Three Decades of Neo-liberal Economics in Chile: Achievements, Failures and Dilemmas.

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1. Introduction

The Chilean economy is often praised for its achievements of growth, macroeconomic sustainability, low inflation, external openness and reduced poverty. The fact that it started early the sort of reforms later known under the heading of “Washington Consensus” made it the “advantaged student” of international financial institutions. Today, however, the world seems more impressed by rapid growth in giant countries such as China, India and even Russia along with the remarkable performance of other smaller to medium size economies such as Ireland, New Zealand, Poland, Czech Republic and others. Unfortunately, few success stories are found in the Latin American region and Chile still remains the model case in the region.

The Chilean development story of the last two to three decades is a mix of successes in the macro, growth and trade fronts but also of failure to reduce chronic inequality of income and wealth. In addition, the current growth patterns have impacts on the environment, natural resources and energy demand that are considerable. The Chilean development path of the last two decades combines rising GDP per person and increases in material welfare and productive modernization and integration to the world economy. However, it is also high time to look at also some unpleasant features of this development path such as urban insecurity, rising crime, pollution, pressures on natural resources, congestion and social stratification in the access to education, health and pensions.

Closer inspection of the overall development model of the last three decades in Chile reveals several basic similarities (and some differences) between the economic policies applied by the military regime of General Pinochet and the economic polices of the democratic administration in power since 1990.

The free market revolution of the mid 1970s in Chile was a sharp departure of the historical pattern of economic and social policies in the country and in most of the developing world. It is apparent that this economic revolution was largely possible in the controlled political conditions of absence of congress and free press, banned left-wing political parties, highly controlled labor unions and strong military rule that characterized Chilean politics since the oust of Salvador Allende in September of 1973 until the late 1980s. The democratic government that came to power in March of 1990 (after free
elections in 1989) chose maintaining the bulk of the economic policies of the military (open trade, the primacy of markets and the private sector, privatization) complemented by more active social policies oriented to reduce poverty and protect vulnerable social groups. The new governments also started to invest more in public education, public health and in the physical infrastructure, all neglected sectors during the military period. The democratic governments have also been macro-economically prudent, maintaining low inflation and fiscal and balance of payments sustainability. A curious feature of policies – for a social-democratic coalition – is that reducing wealth and income inequality has *not* been an explicit and active target of policy. In fact, inequality of income and wealth and social stratification may have even increased in the post-Pinochet years, although absolute poverty declined.

The main purpose of this paper is to look at the achievements, failures and dilemmas of the current development model in Chile with a view of drawing useful lessons for other developing countries and for highlighting areas of internal transformation and reform towards more equitable and sustainable policies.

Chile, since the mid 1980s, has accelerated its *annual* average growth rate of GDP by near 2.5 percentage points above the average growth rate of 1940-1985 (in turn, growth was much faster in the 1986-1998 period than in the 1998-2007). The increase in average growth of the last two decades has taken place while maintaining low inflation, fiscal solvency, balance of payments sustainability and reducing public external debt. Currently, macroeconomic policies are guided by a combination of inflation targeting by the Central Bank, a fiscal rule of structural fiscal surpluses and a flexible exchange rate regime. This regime has enabled low inflation and policy predictability. However, growth cycles although of a milder magnitude than in the past remain as well as significant fluctuations in the nominal and real exchange rate; this is worrisome for an economy like Chile that is very open to international trade and capital mobility. Recently in early 2008 the Chilean peso has appreciated in two months by more than 10 percent against the US dollar in a context of a weak dollar and record copper prices.

In the last two to three years Chile has accumulated near US$ 20 billion in external assets of the public sector held abroad (more than 10 percent of GDP) following strong copper prices. Fiscal savings and international reserves provide a cushion against external
shocks in a volatile world economy. At the same time fiscal abundance is in contrast with comparatively modest levels of public spending in education, health and environmental protection along with “new” social problems, including a sharp rise in crime and urban insecurity. These issues are part of the internal policy debate nowadays.

Controversies also revolve around labor policy in an economy in which rapid growth created jobs but often of a fragile nature and in which the reduced bargaining power of labor has biased the distribution of productivity gains towards company-owners and capital. In this context while large private sector associations along with an establishment of a largely orthodox economics profession calls for more labor market flexibility, labor unions demand more social protection. Emerging labor conflicts in copper, salmon, fishery and other areas reflect somehow radical demands of a labor movement that has been largely marginalized over the years in a country that steadily becomes more prosperous and open to globalization. New, modern, and more equitable labor relations are badly needed in Chile.

The links between trade and employment in Chile are not immediate. Export and import-competing activities generate only 30 percent of total employment while the non-traded goods sector creates the remaining 70 percent. The relation between aggregate growth and social welfare of the poor are mediated by the labor market and the socio-demographic characteristics of low income families. Empirical evidence from household surveys shows that aggregate economic growth reaches comparatively less poor households than non-poor households. This is for at least three reasons: First, poor families have higher dependency ratios than no-poor families so the income of each worker has to be divided among more family members than in the case of non-poor families. Second, the earning capacity of the worker of poor household is expected to be lower than the worker, professional or executive of non-poor households, as education levels are systematically lower for low-income families. Third, unemployment rates are much higher in poor families than in non-poor families. Moreover, the poor tends to work more in the informal sector, a sector with lower productivity that pays lower salaries and where jobs are unstable.

Inequality is a persistent feature of the Chilean model. In the last 20 years Gini coefficients for income hover around 0.55 a high number under international standards. Recently some mild reduction has taken place in the coefficient but the broad trend is that
income is highly concentrated in the top 5 to 10 percent of the distribution. Gini coefficients for the first to the ninth deciles are around 0.38, not too far from the valued of OECD countries. So inequality in Chile mainly explained by concentration at the top of the distribution of incomes.

The environmental and natural resource implications of the acceleration in economic growth and the rise in consumption levels of the last two decades deserves more attention and analysis. Two-thirds of Chilean exports, the main engine for growth, are composed by non-renewable and renewable natural resources. In addition, the rapid expansion of consumption increases the stock of cars and transport vehicles rising emissions. According to a recent OECD-ECLAC report on the state of the environment in Chile, identifies as worrisome trends a high intensity of energy of output and consumption, the heavy use of water resources and soil, high exploitation of forestry, rapid extraction of sea-products and aggressive mining extraction.

The paper is organized in five sections besides this introduction. Section 2 provides an overview of the Chilean economy from a medium to long run perspective and section 3 analyzes the main features of the macroeconomic policies and economic growth in Chile in the 1990-2007, comparing the economic performance of the Aylwin, Frei, Lagos and Bachelet administrations. Section 4 looks at the joint behavior of growth, poverty and inequality in the last 20 years (a story of reasonably rapid growth, decline in poverty and stable inequality) and provides data on income and wealth distribution; this section also looks at the causes of the persistence of inequality and role that the policies of the last two decades may have played in this. The section also documents the rise in crime and urban insecurity. Section 5 review factors that impinge on the development potential of the Chilean economy such as education, spending on science and technology, cost of doing business, institutional capacities and other factors. Section 6 concludes.

2. The Chilean Economy in Long Run Perspective: A Brief Overview

Between 1940 and 1985 Chile grew at a modest rate of growth of GDP 3.5 percent per year with GDP per capita growing at 1.4 per cent per year (see Table 1 below). At this

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1 This section draws partly on Solimano and Pollack (2006).
pace it takes near four decades for GDP per head to double. This growth record often took place in a context of chronic inflation, recurrent balance of payment and fiscal imbalances and distributive conflict in an unequal society. Attempts at economic modernization and management of social conflict in Chile was generally mediated by democratic institutions. However, since the mid 1960s until 1973 the accelerated pace of democratization, popular participation and economic redistribution generated acute tensions and resistance by upper income groups within Chilean society. The attempt to build Chilean-style socialism in democracy by Allende ultimately led to a breakdown of democracy of 1973. After the collapse of democracy, the instauration of a military regime in September of 1973 turned rapidly into a radical revolution to reshape the Chilean economy and society along free market lines within a de-politicized and demobilized society. In the economic front the center-pieces of the economic policies of the military regime revolved around macro-adjustment, economic liberalization and privatization of both state-owned enterprises and social services. The democratic regime after Pinochet as mentioned before tried initially to get a balance between continuity and change in economic policies combining free markets with increased social protection without attempting to alter existing income and wealth distribution. The mantra of “growth with equity” of the democratic administrations was more satisfied on the first half: the growth side. Equity was to wait, except if defined as a reduction of poverty, which is largely a by-product of rapid economic growth.

Let’s return to the recent economic history of the last four decades. In the 1960s the prevailing economic model of import substitution was showing signs of exhaustion reflected in moderate growth, fiscal and external imbalances, chronic inflation and persistent inequality. The conservative Alessandri administration (1958-64) focused, largely, in managing several macroeconomic crises of different intensity but without articulating a very clear agenda of structural change of the prevailing development model. The Christian Democratic administration of President Frei Montalva (1964-70) started a program of reforms of the economy (trade reform, agrarian reform, more inclusive credit policies), along with a progressive social agenda, accompanied by growing social organization of urban dwellers and peasants. The average rate of economic growth in 1960-69 was 4.4 percent per year (2 percent in per capita terms). Inflation remained stubborn at around 26 percent per year and the country lived with chronic external and fiscal
In 1970 the left wing coalition of President Salvador Allende, United Popular (Popular Unity), won the national elections around an economic and social program of transition to socialism (entailing nationalization of copper mines, expropriation of large industrial firms, banks and other financial institutions and acceleration of agrarian reform). The Allende government undertook expansionary fiscal and wage policies coupled with price controls. This generated a growing fiscal deficit that was financed by money creation. In 1972, repressed inflation and shortages became pervasive, starting to alienate the middle class against the government. Inflation turned into very high and open in 1973. Eventually acute internal political conflict, external covert intervention and the economic crisis led to a military coup in September of 1973 that ousted the Allende government and inaugurated 17 years of military rule, personalized by General Augusto Pinochet. In the economic area, the military regime devoted to stabilize inflation (see Figure 5), restituting property to former owners and securing external credits. Money based stabilization was complemented by a drastic fiscal adjustment program in which near 100,000 public employees were separated from the state sector in one year leading to a jump in the unemployment rate that remained high for several years. Trade liberalization, privatization, fiscal adjustment and market liberalization policies dominated the second half of the 1970s. An exchange rate based stabilization program was used, between 1978 and 1982, to reduce inflation, although the experiment ended up in 1982 in a severe economic and financial crisis. The economy suffered a sharp decline of GDP, a jump in unemployment and bankruptcies, accompanied by a crisis in the banking sector, recurrent currency devaluation and serious external debt servicing problems. The crisis management of the 1982-83 economic crisis involved bailouts of firms and banks, a real depreciation of the currency that restored profitability in tradable goods activities and a cut in domestic absorption. These policies were supported by loans from IMF, World Bank and IDB. The social consequences were dire. Unemployment climbed to near 30 percent in 1983, real wages fell and many small and

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2 A very complete reference of economic policies in the 1950-70 period is Ffrench-Davis (1973). A long run view of the Chilean economy is in Meller (1997). Analysis of the Allende experience include Bitar (1979), Larraín and Meller (1990), Maldonado (1993), and others.


4 See Solimano, Aninat and Birdsall (2000).
medium scale firms drowned in debt or went bankrupt with the ensuing destruction of organizational capital and jobs.

In the second half of the 1980s the Chilean economy recovered supported by a more competitive real exchange rate, by the financial rehabilitation of firms, by tax cuts, easier credit and higher internal demand. However, by the end of the 1980s inflationary pressures mounted as well as external imbalances leading afterwards to the new Aylwin administration — the first democratic government elected after 17 years of Pinochet rule — to address. In addition, the Aylwin government raised taxes to fund social programs oriented to revert the social deterioration of the previous years in terms of minimum wages, reduced monetary subsidies to the poor and the chronic under-funding of the public health and education systems. Fiscal resources were also needed to start revamping public infrastructure such as ports, roads and highways deteriorated after years of little public investment. Macroeconomic policies in the 1990s (the subject of next section) accommodated higher social spending while reducing inflation, taxed short-term capital inflows, and reduced public external debt. The Lagos administration furthered conservative fiscal policies by adopting the explicit rule of fiscal surplus, achieved a further reduction in inflation but suspended the tax on short-term capital inflows and supported a floating exchange rate regime with minimal Central Bank intervention. The Bachelet administration, that took power in March of 2006 is the fourth government of the coalition that has governed Chile since 1990 has enjoyed a spectacular surge in copper prices that generated current account surpluses and a very strong fiscal surplus on the order of 7-8 percent of GDP. However, average economic growth in 1996-1997 did not accelerate much (4.7 percent) creating a puzzle of a sharp terms of trade boom with relatively modest growth.

3. Growth Performance and Macroeconomic Policies under the Democratic Administrations

Growth Performance

In the last 22 years the rate of economic growth accelerated in Chile compared to its own historical record. In fact, as Table 1 shows the average rate of growth of GDP in 1986-
2007 was close to 6 percent per year. In contrast, as mentioned before the historical rate of growth of the period 1940-1985 was only 3.4 percent.

<table>
<thead>
<tr>
<th>Table 1.- Chile: Economic and Social Indicators, 1940-2007</th>
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<tbody>
<tr>
<td>(1)</td>
</tr>
<tr>
<td>Real GDP: Rate of Growth (% annual) a/</td>
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<tr>
<td>Real GDP per capita: Rate of Growth (% annual) a/</td>
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<tr>
<td>Gross Fixed Capital Formation (% of GDP) b/</td>
</tr>
<tr>
<td>Gross National Savings (% of GDP) g/</td>
</tr>
<tr>
<td>Total Factor Productivity (Index 1960=100) d/</td>
</tr>
<tr>
<td>Fiscal Balance (% of GDP) e/</td>
</tr>
<tr>
<td>Inflation Rate (annual change %) f/</td>
</tr>
<tr>
<td>Terms of Trade (Jan 1977=100) c/</td>
</tr>
<tr>
<td>Real Exchange Rate (Index 2000=100) c/</td>
</tr>
<tr>
<td>Unemployment Rate (% annual) f/</td>
</tr>
<tr>
<td>Real Wages (Index 2000=100) h/</td>
</tr>
<tr>
<td>GINI Index i/</td>
</tr>
<tr>
<td>Ratio between 1st. and 10th. decile (Autonomous Income) j/</td>
</tr>
</tbody>
</table>

Sources: own elaboration based on data from:

- c/ World Bank's World Development Indicators, 2007. Columns (1) and (3): data up to 2006.
- d/ Fuentes, Larraín and Schmidt-Hebbel (2006). Sources of Growth and Behavior of TFP in Chile. Cuadernos de Economía, Vol. 43. The results reported correspond to the simple average, from period to period, of the TFP Measures 4 and 8 from the Appendix 2 of the paper. Columns (1) and (3): data for period 1960-2005.
- f/ National Institute of Statistics, Chile.

In per capita terms the rate of growth of GDP per person was 4.4 per cent in the period 1986-2007 compared to an annual rate of growth of GDP per head of 1.4 percent in 1940-1985. This increase in per capita growth is expected to have made a big difference in the standard of living of the “average citizen” although in a country with an uneven income distribution the concept remains fuzzy. As we document in this paper income distribution has been and continues to be very concentrated in Chile. In turn, wealth distribution is even more concentrated than income distribution as ownership of financial assets, productive wealth and land is often very concentrated (see Davies et al., 2007, for international
evidence on this). One the other hand, as a consequence of reasonably rapid growth along with targeted social transfers measured poverty declined sharply in Chile in the last 20 years or so from over 42 percent in the late 1980s to close to 14 percent in 2006.

As Figure 1 shows the data shows that a turning point in the dynamics of growth in the period 1940-2007 takes place in the mid to later 1980s.

![Figure 1. Economic Growth in Chile, 1940-2007](GDP and GDP per capita, Index 100=2003).

The acceleration in economic growth in Chile in the last two decades deserves more analysis. The Chilean growth story of this period reflects the favorable effect of macroeconomic, social and political stability, a strong reliance in markets – the “neo-liberal component” – along with a more consolidated private sector with an increased capacity to mobilize savings and undertake large scale projects. The external environment (terms of trade, foreign demand) experienced various cycles during this period, so no discernable net positive or negative effect can be easily established. Sources of growth analysis, based on the supply-side often decompose output growth into factor accumulation (capital, labor ,

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5 Studies on growth in Chile are Fuentes et al. (2006), De Gregorio (2004), and Solimano (2006).
human capital) and total factor productivity growth (improvement in the degree of efficiency at which productive resources are used). In turn, we can undertake a more eclectic growth-analysis by looking at both supply and demand factors such as savings, investment, productivity, exports, private and public consumption. Summarizing the following factors are likely to be at work in the acceleration of economic growth in Chile since the mid to late 1980s:

(a) An increase of over 7 percentage points of GDP in the investment in 1986-2007 compared with the historical period 1940-1985.
(b) An increase of around 10 percentage points of GDP in national savings in both periods.
(c) An acceleration of total factor productivity growth.\(^6\)
(d) A sharp rise in the export share in GDP that almost doubled in 1986-2007 compared to the historical reference period.
(e) A steady overall decline in inflation.
(f) A shift from fiscal deficits to fiscal balance and surpluses.
(g) A lower reliance in external savings and a cut in current account deficits in the balance of payments.
(h) After the restoration of democracy in 1990 a climate of political and social stability, in spite of persistent inequality.

The shift from import substitution to external opening intended to accelerate growth. This was largely accomplished. In an economy with less distortions, market prices play a more effective role in signaling scarcities and thus resources will go to activities with higher profitability. This process leads to a more efficient resource allocation. However, going from better resource allocation to sustained growth requires also a higher rate of accumulation of human and physical capital and faster productivity growth. Part of that process effectively took place in the last two decades as the list of factors above show.

However, the causality from the implementation of market reforms to growth outcomes is complex, it involves lags and is affected by other important variables. In fact Chile liberalized markets, opened the economy to international competition and privatized

public enterprises in the second half of the 1970s but economic growth started to pick-up in more steady form in the second half of the 1980s and really in the 1990s, say *more than a decade after the policies of macro stabilization, external opening, privatization and liberalization of financial markets were launched*. In the first phase of the implementation of these policies growth was highly cyclical: recovery and growth took place in 1976-1981 to be followed by a big contraction in economic activity and financial crisis in 1982-1983 as documented in the previous section. It is interesting to note that the harvesting of growth really took place in the democratic period. This induces to suggest that democracy gave domestic and international legitimacy to the Chilean economic model and enabled considerable social and political stability for investment and growth to increase and enable more rapid growth. In turn, rapid growth also helped to legitimize democracy and the economic model although persistent inequality (not only growth) may matters for the overall degree of legitimacy of the economic model.

The growth dynamics of the last twenty years was not uniform across sub-periods (for a graphical display of the evolution of the main macro and growth variables see Figures 2, 3 and 4). The differences were minor as the average rate of growth of GDP in the 1986-1997 sub-period almost doubled that of 1998-2007. In fact, the average annual rate of growth of GDP was 7.6 per year in the first period and only 3.9 percent per year in the second period. Cyclical factors certainly affected this differential growth performance, as in the second half of the 1980s the Chilean economy still had unused capacities as it was recovering from a big economic contraction earlier in the decade. In turn, since 1998 the Chilean economy was affected by the Asian and Russian crises of 1997-987 and growth remained sluggish for near five years afterwards the onset of that crises. Economic growth accelerated since 2004 but not in proportion to the sharp rise in copper prices. Chile seems to be a special case in which a strong terms of trade boom is *not* translated in faster economic growth. This may be explained, in part, by a fiscal policy oriented to save most of the terms of trade bonanza. As mentioned before in early 2008 Chile has near 20 billion dollars, deposited abroad mostly in US banks as part of its Economic and Social Stabilization fund. This is in addition of near 17 billion in international reserves held by the Central Bank.

**Unsettling Features of the Chilean Growth Pattern**
The famous British economist Sir John Hicks maintained that sustainable real income is one in which future generations are not impaired by current savings and investment decisions. This is a relevant concept for evaluating the sustainability of Chilean growth. In particular due to its excessive reliance on natural resources (renewable and non-renewable), high intensity in energy use, productive concentration and environmental implications. A highlight of critical issues in this regard is the following:

(a) **Natural Resource Sustainability.** It is estimated that around 70 percent of Chilean exports (more than 35 percent of GDP) rely on raw materials and processed renewable and non-renewable natural resources: copper, fruits, fishmeal, timber and others. For a country that has managed to grow at around 6 percent per year for more than two decades under this pattern, the pressures on natural resources and the environment of this growth pattern can be significant.

(b) **Energy intensity of growth.** A recent evaluation made by the OECD along with ECLAC on the environmental and energy consequences of rapid growth in Chile warns that this process is having significant impacts on energy intensity of Chilean consumption and growth is above unity. It is indicative that Chile is currently facing electricity shortages due to an excessive reliance on imported natural gas and a lack of diversification towards other sources of domestic energy including clean sources of energy.\(^7\)

(c) **Environmental impacts of rapid growth.** In Chile there are potentially serious consequences of rapid growth process on the environment as highlighted in the OECD/ECLAC report. The effects are of a varied nature and resources devoted to prevention and mitigation are still limited \(^8\). Rapid growth in GDP and consumption has a direct effect on the environment due to large emissions, a high-intensity of energy of output and consumption, use of water resources and soil, high exploitation of forestry, rapid extraction of sea-products and

\(^7\) An early analysis of the pressure of rapid growth on water resources, energy, forestry and the environment in Chile is Sunkel (1994).

\(^8\) OCDE and CEPAL (2005).
aggressive mining extraction, sharp increase in the stock of cars and transport vehicles.

(d) *Firm concentration.* Exports, a main engine of growth, are largely concentrated in large firms. The *direct* share of exports by small and medium size enterprises (SMEs) is very small (less than 3 percent of total exports). This concentration in the productive structure mirrors the concentration of incomes that characterizes the Chilean economy (see Table 2 and Solimano, 2007).

(e) *Employment intensity of growth.* Growth is envisaged as the main source of employment generation in Chile. However, given the importance of capital-intensive tradable sectors such as copper and other activities the employment intensity of growth is not very high, with a medium term employment-growth elasticity of around 0.5.

<table>
<thead>
<tr>
<th>Year</th>
<th>Micro and Small</th>
<th>Medium</th>
<th>Large</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1999</td>
<td>1.8</td>
<td>3.5</td>
<td>94.7</td>
<td>100.0</td>
</tr>
<tr>
<td>2000</td>
<td>1.7</td>
<td>3.1</td>
<td>95.2</td>
<td>100.0</td>
</tr>
<tr>
<td>2001</td>
<td>1.5</td>
<td>3.4</td>
<td>95.1</td>
<td>100.0</td>
</tr>
<tr>
<td>2002</td>
<td>1.4</td>
<td>3.2</td>
<td>95.4</td>
<td>100.0</td>
</tr>
<tr>
<td>2003</td>
<td>1.3</td>
<td>2.6</td>
<td>96.1</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: own elaboration based on data from Customs Office and SII, 2003.

**Table 2. Chile. Exports share by firm size, 1999-2003**

**Macroeconomic Policies**

During the last two to three decades a strong policy consensus developed in Chile on the need to ensure macroeconomic stability for development. Chile suffered the traumas
**Figure 2. Chile: Gross Domestic Product, 1986-2007**

(Total and Per Capita GDP, Annual Growth Rate, in percentage)


**Figure 3. Chile: Investment, Savings, and Productivity, 1986-2006**

*Panel A:* Investment (% of GDP, series at constant prices)

*Panel B:* Investment (% of GDP, series at current prices)

*Panel C:* Total Factor Productivity (TFP, annual rate of change %)

*Panel D:* Gross National Savings (% of GDP, current values)

Sources: Investment and National Savings: Central Bank of Chile; TFP: Fuentes et al. (2006) “Sources of growth and Behavior of TFP in Chile”.
of fiscal and inflationary crises in the 1970s and currency and financial collapse in the early 1980s that interrupted economic growth and created big surges in unemployment, declines in real wages and human welfare. The macro policies of the 1990s in Chile were gradualist in the anti-inflationary front, the exchange rate regime until 1999 was ‘managed’, fiscal policy was generally prudent but without an explicit fiscal rule (until 2000) and taxes to deter short-term capital inflows were used until 2000 when they were removed (a summary of these policies and their evolution are found in Table 4). In the 2000s macroeconomic policies had some innovations. A fiscal rule was introduced and the Central Bank made more explicit a policy of “inflation targeting” regime. Apparently the search for rules replaced discretion as the new conventional wisdom. Let us look at these policies in some more detail:
**Fiscal Policy.** In 2000 the Lagos administration formalized a *fiscal rule* to make fiscal policy more predictable and also to deter possible pressures on fiscal spending coming from political parties, parliamentarians, interest groups and others, reducing the degree of discretion in fiscal spending forcing its increases to be in line with what is considered as permanent increases in copper prices, potential GDP and other sources of revenues. In this way cyclical improvement in terms of trade or transitory increases in tax revenues due to faster economic growth are not followed by proportional or more than proportional increases in public spending, often the source of macro imbalances and unsustainable cycles in Latin America. The new rule in 2000 established that the government was to run a *structural* fiscal surplus of 1 percent of GDP (the *structural budget* is calculated using medium run projections of the main sources of fiscal revenues such as the price of copper and the rate of growth of GDP). Later, the Bachelet administration reduced the specific value of the structural surplus to 0.5 percent of GDP. The rule is also consistent with some degree of counter-cyclical fiscal policy as it allows the government to run deficits in years in which GDP is below the full capacity level, financed, in principle, by surpluses accumulated in good years. The degree of counter-cyclical polices is open to debate. For example aggregate demand polices in 2000-2003 were mildly counter-cyclical in spite of favorable conditions to accelerate a recovery of growth and employment at a time of low inflation, existing unused capacity and access to external borrowing at a low cost. Also the dramatic surge in copper prices since 2006 have not been followed by an acceleration in growth. Most of the bonanza has been saved by government which run in 2007 a (current) fiscal surplus of 7.7 percent of GDP in 2006 and 8.1 percent of GDP. As mentioned before the surpluses created in the government are part of an economic and social stabilization fund deposited abroad earning (hopefully) safe but modest returns. As a consequence of a very favorable fiscal position, particularly in US dollars, the Chilean public sector is net creditor in dollars and maintains a small internal public debt (public debt has declined from 39 percent of GDP in 1990 to 4.9 percent of GDP in 2007).

**Exchange Rate Policy.** Since September 1999, Chile has been under a system of flexible exchange rates that replaced the “adjustable band (managed)” system in place in the 1990s (see Figure 6). The management of the adjustable band regime was not simple as persistent capital inflows during most of the 1990s, mainly until 1997, exerted a “downward”
pressure on the exchange rate (to appreciate) moving the market exchange rate to the floor of the band (see Figure 7). The Central Bank engaged in expensive sterilization operations to counteract the monetary effect of massive purchases of foreign exchange. In 1998-99, a tight monetary policy was complemented by a policy of reduced exchange rate flexibility (this move narrowed the band, cutting the distance between the floor and the ceiling of the band) in face of adverse terms of trade shocks and a reduction in capital inflows. The policy was surprising as in general, adjustments to adverse external shocks that are not fully financed require more (not less) exchange rate flexibility. The experience of current flexible exchange rates without intervention in the 2000-2008 period has been one of large fluctuations in the nominal exchange rate as shown in Figure 6.\(^9\) This is an issue that deserves attention as price (exchange arte) signals that contain a lot of volatility introduce

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\(^9\) The Central Bank has intervened in the foreign exchange market in very few occasions and only under pressure for depreciation of the exchange rate: one in 2001 associated with a certain instability created by September 11th and the crisis of the Argentinean currency board. The other main intervention was in 2002 after turbulence linked to the Brazilian elections.
Figure 6. Chile: Nominal Exchange Rate, 1984-2008
(in Chilean Pesos per US$)

Source: Own elaboration based on data from Central Bank of Chile.

Figure 7. Chile: Real Exchange Rate, 1977-2008
(Index 100 = 1986)

Source: Own elaboration based on data from Central Bank of Chile.
Note: Data points correspond to annual average real exchange rate, except for year 2008 that corresponds only to January. An increase in the index indicates depreciation and a decline is an appreciation.
noise for exporters and import competing firms. Again the dominating believe is that the exchange rate market has to be left undisturbed, and that any central bank intervention is ultimately futile. The problem is that this undisturbed market equilibrium may yield a level and volatility of the exchange rate that may have adverse real effects on economic activity and the profitability of the tradable goods sector, the engine of growth in Chile. Since 2005, a strong tendency towards appreciation of the exchange rate has developed but the Central Bank has refrained from intervening. In early 2008 the nominal exchange rate, peso/dollar appreciated in more than 10 percent in nominal terms in a context of high copper prices, weak dollar in international currency markets and a strong dollar-surplus of the Chilean government.10

Disinflation and Monetary Policy. In 1990 inflation was 27.3 percent converging to less than 3 percent until 2006 (in 2007 inflation accelerated to over 7 percent due to several food and energy price increases). The decline in Chilean inflation (see Figure 5) is also part of a general shift to a low inflation regime in the world economy. Chile instituted an independent Central Bank at the end of the Pinochet regime in the late 1980s with a mandate of ensuring low and stable inflation and normalcy in internal and external payments. Thus, the only policy-objective of the Chilean Central Bank is ensuring low inflation. Growth and full employment are not included as policy-objectives according to the Chilean Central Bank constitutional chart. This is certainly different from several Central Banks of developed economies, starting by the US Federal Reserve.11 It is argued that the strong anti-inflationary mandate of the independent Central Bank has contributed to the attainment of lower inflation.

At the same time, it is apparent that the policy actions of the Central Bank also affect output and employment and Central Banks can cause cycles and even deepen recessionary shocks (as it seems was the case in the late 1990s). In fact, the Central Bank

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10 The free floating regime has come along with: (a) a decline in “pass-through” coefficients between exchange rate and prices that reduces the inflationary effect of currency depreciations; (b) small liability-dollarization in the banking system although the increase in external indebtedness of the corporate sector reduces this effect; and (c) the development of more sophisticated financial instruments to deal with exchange fluctuations, see De Gregorio and Tokman (2004).

11 Of course monetary authorities cannot be completely oblivious to the real cycles of the economy and the effects of its own policies on the intensity and timing of these cycles. Also as part of the accountability mechanisms the authorities of the Central Bank have to present, every year, to Congress a report on the march of the economy. A new analysis of the topic is contained in Williamson (2008).
induced a credit crunch in 1998-99 that along with reduced exchange rate flexibility probably amplified the real effects on domestic output and employment of the external shocks associated with the global turbulence of 1997-99. Monetary policy in recent years has operated using an inflation target in the range of 2 to 4 percent but in 2007 inflation jumped over 7 percent due to higher oil prices, internal shocks that led to higher agricultural prices. Some observers argue that a policy of low interest rates by the Central Bank in 2006 and early 2007 also contributed to the upsurge of inflation in 2007.

Macroeconomic Performance of the Four Democratic Administrations since 1990

Comparing the macroeconomic and growth performance across the last four government administrations since 1990 (Bachelet at the time of this writing is still in the middle of her four year administration) we find some differences in outcomes and in underlying macro policies (see Tables 3 and 4). Economic growth was the highest in the Aylwin administration (7.8 percent per year in 1990-94) and the lowest in the Lagos administration with average GDP growth of 4.4 percent per year in 2000-2005. The growth record of the Bachelet administration in 2006-2008 was only marginally better (4.8 percent per year) but in a context of record-high copper prices. Also the average rate of unemployment was higher in the Lagos administration (see Table 3).

In turn, inflation was the highest under Aylwin (average 17.7 annual) and the lowest under Lagos (2.9 percent annual). The macro performance of the Frei Ruiz-Tagle administration lies in between Aylwin and Lagos in terms of growth and inflation (lower growth than Aylwin but faster than during Lagos; higher inflation than under Lagos but lower than during Aylwin). Of course, initial economic conditions and the international economy affected the growth record of any administration. For example, a complicated international scenario associated with the occurrence of the Asian and Russian crises hit the Frei government in 1997-98 and also affected, to some extent, the Lagos government (until 2003). In turn the Bachelet administration has benefited from unprecedented high copper prices, the main source of fiscal revenues for the government. Fiscal policy has been, on the whole, austere in the four governments. The fiscal deficit declined during the Lagos administration that adopted the fiscal rule and then turned to very large surpluses under the

---

12 This number probably will go up when 2005 is included if the forecast of near 6 percent growth realizes.
Bachelet administration. In general all concertación governments maintained moderate to low current account deficits. Recently in 2006-07 this turned to an average surplus of 3.6 percent of GDP.

Table 3. Chile: Economic Performance by Administration, 1990-2008

<table>
<thead>
<tr>
<th></th>
<th></th>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>GDP Growth Rate (%)</td>
<td>7.80</td>
<td>5.50</td>
<td>4.40</td>
<td>4.80</td>
</tr>
<tr>
<td>- Per capita</td>
<td>5.90</td>
<td>4.10</td>
<td>3.20</td>
<td>3.80</td>
</tr>
<tr>
<td>Inflation Rate (%)</td>
<td>17.70</td>
<td>6.10</td>
<td>2.90</td>
<td>5.20</td>
</tr>
<tr>
<td>Real Wages (Index 2000=100) /g</td>
<td>74.21</td>
<td>92.03</td>
<td>104.17</td>
<td>112.20</td>
</tr>
<tr>
<td>Real Wages (Rate of Variation, %) /g</td>
<td>3.74</td>
<td>3.82</td>
<td>1.61</td>
<td>2.39</td>
</tr>
<tr>
<td>Unemployment (%)</td>
<td>7.30</td>
<td>7.30</td>
<td>9.70</td>
<td>7.60</td>
</tr>
<tr>
<td>Fiscal Balance (% of GDP) /e</td>
<td>1.60</td>
<td>1.10</td>
<td>0.70</td>
<td>9.00</td>
</tr>
<tr>
<td>Terms of Trade (Index 1996=100) /e</td>
<td>93.25</td>
<td>102.22</td>
<td>114.98</td>
<td>163.70</td>
</tr>
<tr>
<td>Current Account (% of GDP) /e</td>
<td>-2.50</td>
<td>-3.50</td>
<td>-0.24</td>
<td>3.61</td>
</tr>
</tbody>
</table>

Notes:
e/ Central Bank of Chile.
f/ National Institute of Statistics, INE (Chile).

Table 4. Chile: Macroeconomic Policy by Government Administration, 1990-2008

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Exchange Rate Policy</td>
<td>Exchange rate band</td>
<td>Exchange rate band</td>
<td>Floating</td>
<td>Floating</td>
</tr>
<tr>
<td>Monetary Policy</td>
<td>Eclectic</td>
<td>Eclectic</td>
<td>Inflation targeting</td>
<td>Inflation targeting</td>
</tr>
<tr>
<td>Fiscal Policy</td>
<td>Austere (without fiscal rule)</td>
<td>Moderately austere (without fiscal rule)</td>
<td>Rule of structural fiscal surplus: 1% of GDP</td>
<td>Rule of structural fiscal surplus: 0.5% of GDP (from 2007)</td>
</tr>
<tr>
<td>Taxes to Short Term Capital Flows</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>


4. The Social Record of the Post-Pinochet Administrations.

This section focuses on the social dimension of the Chilean model during the post-Pinochet period. In a nutshell the main achievements has been a rapid decline in poverty
and the main failure is the inability to reduce inequality of incomes and wealth. Poverty (measured as the percent of population below a certain poverty line) declined from levels above 40 percent in the late 1980s to around 14 percent in 2006 (see Table 5). The decline in poverty is largely a by-product of the acceleration of growth that has taken place in the last 20 years. As depicted in Figure 8 there is a clear inverse relation between growth of GDP and poverty; however, the Gini coefficient most of the time above 0.55, remains virtually flat in the last 20 years (with a slight decline in 2006) in spite of the acceleration in growth and the decline in poverty of this period.\textsuperscript{13} In this section we shall devote more attention to the issue of the persistence of inequality.\textsuperscript{14}

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{figure8.png}
\caption{Chile: Growth, Poverty, and Inequality, 1987-2006}
\end{figure}

\textsuperscript{13} The exact numbers of people out of poverty are sensitive to the definition of the poverty line. In Chile poverty lines are calculated using consumption shares based on household surveys of the 1980s. Observers argue that is a low poverty line (diminishing measured poverty).

\textsuperscript{14} See Solimano (1998, 2005) for a discussion on theories of inequality and social policy. On the links between distributive justice and Economic Development, see Solimano, Aninat and Birdsall (2000). There is a growing economic literature that indicates that inequality of income and wealth (closely related to inequality of opportunities) is problematic both for ethical and instrumental reasons. Inequality can harm growth through various channels: it may generate social polarization and political instability, can invite to higher taxation which is detrimental to investment; in addition, in unequal societies there is an economic loss because many talented individuals and excluded social groups can not realize their initiative and productive potential because lack of credit, limited information on opportunities, lack of social contacts, and reduced access to political power.
The Chilean experience of the last two decades illustrates the complexities and nuances of the relation between economic growth and social inequality. Against the predictions of modern theory of political economy (as developed by Alesina, Rodrik and others) of a negative relation between inequality and growth, in Chile persistent inequality apparently did not harm growth (and was largely unaffected by growth itself) in the last two decades or so (although the pace of poverty reduction would have been faster if inequality were lower, for a given rate of growth of GDP). However, this is not the only sign of the relation between growth and inequality that is possible: older theories of savings-driven growth (an example of that is the Kaldor model in which workers have lower propensities to save than capitalists) predicted that certain concentration in income distribution was needed to boost national savings and finance growth. This is suggesting a positive relation between inequality and growth (this was part of Kaldor’s critique that capitalist growth and income concentration went hand in hand). In Chile, it is also apparent that the acceleration of economic growth per se has not led to a decline in inequality. The empirical puzzle is

<table>
<thead>
<tr>
<th>Country</th>
<th>Year</th>
<th>Poverty Rate (%)</th>
<th>Extreme Poverty Rate (%)</th>
<th>Gini Coefficient (Autonomous Income) (%)</th>
<th>Gini Coefficient (Monetary Income) (%)</th>
<th>Income Share of Top 10%</th>
<th>Income Share of Bottom 20%</th>
<th>Ratio 10/1 (10th vs. 1st)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chile</td>
<td>1987</td>
<td>45.1</td>
<td>17.4</td>
<td>57.7</td>
<td>57.7</td>
<td>47.40</td>
<td>3.20</td>
<td>54.00</td>
</tr>
<tr>
<td></td>
<td>1990</td>
<td>38.6</td>
<td>12.9</td>
<td>56.3</td>
<td>56.2</td>
<td>47.30</td>
<td>3.80</td>
<td>39.00</td>
</tr>
<tr>
<td></td>
<td>1992</td>
<td>32.6</td>
<td>8.8</td>
<td>56.2</td>
<td>55.9</td>
<td>47.40</td>
<td>4.10</td>
<td>35.00</td>
</tr>
<tr>
<td></td>
<td>1994</td>
<td>27.5</td>
<td>7.6</td>
<td>56.3</td>
<td>54.9</td>
<td>47.20</td>
<td>3.80</td>
<td>37.00</td>
</tr>
<tr>
<td></td>
<td>1996</td>
<td>23.2</td>
<td>5.7</td>
<td>57.6</td>
<td>56.3</td>
<td>47.10</td>
<td>3.20</td>
<td>54.00</td>
</tr>
<tr>
<td></td>
<td>1998</td>
<td>21.7</td>
<td>5.6</td>
<td>57.8</td>
<td>57.0</td>
<td>47.40</td>
<td>3.20</td>
<td>53.00</td>
</tr>
<tr>
<td></td>
<td>2000</td>
<td>20.6</td>
<td>5.7</td>
<td>57.8</td>
<td>57.2</td>
<td>47.90</td>
<td>3.20</td>
<td>57.00</td>
</tr>
<tr>
<td></td>
<td>2003</td>
<td>18.8</td>
<td>4.7</td>
<td>56.7</td>
<td>55.0</td>
<td>46.90</td>
<td>3.50</td>
<td>46.00</td>
</tr>
<tr>
<td></td>
<td>2006</td>
<td>14.5</td>
<td>3.2</td>
<td>55.2</td>
<td>53.2</td>
<td>44.70</td>
<td>3.40</td>
<td>45.00</td>
</tr>
<tr>
<td>Brazil</td>
<td>2001</td>
<td></td>
<td>59.3</td>
<td></td>
<td></td>
<td>46.95</td>
<td>2.47</td>
<td>53.97</td>
</tr>
<tr>
<td>Finland</td>
<td>2000</td>
<td></td>
<td>26.9</td>
<td></td>
<td></td>
<td>22.57</td>
<td>9.62</td>
<td>5.61</td>
</tr>
<tr>
<td>Ireland</td>
<td>1997</td>
<td></td>
<td>34.3</td>
<td></td>
<td></td>
<td>27.23</td>
<td>7.44</td>
<td>9.36</td>
</tr>
<tr>
<td>Portugal</td>
<td>1997</td>
<td></td>
<td>38.5</td>
<td></td>
<td></td>
<td>29.84</td>
<td>5.75</td>
<td>14.99</td>
</tr>
<tr>
<td>Spain</td>
<td>2000</td>
<td></td>
<td>34.7</td>
<td></td>
<td></td>
<td>26.61</td>
<td>6.97</td>
<td>10.35</td>
</tr>
<tr>
<td>Sweden</td>
<td>2000</td>
<td></td>
<td>25.0</td>
<td></td>
<td></td>
<td>22.18</td>
<td>9.12</td>
<td>6.20</td>
</tr>
<tr>
<td>United States</td>
<td>2000</td>
<td></td>
<td>40.8</td>
<td></td>
<td></td>
<td>29.85</td>
<td>5.44</td>
<td>15.00</td>
</tr>
<tr>
<td>Uruguay</td>
<td>2000</td>
<td></td>
<td>44.6</td>
<td></td>
<td></td>
<td>33.71</td>
<td>4.78</td>
<td>18.62</td>
</tr>
</tbody>
</table>

thus that high and stable Gini coefficients coexist with relatively rapid growth suggesting that both variables (inequality and growth) behave *independently* one from the other.\(^{15}\)

In spite of the reduction of poverty in the last 20 years, the evidence shows that vulnerability to poverty still remains as a potential problem. In fact, it is estimated that near 30 percent of the population have incomes within 40 percent of the official poverty line (see Lopez and Miller, 2008). This reveals that significant contingents could fall in poverty if the economy is hit by adverse shocks. Inequality data shows a picture of significant and persistent disparities in income in Chile: the top richest 10 percent of the population captured near 47 percent of income up to 2003 and 45 percent in 2006; in contrast the bottom 20 percent captured only 3.4 percent of income in 2006. The Gini coefficient for autonomous income (say income earned in the market before subsidies and transfers of the government) has an average value of 56.8 in the 1987-2006 period and slightly declines in 2006. In turn, the Gini coefficient for total income—say the concept that includes the transfers and subsidies of the state—is slightly below the Gini for autonomous income but the differences are not very significant. These values of the Ginis are at the high-end for Latin America, a region already characterized by high inequality (see Table 5).

![Figure 9. Chile: Income Averages by Income Groups, 2006](image)

**Panel A**: Deciles

**Panel B**: Ventiles

Source: Own elaboration based on CASEN survey 2006.

\(^{15}\) Solimano and Torche (2007) investigate this issue for Chile and note the degree of independence between both variables. See the World Development Report 2005/06 of the World Bank devoted to Equity and Development that stresses the multidimensional nature of inequality encompassing both economic, institutional and political determinants.
Table 6. Chile: Gini Coefficients by Income Groups, 1987-2006
(measured over Autonomous Income)

<table>
<thead>
<tr>
<th>Year</th>
<th>Gini Total (%)</th>
<th>Gini 1-9 deciles (%)</th>
<th>Gini 10th decile (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1987</td>
<td>57.7</td>
<td>39.5</td>
<td>34.3</td>
</tr>
<tr>
<td>1990</td>
<td>56.3</td>
<td>36.4</td>
<td>37.6</td>
</tr>
<tr>
<td>1992</td>
<td>56.2</td>
<td>36.0</td>
<td>38.2</td>
</tr>
<tr>
<td>1994</td>
<td>56.3</td>
<td>37.0</td>
<td>39.4</td>
</tr>
<tr>
<td>1996</td>
<td>57.6</td>
<td>39.6</td>
<td>37.1</td>
</tr>
<tr>
<td>1998</td>
<td>57.8</td>
<td>39.6</td>
<td>36.4</td>
</tr>
<tr>
<td>2000</td>
<td>57.8</td>
<td>38.3</td>
<td>40.0</td>
</tr>
<tr>
<td>2003</td>
<td>56.7</td>
<td>37.5</td>
<td>39.6</td>
</tr>
<tr>
<td>2006</td>
<td>55.2</td>
<td>38.1</td>
<td>35.3</td>
</tr>
<tr>
<td>Average</td>
<td>56.8</td>
<td>38.0</td>
<td>37.5</td>
</tr>
</tbody>
</table>


Figure 9 (Panels A and B) shows the shares of income by deciles and ventiles (the distribution ordered by groups of 5 percent). It is apparent from Figure 9 that inequality of incomes in Chile is mainly due to concentration at the top (say the richest 10 and 5 percent) rather than due to acute poverty at the bottom of the distribution. In turn, income distribution is relatively even (lower disparities of income) from the 1 to 9 deciles. The main difference is in the income share of the top decile relative to the rest. The same point can be made by looking at Table 6 that shows that the values of the Gini coefficients for the complete distribution (from deciles 1 to 10) are significant higher than the Gini for the deciles 1 to 9 (and 10th). In fact, if the top decil is excluded from the overall distribution the resulting inequality levels are not too different from the levels found in more egalitarian countries (a Gini below 0.4, see Table 5). A mathematical note is relevant here: due to the formula of the Gini that includes several interaction terms the total (or average) Gini coefficient for the whole distribution is not the average of the Gini for the individual sub-components. Our measures of inequality focuses on income flows. However, wealth distribution is probably much more concentrated than income distribution in Chile (this is true in other countries as well). As Table 7 shows, according to the publication Forbes
Magazine that gathers since 1982 information on the wealth levels of the “super-rich” (billionaires), Chile has four billionaires (individuals whose net worth is estimated to be over one billion dollars) out of a total population of 16 million people. The estimated combined wealth of the four riches people in Chile is 12.5 percent of Chilean GDP (estimated for 2008). As a reference point the United States had 406 billionaires in 2007 (out of a population of 300 million) whose combined wealth amounts to around 10 percent of the GDP of the US. Wealth concentration seems to be much lower in the US than in Chile!

### Table 7. Individuals with the Largest Net Worth in Chile, 2004-2008

<table>
<thead>
<tr>
<th></th>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Andrónico Luksic 1/</td>
<td>3,400</td>
<td>4,200</td>
<td>..</td>
<td>..</td>
<td>10,000</td>
<td>..</td>
<td>77</td>
</tr>
<tr>
<td>Anacleto Angelini 2/</td>
<td>2,500</td>
<td>2,900</td>
<td>3,700</td>
<td>6,000</td>
<td>1,000</td>
<td>119</td>
<td>1062</td>
</tr>
<tr>
<td>Eliodoro Matte and family</td>
<td>2,800</td>
<td>2,700</td>
<td>4,100</td>
<td>5,600</td>
<td>7,900</td>
<td>137</td>
<td>117</td>
</tr>
<tr>
<td>Sebastián Piñera</td>
<td>..</td>
<td>..</td>
<td>..</td>
<td>1,200</td>
<td>1,300</td>
<td>799</td>
<td>897</td>
</tr>
<tr>
<td>Four major fortunes</td>
<td>8,700</td>
<td>9,800</td>
<td>7,800</td>
<td>12,800</td>
<td>20,200</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chile’s GDP (in current US$)</td>
<td>95,026</td>
<td>115,000</td>
<td>145,841</td>
<td>154,000</td>
<td>161,700</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Four major fortunes as % of GDP</td>
<td>9.16%</td>
<td>8.52%</td>
<td>5.35%</td>
<td>8.31%</td>
<td>12.49%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


Notes: In column (4) GDP 2007 was estimated based on rate of growth of 5.2%. GDP 2008 in column (5) was calculated based on the average of the projection range (4.5-5.5%) from the Central Bank of Chile (IPoM, Jan 2008).

1/ Andrónico Luksic died August, 2005. His widow, Iris Fontbona and family inherited his fortune.

On the causes of the persistence of inequality

Why inequality remains so high in Chile? Several explanations can be put forward to account for the persistency of inequality. These explanations combine the effect of globalization, wealth concentration, lack of social mobility, labor market and political economy factors:

(a) Economic openness and liberalization policies enabled gains (wage premiums and large profits) to individuals with tertiary education levels, with entrepreneurial drive and risk taking attitudes, good social connections and access to credit. These people often come from well-to-do families although of course random cases coming from other social backgrounds exist.
(b) A significant concentration of ownership in key sectors such as banking, manufacturing, retail trade, private pension and health providers, pharmacies and other sectors with high rates of return for unit of invested capital (see Solimano, 2007).

(c) Weak mechanisms of upward social mobility and accumulation of human capital. The big differences in the resources per student of the public school system compared to private schools (a ratio of one to four approximately) reinforces the lack of social mobility and income inequality that is closely correlated to the level and quality of education. As the children of working class and low income groups attend mostly public schools and the children of the upper middle class and elites go to private schools the creates a powerful mechanisms of preservation of disparities in incomes and social connections in Chilean society.

(d) Low level of workers unionization and limited bargaining power of the working class reducing its capacity to appropriate a higher share of the productivity gains that are generated in a growing economy. This point was already underscored by the famous David Ricardo long ago. This also affects the labor share in national income.

(e) A low preference for public policies oriented toward progressive income and wealth redistribution not only by the Pinochet regime but also by the democratic governments in power since 1990.

The Role of Policies in the Persistency of Inequality

The persistence of inequality in Chile after near two decades of the restoration of democracy is one of the salient features of the Chilean model. This raises some intriguing questions on the relationship between democracy and equality that deserves further analysis. It also shows a shift in the social priorities of the Chilean center-left away from redistributive economics in sharp contrast with its historical stance on this issue.\textsuperscript{16} The

\textsuperscript{16} Part of the "traditional left" in Chile, say the Chilean Communist Party, is not in the government and does not belong to the coalition that has ruled since 1990.
social policies of the *Concertación* governments have been guided by at least four general principles: (i) economic growth will be the main force to reduce poverty measured on a income–basis (in reference to a poverty line); (ii) increase in the level and better targeting of monetary transfers to the very poor and most vulnerable, (iii) increase in public spending in education, health, housing and pensions, (iv) more recently the Lagos and Bachelet governments started reforms in the systems of private provision of social services in health care and in the pensions system. A “social matrix” is shown in Table 8 for various dimensions of social and labor policy since 1990.

In retrospect some controversial features of the social and labor polices of the democratic administrations are: (i) the lack of explicit and active policies oriented to reduce inequality of income and prevent big concentration of ownership and wealth in economic conglomerates in the banking sector, pension funds management companies and others. (ii) the absence of explicit consideration of the middle class as a valid subject of social policy (partially redressed in the Lagos and Bachelet administrations), (iii) an excessive emphasis on targeting, that generates unintended exclusions of benefits for border-line individuals, included children, (iv) underinvestment in public education as reflected in very significant differences in the level of spending per student between public and private education,\(^\text{17}\) (v) the absence of labor policies oriented to rebalance the bargaining power of workers and employers, that was severely (permanently?) debilitated the power of labor unions since the Pinochet regime.

The privatization of social services in the military regime created a dual regime in which the upper middle class and the rich receive social benefits from the private providers (they can afford to pay for that) whereas the bulk of the middle class and the poor are in a public system generally under-funded. In view of these limitations the Bachelet administration is talking of a establishing a “new social protection state” for Chile. The main concrete step in this direction is the recent reform of the social security system. In 2007 a new law was approved oriented to improve minimum pensions and making universal its coverage, redressing some inequities in the system against women and other changes. The new law however, preserves virtually intact, the high-fees, private capitalization AFP- system.

\(^{17}\) See Lopez and Miller (2008).
<table>
<thead>
<tr>
<th>Table 8. Chile: Social Matrix, by Government Administration, 1990-2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>---------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>Poverty</strong></td>
</tr>
<tr>
<td><strong>Inequality (Gini Coefficient)</strong></td>
</tr>
<tr>
<td><strong>Increase and Focalization of Subsidies</strong></td>
</tr>
<tr>
<td><strong>Minimum Wage</strong></td>
</tr>
<tr>
<td><strong>Education</strong></td>
</tr>
<tr>
<td><strong>- Expenditure</strong></td>
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Labor market, workers unionization and social conditions

The link between social conditions and the working of the labor market is important. Elements of those links can be summarized as follows (see Riesco, 2008,
Solimano and Pollack, 2006, and Infante and Sunkel, 2004, for various views and further elaboration on this:

(a) Poor families are larger than non-poor families and have higher dependency ratios;

(b) Poor families (indigent and poor non-indigents) have a high incidence of unemployed and inactive members,

(c) The incidence of unemployment among the poor is closely related to their education level, which is much lower among the poor income strata,

(d) Workers coming from indigent and poor households tend to work in lower productivity sectors,

(e) The Chilean labor market is characterized by job fragility, frequent shifts of workers across jobs, from employment to unemployment, changes in and out of the labor force, (Riesco, 2008). This implies a degree of job fragility particularly for women and low skills workers, one of whose consequences is preventing the attainment of a minimum pension in the private capitalization system that had a minimum requirement of continuous contributions for 20 years to qualify for such minimum pension.

(f) There is significant segmentation in the Chilean labor market between the formal and informal sector. According to Infante and Sunkel (2004) while in the formal sector around 87% of workers have a formal work-contract; only 50 % of informal workers have it. Besides, 84% of formal sector’s workers have social security benefits, but only 35% of workers in the informal sector have it. In turn, working conditions are generally worse in the informal than in the formal sector (longer working hours and less safety at the work-place). Informal sector workers are less educated (with an average of 9.6 years of education), than formal workers (with an average of 12.2 years of education); also poverty is higher among informal sector workers, than within the formal sector. Additionally, working women are concentrated in the informal sector, and they
get lower salaries than men (20% lower in the formal sector and 45% lower in the informal sector).

(g) The degree of labor unionization in Chile is very low and has declined since the return of democracy. In fact while the rate of unionization reached near 16 percent in 1992 in 2006 it was near 11 percent. In the years before the military coup of 1973 the rate of unionization was over 20 percent. In addition, currently the percent of workers subject to collective bargaining is around 8 percent (Riesco, 2008).

The rise of crime and insecurity

A worrisome feature, probably connected with social conditions, is the significant increase in urban violence, robbery and crime in Chile that has taken place in the last 10 to 15 years. The statistics of number per 100,000 inhabitants of people reporting violence associated to assaults, robbery and stealing has increased by 124 percent between 1990 and 2005 (Beyer and Vergara, 2006). A full explanation for the rise in violence and robbery in this period would require further research in the topic. Some factors may be highlighted, however. One possible explanation is the following: as the economy prospers and gets richer expectations of economic advancement develops in all groups of the population. However, in a country with high inequality and limited upward social mobility, some people particularly the unemployed or precariously employed, often young individuals coming from dysfunctional families may feel that they share relatively little of the macro prosperity. Therefore, some of them will engage in criminal activities in urban areas particularly in affluent neighborhoods. In fact, Beyer and Vergara (2006) show that the criminals are mostly young (often under 20 years of age), male and of low income levels. Also they often come from weakly constituted or fragmented families. This latter factor in their statistical analysis is denoted by a variable showing the proportion of families in which the head of household are women; this variable, in turn, has a statistical significant effect on the rate of reported cases of crime and violence. Also the rate of urbanization has

\[18\] Unfortunately, statistics for this period on the actual number of violent, robbery-related actions are not available.

\[19\] One of the few empirical studies on the determinants of crime and violence in Chile is Beyer and Vergara (2006).
a positive effect on reported crime, confirming the presumption that this is mainly an urban phenomenon. The cost of undertaking crime proxy by number of arrests and time spent in jail as well as some anti-crime policies (the program called Plan Cuadrante but apparently not for the Barrio Seguro) have a negative effect on reported crime rates. In any case social conditions such as fragility of employment, inequality and rising expectations along with growing urbanization and insufficient police and judiciary systems may account for growing crime in Chile.

5. Looking at the Future: Development Potential, Competitiveness, and Quality of Life in Chile

In the last two decades Chile has shown that is able to grow at respectably high rates although this growth process was not always steady. The “consensus forecast” of the government and local economists seems to be that Chile’s potential grow is about 5 percent per year. Although this rate of growth is below the average observed in the last two decades it yields a respectable rate of growth of GDP per head of 3.5 percent per year (assuming population growth of 1.5 percent per year). Of course all these projections are conditional on the behavior of the main determinants of economic growth besides demographic trends. In the future, Chile’s economic potential will depends on various economic and non-economic factors. On the economic side critical variable will be the level of accumulation (and the quality) of human and physical capital, the rate of growth of total factor productivity and the quality of resource allocation and public policies. Investment and innovation require stability of the rules of the game and macro, social and political stability. Excessive inequality can be a potential destabilizing factor if combined with modest growth and disappointed expectations. Chile already lived through a period of initially high development expectations that were disappointed later on in the early 20th century. Also it is very important to invest in “enabling social and institutional factors’ such as good level of education, research and development, low bureaucracy and moderates costs of doing business, effectiveness and quality of institutions (including the incidence of corruption). In some of these scores Chile does well by international standards. In others the record is far from brilliant (see Table 9).
On the education front Chile faces perhaps one of its more important challenges if it wants to grow at reasonable rates. According to the international PISA and TIMSS tests of educational attainment for middle and high school students in science, reading and math, Chile is well below the OECD although above Latin America (for the PISA test). In turn, the level of public expenditure per student in Chile (as a share of GDP) is below the OECD in primary education (4.4 percentage points of GDP below the OECD average), in secondary education (a difference of 10 percentage points) and in tertiary education (a difference of 15 percentage points). In tertiary education public spending in Chile is near 20 percentage points below the average of Latin America, Table 9. However, these large
differences are probably due to the increasing importance of the private university system in Chile; so public spending in tertiary education can underestimated the overall effort in this sector.

Expenditure on research and development in Chile is a near one-fifth of the average of OECD countries and the number of researchers in R&D activities is also just a fraction of OECD. However, with respect to Latin America the number of researchers in R&D is twice as much as the average of Latin America.

Chile shows low indices of perceived corruption (i.e Transparency International) and is close to the levels of the OECD in this matter. However, in recent years in Chile the reporting of cases of irregular practices in the public sector and corruption have risen. Bureaucratic corruption seems to be low but ‘political corruption” apparently is on the rise. A system of implicit party quotas for the appointment of government officials at different levels exist. This, per-se, does not imply corruption but it has been found that “party operators” in the public sector try to extract resources form various government agencies and ministries to finance their political campaigns, patronage and the provision of jobs and contracts for family, party-members and friends. The magnitude and extension of these practices is still largely an open question.

At the same time, regarding the “cost/ease of doing business” Chile scores well according to an index prepared by the World Bank that measures various considerations that affect the cost of opening and running a business: the time to open and close a company, difficulties to pay taxes, labor regulations, cost of credit. In an index from lower cost of doing business to higher cost Chile is number 33 in a ranking of 178 countries. The average for Latin America is 89 and the average of the OECD is 28. In addition, the degree of competitiveness of Chile (see Competitiveness Index in Table 9 ) is close to OECD levels and above Latin America.

On quality of life, Chile scores at a relatively high level in the Human Development Index –closer to the OECD and above the average of Latin America. Female’s life expectancy is equal 81 years of age and for male 74 . Health indicators for children are good particularly regarding low indices of diarrhea. Negative trends on quality of life, however, are the rise in crime documented before, the congestion and pollution of urban areas and

\[20\text{ See Tanzi (2008).}\]
increased time spent in public transportation, particularly in the capital city of Santiago after the launching of a new, largely defective system of public transportation (the Transantiago system).

The environment is an important topic. Chile approved new legislation for the protection of the environment in the early to mid 1990s; however, the prevailing institutional framework is characterized by the absence of a strong centralizing center (a Ministry of the Environment or equivalent) and responsibilities are spread out across various agencies; the most important of them being the CONAMA (Corporación Nacional del Medio Ambiente, National Environmental Agency). Also the Ministry of the Presidency is in charge of a range of environmental issues along with various other subjects such indigenous population and others. Experts agree that Chile still devotes modest public budgets for environmental protection and that these agencies often lack of human and financial resources for monitoring and control in sensitive areas. On the other hand, part of the environmental spending in Chile is carried out by the private sector (water and sewerage treatment and others). A positive force for more environmental protection in Chile is coming from the outside: the free trade agreements that Chile has signed with the United States, the European Union and other countries along with the impending accession to the OECD. These agreements will bring the need to enforce stricter environmental standards closer to the ones adopted in developed nations. How fast will this convergence take place is an open question.


Chile, in the last twenty years or so, has made important achievements in terms of acceleration of economic growth, productive modernization and the consolidation of macroeconomic stability. Free markets and a prominent role for the private sector have been center-pieces of the development strategy followed in the last three decades. In democracy, a more gentle and human version of the economic model imposed in the military period as taken place. The democratic governments since 1990 have cared (and achieved) poverty reduction and advanced on social protection of the poor. However, the Chilean model in democracy has failed to alter the traditional inequality of income and wealth of Chilean society. As growth has been reasonably high during this period, the
restoration of democracy has been accompanied by modest social conflict, helped also by a context of weak unions and largely demobilized social movements. Nowadays, income and wealth inequality takes place at a much higher level income per capita level than a few decades ago. Can this equilibrium be maintained indefinitely in the future? Probably not as societies that get richer its citizens are likely to demand also more rights, less inequality and be less tolerant for large social stratification. A gradual but steady reduction in social inequality would require changes in several fronts: (a) more resources of the public sector to education, (b) curtailing further concentration of wealth and market shares in banking, retail trade, private pensions systems and private health provision, and other sectors, (c) more effective regulation of big business and (d) effective support to the sector of small and medium size enterprises. Growing labor activism in Chile is also a signal of the need to rebalance labor relations in a more prosperous society that made labor unions increasingly peripheral and marginalized. Another worrisome trend of the Chilean model is the environment impact and natural resource sustainability of a model of economic growth and export orientation based in the intense exploitation of natural resources. A critical dilemma is whether to continue pushing for growth along the same lines of resource-intensity and neglect of inequality of the last two to three decades or rebalancing the priorities of the development strategy to more social equality and protection of the environment. Also in a turbulent international economy is hard to think in a purely hands-off approach to macroeconomic policy that attempt relying in rules irrespective of the pressures for stabilizing employment and growth. This record shows the limits of neo-liberal economics for producing social equity and balanced development in unequal and highly stratified societies even when applied by social-democratic administrations subject to democratic scrutiny. The political economy correlate of a redefinition in development priorities may be less power for the dominant elites (economic and political) and broader social participation for the middle class and the working people to support new and more equitable development priorities.
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