted in an expansion of unemployment by 4.4 percentage points. The recovery after 2003 had a positive and significant impact. Richer households show an increasing participation in the labour market and growing occupation rates. This resulted in the reduction of unemployment up to 1994 and a slight increase in 1998 of the unemployment rate but always at very low levels. Middle income households show the same pattern as the poor. While growth affects in a positive manner all households, the cost of adjustment to the shocks falls mostly on the poor and middle income households.

Finally, a similar situation is observed in relation to changes in labour insertion. For the richer population, both growth and recession had a very small effect on the type of jobs that they had access to since the majority already occupied high and good quality jobs; only a marginal mobility was registered during the adjustment period. The changing economic scenario brought along a small degree of mobility between low and middle quality jobs for poor households. However, the evolution of the middle income households registered a continuous downward mobility from high/good to middle and low quality jobs during the recession, a trend that continued even after 1998.

An increase in high paying jobs is crucial for an increase in equity. The previous analysis confirm that growth is inversely related to unemployment and hence, during periods of growth as happen during the early nineties, the rate of unemployment decreases for all and particularly for the poor. The analysis also highlights the importance of access to good jobs in countries such as Chile, where differences of productivity according to firm size are large and increasing. Occupations in large enterprises have an average wage that is 2.6 times those that can be obtained in micro-enterprises. Middle size enterprises are able to pay on average 1.6 times what the micro enterprises can afford. In addition, protection is directly related to firm size. These differences are mainly explained by the existence of larger productivity gaps per worker that also increase with size and reach 7.3 and 2.1 times when large and mid size companies are compared to productivity in micro-enterprises.

Increasing education quality for the lower income groups will improve the chances to get access to higher productivity jobs. Providing day care and nursery coverage for low income households would also diminish differences brought by socioeconomic origin that cannot be corrected at the school age. At the same time it will allow the mothers in the lowest quintiles to work. At present 75% of the mothers of the highest income quintile participate in the labour market, while for

those in the poorest quintile the percentage is only 33%. An additional income preceptor per household has proven to be an effective way to move upwards in the income ladder. These are national policies that have to be implemented to increase the probability that losers may become winners.

However there is also need to innovate in development policies associated to globalization. We have shown that even in a successful experience like Chile, small enterprises constituted losers either because they were unable to compete against imports or due to the increasing concentration of domestic markets or because of unequal relations with to larger enterprises. In addition, the policy package prescribed that government should not intervene and small enterprises should either adapt or disappear. Adaptation is the only durable strategy, particularly if the process is gradual and supported by adequate governmental policies. This does not exclude a strategy that also allows for a gradual phase out of the most inefficient producers.

As this did not have a place either at national or the international level, the result was capacity destruction particularly affecting the small ventures. This was the case in agriculture, industry and commerce. They happen to be, in Chile and in most developing countries, the more labour intensive sectors and hence they were unable to reinforce growth with employment creation. Fifty-six percent of agricultural employment is in small size productive units and this percentage is 36% in industry and 61% in commerce. The three sectors together constitute 61% of all employment at the small scale. In medium sized enterprise employment the same three sectors are responsible for 46% of total employment.

The policy redesign should allocate priority to financing and improve technology for small units, as well as to promote regulation to ensure fair competition and levelling of the playing field where the actors currently have unequal bargaining power. The case of credit deserves special mention since according to the Chilean experience this has been the detonator

of bankruptcies at that size level. Financial market development allowed for more open access to credits, but they were at short term and variable rates, either by the banks or by intermediaries. There is need to increase access to longer term financing, to risk coverage and to interest rates that are consistent with the capacity to pay. Indeed, this is also a matter

of national policy, but given that it is closely related to the need of restructuring generated by globalization it could also lead to a creation of a credit facility at international level that would promote, finance and advise on better practices and policies. Only then will there be fewer losers and most of them can become winners if duly guided and supported.

## 7. GLOBALIZATION, CRISIS AND WINNERS AND LOSERS

There are winners and losers during the process of globalization and it is generally accepted that the sum is positive for the countries involved in the process. However, more open and integrated world markets are also subject to crisis registered in the world. Latin American experience clearly illustrates that besides the Great Depression of the 1930's and the "Debt Crisis" of early 1980's there were recurrent crisis during the period after trade and financial opening accelerated. During the second half of the 1990's and early 2000's, countries were affected by crisis originated inside the region like the one in Mexico and Argentina as well as by those registered in other regions of the world, such as the Asian crisis in the late 90's. More recently the "Global Financial Crisis", originating in the US and Europe, has had consequences on most countries around the world. At present, the evolving situation in countries like Ireland, Greece, Spain, Portugal and Turkey may also become a new crisis episode of global consequences.

Globalization creates opportunities but also costs and hence, winners and losers during the process. Crises mostly result in costs, except for the opportunities to improve policies. The historical experience in the region is that both happened but the costs associated prevail and fall on those less able to afford them. This was clearly the case with the "Debt Crisis" that gave origin to the "Social Debt" concept.<sup>19</sup> We will briefly refer only to the effects of the "Global Financial Crisis" in Chile both regarding its result in terms of employment and growth as well as policy innovation that contribute to soften the cost and hence, the number of people affected.

The recent crisis started during the last trimester of 2008 interrupting five years of economic expansion and decreasing unemployment mostly as a consequence of high commodity prices. A difference from previous crisis was that this crisis affected all countries in Latin America with different intensities.

On average, output decreased by 1.9 percent in 2009 and around 3 percent in per capita terms. The crisis mostly affected the region during the first three trimesters of 2009, with the last trimester seeing less intensive effects. The average unemployment rate increased 0.8 percentage points during 2009 and at its peak it increased by 1 percentage point.<sup>20</sup> Unemployment increased from 7.3 to 8.1 percent in one year, resulting in an additional 2.2 million unemployed. As a result of the economic contraction, the occupation rate also decreased on average by 0.5 percentage points; while the participation rate remained constant. Wage workers in private enterprises were more affected, but their decreased level of employment was partly compensated by the increase in public employment and particularly, by special employment programs. Self employment and unremunerated family members increased by 4 percent and the demand of labour from formal enterprises decreased. This resulted in increased informal employment affecting job quality.

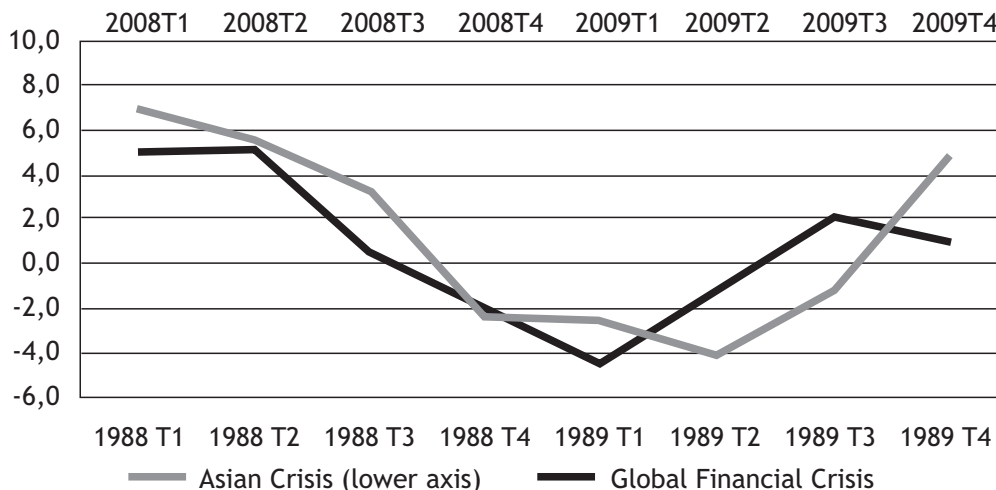
Average unemployment increased between 2008 and 2009 from 7.8 to 8.1 percent, an expansion of 1.9 percentage points, more than double the average increased registered for Latin America. In fact, unemployment increased from 7.5 percent in the last trimester of 2008 to 10.7 percent in the second trimester of 2009 and to 10.2 in the third. It lowered to 8.6 percent during the last trimester, a level that still was 1.1 percentage points higher than at the beginning of the crisis. This was the result of a reduction in the occupation rate concentrated on men, since women maintained their share and a decrease in participation rates of men, particularly young people and a marginal increase in women's participation rate. As a result, unemployment increased more for men than women.

The results of this crisis in Chile were clearly negative and as a difference from previous crisis, most of the Chilean people had losses. However, between the Asian Crisis and the

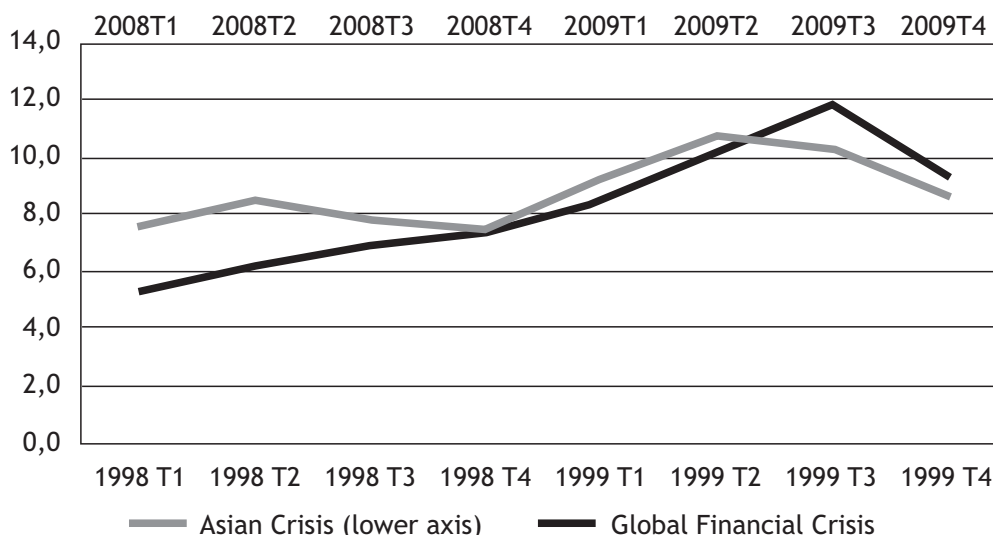
Global Financial Crisis, the country has improved its policy instruments to soften, if not to avoid, the cost of future crisis. Graphs

10 and 11 illustrate this feature by comparing growth and unemployment performances during the two crises mentioned.

**Graph 10: GDP growth by trimester (yearly percentage variation)**



**Graph 11: Unemployment by trimester**



Sources: INE, Banco Central, Ministerio de Hacienda,

The international scenario of the Global Financial Crisis was comparable to the one prevailing during the Asian Crisis, both in real and financial terms, and the growth paths in both cases are similar. However, there are differences in unemployment evolution during both crises. Although they are similar at the beginning of the crisis, in the latter unemployment stabilizes at a lower level than the former. In addition, investment contraction was also smaller during the Financial Crisis.

There were losers in both cases but a better management of monetary and fiscal policies contributed to diminish the cost and shorten the duration. As already referred to in this paper, inflation targeting allowed for lower inflation and reduced interest rates, while the structural rule on fiscal policies plus the recent introduction of FEES and FSP contributed to diminish the impact of the cycle.

## 8. CONCLUSIONS

Chile constitutes an interesting experience to research winners and losers from globalization. Chile has undertaken major reforms during more than three decades and has accumulated experience in policy management. However, it is a special case given the conditions prevailing during the first phase of the reforms in combining an authoritarian political regime with an orthodox economic package applied during a short period of time. The reforms were reformed even during the initial phase, but a different scenario starting when the political conditions changed.

The analysis shows that there was not a unique policy package for insertion to the world economy. It suggests that the option is not one of moving from an import substitution to an export promotion strategy nor is it a trade and financial liberalization withdrawing the capacity of government to guide and intervene in development policies. The orthodox package applied in the early stages was successful in opening the economy and promoting exports but it also flooded the country with imports and did not allow for domestic production to adjust to the new conditions.

A major opening took place during the period multiplying the coefficient of exports plus imports on GDP by three times and producing accelerated expansion in both exports as well as imports. The results on economic growth were not according to what was anticipated by theory. Nor does it follow what happened in other countries of Latin America.

The main conclusion is that the outcome was positive for the Chilean people as a whole. Per capita output increased fast; faster than most of the neighbouring countries and the gaps with OECD countries were reduced. The poor and the indigent were reduced to half and one-third of their original levels. Well being related to access to durable goods, housing and basic infrastructure also increased substantially.

The positive sum is the result of winners and losers. The main winners were the financial

services accompanied by mining, energy, communications, transport and fishery. All of them were direct beneficiaries of globalization. The first by the liberalization of capital markets, fishery and mining because of the opening to the world markets for products with absolute comparative advantages and in mining especially by the changes in property laws and particularly in foreign investment treatment. The other two sectors were also favoured by the transference of technological innovations and the incentives given by government to attract foreign investment.

The losers were mostly three sectors: agriculture, industry and commerce. The loss responds to similar causes but there also differences among them. In all of them there is an intra sectoral change that hides winners and losers inside. Commercial agriculture was a winner since exports expanded and productive transformation took place incorporating new technologies and new products. At the same time, traditional agriculture, particularly in wheat and beet production could not adapt in spite of the protective price bands introduced. Beet producers manage to survive given the existence of a monopoly in sugar refining that passed from state to foreign ownerships, but maintained the chain of production helped by the price protection. Those small growers who adapted to the new conditions but shifting from vegetables for domestic markets to fruits for exports had a mixed experience. They entered into new production relations with big trader companies and became dependent on the market fluctuations and traders decisions. In some cases they prosper, in others they ended squeezed by indebtedness and had to sell the land. In commerce small shops surrender under the increasing concentration of the market and the competition of large and integrated operators.

One common characteristic of the losers is that they were operating mostly at small scales and could not resist the early opening shock, or those who managed to adapt, could



not manage the new conditions. Access to credit was a clear constraint to transformation and access to credit through intermediaries proved to be dangerous, but also credits from the banking system, usually of short duration and fluctuating interest rates, were risky. This was the main cause of failure for the small scale enterprises during the Asian crisis at the end of the nineties.

Changes in the employment structure as a result of globalization and reforms also created winners and losers. The small scale difficulties generate an important loss of job opportunities. In addition, four processes were important. The first was privatization and the reduction of employment in government. The reduction of personnel was one of the instruments used to successfully balance the budget, as it was the reduction of salaries paid and freezing new hiring. Public employees changed their labour status. In some cases, with the compensations received they could start a new business or find a job at the private sector. However, a significant number became unemployed or could only create an own account work. They lost stability and particularly protection, since that still is usually the main advantage of public employment rather than income. This meant increased uncertainty affecting the middle classes, an important segment in societies highly stratified. The three other processes were tertiarization, informalization and precarization. Chile has transited through the three. This constituted a difference to the normal pattern of moving to low productivity services and increased informality. Precarization, however, has increased associated to the search of more flexible labour contracts for the enterprises who respond faster and more efficiently to volatile markets.

Winners and losers have to be examined on relative terms. This required looking at the income distribution. In Chile, although the poor won, equity did not improve until recently. The richer households managed to maintain a large share of total income. The GINI coefficient improved after 1990 when

compared to the early period of opening, except in 2006. However, it is still higher than it was in the sixties.

There is room to improve the distribution of gains and the recent Chilean experience can be useful. A good social public expenditure policy targeted on the poor decreased income gaps in a significant way. When all transfers and subsidies are included the income gaps between the richer and the poorest decreased to a half. Labour incomes are still determinant and wages differences explain most of the income differentials. They depend partly on human capital of each person. Chile has made big progress in educational coverage reaching universality in primary and secondary level and advancing at university level. Differences in the quality of education are high and stratified according to incomes and social origin. Labour insertion is crucial. The persons in poor households participate less in the labour market and a smaller proportion than those of richer households find jobs. When they find one it usually is in the informal sector or in small enterprises, while the richer have alternatives that are mostly in large size enterprises. Differences in productivity between enterprises are large and remunerations gaps are a natural consequence as there are the differences in job quality.

This requires a policy to reduce productivity gaps as well as differences in human capital endowments. The former in particular, requires redefining the conventional policy package followed under globalization. Although small enterprises need to adapt they are not in conditions to do so and require special treatment such as availability of financing at conditions that is according to their capacity of absorption. This is not incorporated in the national nor in the international agendas and its inclusion could serve to compensate losers in the process, but more importantly, to expand winners.

Concentration of assets also deserved policy action. Direct redistribution of assets is out of the agenda but indirect measures can help to improve the chances of the losers. Regulation

of concentrated markets and monopolies, tax reforms towards increased progressivism and adequate financial treatment for the small enterprises can be considered among others.

More frequent crises are likely in a globalized world since diffusion is facilitated. They contribute to increase uncertainty and generate costs. Chile, like most countries in Latin America has experienced recurrent crises that are becoming global. Income losses and higher unemployment are standard consequences. However, they can also con-

tribute to improve public policies design in order to anticipate and soften the impact. The experience of Chile during the last decade illustrates the improvement in public policies; particularly macroeconomic policies can contribute to diminish adjustment costs. Fiscal policies that contribute to stabilization of the cycles, like the structural rule of management of the budget, funds that contribute to regulate fluctuations of resource availability and foreign exchange, as well, as monetary policies that aim to ensure low inflation and low interest rates.

## ENDNOTES

- 1 This is an updated version of a paper prepared as part of the project on *Trade Adjustment Assistance - The Impacts of Trade Liberalization on the Market Labour Sector* of the International Centre for Trade and Sustainable Development (ICTSD). Carla Tokman provided support with data, analysis and edition. The responsibility for the content and opinions contained in this paper can only be attributed to the author.
- 2 Trade liberalization was implemented in conjunction with other policies. For additional discussion on the reforms, see Ffrench-Davis (2004) and Edwards and Lederman (1998).
- 3 The original design was a reduction to 60%, but it was successively modified becoming more pronounced given that inflation exceeded the expected level. See R. Ffrench-Davis, 2004.
- 4 Estimate made by the Chilean Chamber of Commerce incorporating the TLC with China effective since October 2006.
- 5 It is also higher than the elasticity of 0.6 registered at world level during the same period.
- 6 Latin American exports grew at 8.4% while output expanded at only 2.6% year between 1990 and 2002.
- 7 GDP per capita at purchasing power parity measured in USD of 2000. World Bank World Indicators.
- 8 It should be noted that income per capita of Chile was below Brazil in 1989 and by 2005 that had been reversed. In Argentina, the gap fell from 40% to 10% in the same period. The decreasing income gaps can be observed, for example, in relation to Portugal, Spain and Denmark, although the distances are still large, varying from 37%, 51% and 63% respectively.
- 9 The firms played a central role in the adoption, adaptation and transfer of fruit growing technology. They also contributed to building storage facilities, seek markets, gather produce, pack it and transport it. Most importantly, the firms provided finance for growers on the basis of a contract by which the farmer was offered a credit to cover production costs and living expenses. Inputs were supplied by the firm, monitoring the production process by a firm agronomists who also determined the date of harvest. The firms completed the process of storage, transport and sale and the payment was made through a consignment price system that later on resulted in a payment at the final price discounting all expenses plus the credit and the interest due.
- 10 This rate does not include public employment programs that would raise the rate during the first period by 5 percentage points and during the second period by half of a percentage point.
- 11 As analyzed before, a major change of policy orientation was introduced after the debt crisis of 1982. A series of exchange rate devaluations occurred and the import tariff was increased up to 35% in 1984, and later progressively reduced down to 18% in 1988. Trade policy also changed, resorting to anti-dumping measures and price bands for three major agricultural products to soften import competition.
- 12 The data source is a period household survey with national coverage undertaken every two to three years.
- 13 The figure for small enterprises in 1996 should be taken with caution since it is very varied and could at time constitute a statistical error.

- 14 It includes employers and workers in micro-enterprises (5 or less workers), self employed, unremunerated family members and domestic services.
- 15 In 2006 Chile introduced a new law to regulate subcontracting arrangements and private employment agencies. It introduced a deposit requirement for labour agencies as a guarantee of compliance of labour obligations providing that the use of these services can only be provided for temporary activities. In the case of subcontracting between enterprises, it introduced solidarity of responsibility for compliance with labour obligations. The principal firm could still request a certificate of compliance from the subcontractors issued by the Labour Office to recognized private businesses and could also retain funds from payments due to the subcontractor in case of pending obligations.
- 16 The sub periods used for equity are slightly different from the one defined during the adjustment analysis. The first period covers from 1973 to 1990 and the second, from 1990 to the present. The difference results from changes in economic policies in 1985 and the economic effects that were already noted by 1986. The change of political regime also made a difference not only in relation to economic policy, but particularly in relation to distribution of incomes.
- 17 The data refers to Gran Santiago but it is representative of the evolution for the whole country.
- 18 The differences between the poor households and those of middle and upper incomes in 2003 were as follows: 4.5, 3.8, 3.1 persons per household respectively and 35.5%, 24.3% and 17, 4% infants and adolescents respectively.
- 19 For an analysis of crisis on employment in Latin America from the 1980's to the financial crisis of 1999, see Tokman (2010).
- 20 This refers to the weighted mean for the region. The increase of the rate of unemployment reached 1.6 percentage points during the first three trimesters of 2009.

## REFERENCES

- CEPAL (2005), *Panorama Social 2004*, United Nations, Santiago, Chile, April.
- CEPAL (2006), *Panorama Social de América Latina 2005*, United Nations, Santiago, Chile, March.
- Contreras, D, R. Cooper, J. Herman and C. Neilson (2005), “Dinámica de la Pobreza y Movilidad Social: Chile 1996-2001”, Department of Economics, University of Chile, Santiago, Chile.
- Edwards S. and D. Lederman (1998), *The Political Economy of Unilateral Trade Liberalization: The Case of Chile*, NBER working paper N° 6510, Cambridge, Massachusetts, National Bureau of Economic Research (NBER), April.
- Estrategia Diario (2006), “Concentración de los Mercados: El Poder Absoluto de los Grandes Grupos”, Santiago, Chile, October.
- Ffrench-Davis, R. (2004), *Entre el neoliberalismo y el crecimiento con equidad, Tres décadas de política económica en Chile*, Siglo XXI Editores, Argentina.
- Ffrench-Davis, R. (2005), *Reformas para América Latina después del fundamentalismo neoliberal*, CEPAL- Siglo XXI editors, Argentina.
- Infante, R. (2006), “La situación del empleo y el desempleo” in R. Infante (Ed.), *Chile: Transformar las necesidades sociales en nuevas oportunidades de empleo*, Ediciones Chile XXI, Santiago, Chile.
- Infante, R. (2006), “Una política de distribución de ingresos desde la perspectiva de la heterogeneidad estructural”, Unpublished draft, Fundación Chile 21, Santiago, Chile, November.
- Ministerio de Hacienda (2009), *Estado de la Hacienda Pública 2009*, Presentación del Ministro de Hacienda, Andrés Velazco, Santiago, Chile, October.
- Molina, S. (2005), *Es el tiempo de la equidad*, Banco del Desarrollo, Santiago, Chile, April.
- Murray, W.E. (1998), “The global agro-food complex, neoliberalism and small farmers in Chile. Lessons for the Pacific Islands?” *Journal of Pacific Studies*, vol. N° 22, 1998, pages 27-59.
- Núñez, J. and C. Risco (2004), “Intergenerational Income Mobility in a Developing Country: The case of Chile”, *Estudios de Economía*, Documento de Trabajo N° 210, Department of Economics, University of Chile, Santiago, Chile.
- Núñez, J. and R. Gutiérrez (2004), “Class discrimination and meritocracy in the labour market: The case of Chile”, *Estudios de Economía*, Vol. 31, N° 2, pp.113 132.
- Ottone, E. and C. Vergara (2006), *Ampliando Horizontes: Siete claves estratégicas del gobierno de Lagos*, Arena Abierta, printed in Andros Impresores Ltda, Santiago, Chile, October.
- Repetto A. (2005), “Desigualdad de ingresos y de oportunidades en Chile” in P. Meller (Ed.), *La Paradoja Permanente: Equidad y eficiencia: resolviendo el dilema*, Taures, Santiago, Chile, October.
- Román E. (2006), “La capacidad de generación de empleo de las micro, pequeñas y medianas empresas”, in R. Infante (Ed.), *Chile: Transformar las necesidades sociales en nuevas oportunidades de empleo*, Ediciones Chile XXI, Santiago, Chile.
- Shafaeddin, S.M. (2005), “Trade liberalization and economic reform in developing countries: structural change or de-industrialization?”, UNCTAD, Discussion Paper N° 179, Geneva, Switzerland, April.

- Solimano A. and M. Pollack (2006), *La Mesa Coja: Prosperidad y desigualdad en el Chile Democrático*, Editorial LOM, Santiago, Chile, September.
- Solimano A. and V.E. Tokman (2006), “*Migraciones internacionales en un contexto de crecimiento económico. El caso de Chile*”, Serie Macroeconomía del desarrollo N° 54, CEPAL, Santiago, Chile, September.
- Tokman, V.E. (2006), “*Inserción laboral, mercados de trabajo y protección social*”, Serie Financiamiento del Desarrollo N° 170, CEPAL, Santiago, Chile, April.
- Tokman, V.E. (2010), “*El empleo en las crisis: efecto y políticas*”, Serie Financiamiento del Desarrollo N 100, CEPAL, Santiago, Chile, January.

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