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Policy Regimes, Inequality, Poverty and Growth

The Chilean Experience, 1973-2010

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Abstract

Since the 1970s, Chile has exhibited a highly skewed income distribution accompanied with strong fluctuations over time. Although income distribution worsened notably in the 1970s-80s, a significant improvement was recorded in the first half of the 1990s, resulting from better economic and social policies in the return to democracy. Nonetheless, Chile still faces significant challenges to improve development. There must be an active macroeconomic policy focused on the real economy. Chile also needs profound microeconomic reforms, including (i) capital markets, developing long-term financing channels for small businesses; (ii) radical progress in quality of education and labour training; and (iii) vigorous public support for innovation.

Keywords: income distribution, macroeconomic policy, microeconomic policies

JEL classification: D31, E2, D04

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Acronyms

AFPs	private pension fund management companies
EPFs	household budget surveys
FEES	social and economic stabilization fund
FONASA	national health fund
INE	National Bureau of Statistics
PEM	minimum employment programme
POHJ	employment programme for household heads
SMEs	small- and medium-sized enterprises

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1 Introduction

Significant changes in poverty and income distribution have been recorded in Chile over the past four decades. Its evolution can be summarized in three phases as follows: first, in the 1970s and 1980s during Pinochet's dictatorship, income distribution deteriorated sharply, and the share of the population living below the poverty line rose to 45 per cent in 1987. The highest inequality level was also reported during that same year, and in particular there were regressive shocks associated with the economic crises of 1975 and 1982. Next, after democracy was reinstated in 1990, poverty was reduced substantially, and was 15 per cent of the population in 2009. Income distribution improved by the first half of the 1990s, but stepped back partially with the Asian crisis contagion. Third, partial progress was subsequently recorded due to economic recovery and new quite significant social reforms, moving closer to the lower inequality reached in the first half of the 1990s. Income distribution at present is less unequal than in the 1980s, but is more regressive than in the 1960s and early 1970s

The above results, however, should be viewed with caution. For an accurate measurement of income distribution, all different sources of income should be considered. However, income from capital is usually poorly measured, and this is also the case with the Chilean surveys. On the one hand, the Chilean employment survey focuses mainly on labour income. The CASEN datasets, on the other hand, attempt to measure social transfers and income from capital, but this last variable suffers from significant underreporting when national accounts are taken as a benchmark, thus making it difficult to impute figures at household levels. This limits the analysis of income distribution. As income from capital is most probably concentrated within wealthy families, our values underestimate the inequality level, and may bias the labour income share upward. This is an important limitation that needs to be considered in the interpretation of the data analysis.

The paper proceeds as follows: the evolution of inequality during the neoliberal reforms under the 1973-90 Pinochet dictatorship is presented in section 2. Next, the causes of the changes in inequality are examined. Section 3 covers the same analysis for the four centre-left democratic governments,[1] starting from 1990 up to the global crisis. Section 4 analyses the contagion of the global financial crisis, its effects on Chile and the country's policy responses. Section 5 offers concluding remarks.

2 Income inequality under the dictatorship: 1973-89

2.1 Changes in inequality

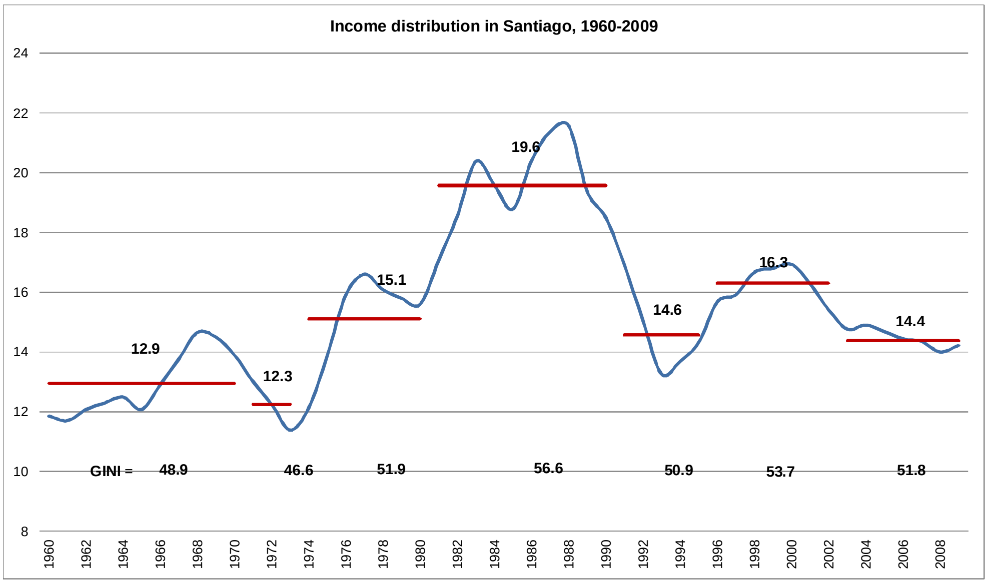
Income distribution experienced a sharp negative trend during the 1970s and 1980s (see Figure 1). Consistent, annual data from the University of Chile's Employment Survey for Santiago, available since 1957, show that the ratio of the rich/poor quintiles was 13 times (Gini=49) in the 1960s, worsened to 15 (Gini 52) in 1974-81, and to 20 (Gini=57) in the 1980s. In fact, income distribution between 1975 and 1987 worsened steadily, stabilized temporarily during the 1977-80 upswing, only to deteriorate again

[1] See Cornia (2010) for a comparative analysis of the recent centre-to-left regimes in Latin America.

thereafter. Even more regressive results were evident in 1987, regardless of whether these were measured by the Gini coefficient or the ratio fifth/first quintiles.

This was essentially a reflection of four interrelated factors: (i) trade reforms strong in import liberalization and weaker in export promotion; (ii) labour reforms from 1973 onward that were strongly biased against workers and union organizations; (iii) great real macroeconomic instability, and (iv) a low ratio of investment per labour force member (signalling a negative impact on productivity for low-trained workers).

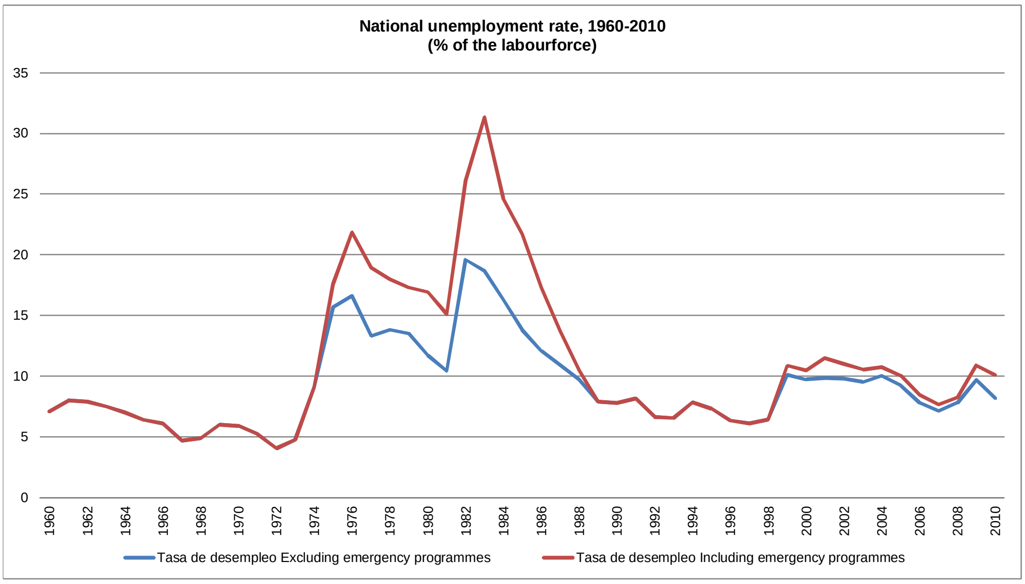
Figure 1
Income distribution in Santiago, 1960–2009



Notes: The data are ordered by income per capita of households. The numbers on the horizontal lines are the average of the ratios richer/poor quintiles in each subperiod under each line. Averages of the Gini coefficient in the same subperiod are given at the bottom of the chart.

Source: Calculated by authors, based on the University of Chile Employment Survey.

Figure 2
National unemployment rate, 1960–2010



Source: Calculated by authors, based on INE data.

Table 1
Wages, family allowances and public social expenditure, 1970–2010
(real indexes, 1989=100)

	Average (1)	Minimum wage (2)	Family allowance (3)	Per capita public social expenditure: Education (5)	Health (6)	Total (7)
1970	109.2	108.9	352.1	159.7	143.7	119.2
1980	97.2	141.6	287.3	141.5	118.2	107.4
1981	105.7	147.8	284.8	147.1	107.3	116.2
1985	90.4	93.7	192.2	121.4	92.0	107.9
1986	92.3	89.5	160.9	114.2	89.8	103.6
1987	92.1	84.0	134.2	105.0	88.4	101.0
1988	98.1	89.6	117.0	102.6	101.1	102.6
1989	100.0	100.0	100.0	100.0	100.0	100.0
1990	101.8	107.0	118.7	94.9	94.0	97.4
1991	106.8	116.7	145.8	105.0	108.9	104.6
1992	111.6	122.0	149.3	118.7	125.1	113.7
1993	115.8	128.0	151.9	127.2	138.6	123.1
1994	123.2	132.8	154.6	137.1	150.9	129.1
1995	129.2	138.8	159.4	151.1	155.3	136.7
1996	134.5	144.8	166.0	168.5	166.7	148.0
1997	137.7	150.1	174.9	183.4	174.4	154.5
1998	141.4	159.3	182.9	201.8	186.4	164.1
1999	144.8	173.8	187.8	213.1	189.7	174.7
2000	146.8	186.5	189.1	228.8	203.0	183.2
2001	149.2	192.8	191.0	244.9	217.1	192.4
2002	152.2	198.2	194.6	260.5	225.1	196.1
2003	153.6	200.7	196.3	261.4	236.0	198.0
2004	156.4	206.3	199.3	278.5	250.8	206.6
2005	159.3	210.2	198.9	275.4	270.1	214.9
2006	162.5	215.6	200.6	289.4	302.7	226.8
2007	167.0	219.3	227.0	318.9	338.9	242.4
2008	166.7	218.4	244.7	364.6	359.2	261.7
2009	174.7	228.8	265.1	417.3	433.7	306.2
2010	178.5	234.4	283.0	437.1	463.9	322.0
Average annual growth						
1982-1989	-0.7	-4.8	-12.3	-4.7	-0.9	-1.9
1990-1997	4.1	5.2	7.2	7.9	7.2	5.6
1998-2009	2.0	3.6	3.5	7.1	7.9	5.9

Note: Column (1) is the general wage index until April 1993, and later the hourly wage index. Column (2) represents liquid income. Column (3) is the family allowance of blue-collar workers in 1970, then the uniform allowance, and later that for the low-income bracket. Column (6) includes expenditures on education, health, housing, pensions and others. All are annual average figures.

Sources: Based on Ffrench-Davis (2010, table VII.1) and updated with data from the National Bureau of Statistics (INE) for wages; and the Budget Office (DIPRES) for social expenditure.

Nevertheless, few social indicators did continue to improve during the Pinochet regime, although most experienced sharp reversal. The number of students enrolled in primary schools as a percentage of the population aged six-to-fourteen was already close to 100 per cent in 1973 while the proportion of 15-18-year olds at the secondary level climbed from 51 per cent in 1973 to 75 per cent in 1989. Also, infant mortality improved significantly as a result of public efforts to strengthen mother and child care that included nutrition programmes for infants, a decline in birthrates, and an improvement in the education of mothers (Monckeberg 1998; Raczynski and Oyarzo 1981).

The worsening of income inequality was generated in particular by the labour markets (Table 1). In the beginning, wages were adjusted with a significant underestimation of actual inflation. This was followed by the deep recession in 1975 which triggered a strong rise in unemployment (Figure 2). Next came recovery in economic activity, employment and wages that continued until 1981, a second, deeper recession in 1982, only to be followed again by a recovery lasting until 1989. In all, real wages during the entire period averaged a mere 82 per cent of the average 1970 level. Unemployment affected on average 18 per cent of the labour force, with a peak of 31 per cent in 1987 (Ffrench-Davis 2010: 8). By 1989, minimum and average wages were still about 8 per cent below the 1970 levels; the impact was compounded by increased wage inequality (discussed later). Similarly, family allowances continued to decline steadily until 1989 when they were 72 per cent below the 1970 level.

Table 1 shows that per capita public social expenditure on education and health dropped substantially, 37 per cent and 30 per cent, respectively. Social security spending was the only one to rise due to the increasing numbers of pensioners, which absorbed the cuts made to average pensions. However, some social spending was targeted to society's poorest members, which appears to have partially compensated for the decline in their labour income.[2] Public social expenditures started to increase again only in 1991 after the return of democracy.

The data on the inequality of income distribution are supplemented with information from consumer spending surveys. Household budget surveys[3] (EPF), on which the CPI basket has been consecutively built, show a steady decline in household spending

Table 2
Growth, employment and net investment, Chile, 1974-2010
(average annual growth rate, %)

	GDP Growth	Growth of employed people	Net investment ratio
1974-81	3.0	2.4	4.7
1982-89	2.9	3.3	4.4
1990-98	7.1	2.4	13.1
1999-08	3.7	2.1	12.8
2009-10	1.7	3.5[a]	14.4

Note: [a]Significant change of figures with a new employment survey of INE.

Source: Based on Ffrench-Davis (2010), updated with data from the Central Bank of Chile, and the National Bureau of Statistics (INE).

2 At times targeting resulted in a crowding-out of the middle class; as, for example, exclusion from the university, once the rather free access was suppressed without a compensating comprehensive scholarship system·

3 EPFs were carried out in Santiago in 1969, 1978, and 1988.

among the three lowest quintiles. Furthermore, the poorer the population sector, the greater the proportional decline (Ffrench-Davis 2010, table VII.2). For example, the share of expenditure of the poorest 40 per cent of households fell from 19.4 per cent in 1969 to 14.5 per cent in 1978, and to 12.6 per cent in 1988. In contrast, for the same benchmark years, the richest quintile saw its share rising from 44.5 per cent, to 51.0 per cent, and 54.9 per cent, respectively, making it the only quintile whose total spending rose between 1969 and 1988.

2.2 Decomposition of income inequality by source: 1973-89

Most of the literature on income distribution has concentrated on measuring income inequality and poverty indicators. However, in recent years, a number of studies have examined and measured the contribution of different sources of income in total inequality. The objective of such an approach is to understand the nature of income inequality by analysing whether total inequality is concentrated in certain specific income components. Thus, it is possible to measure the contribution of any income component to total income inequality.

The Gini coefficient, considered to be one of the best measures of inequality, has been widely used. Following Lerman and Yitzhaki (1985), this section presents a decomposition of the Gini index by sources of income for the 1973-89 period. We measure the contribution of the different sources of household income, assessing the relative importance of each on total inequality. In this section we use the University of Chile's employment survey. Total income is divided into two categories: (i) labour income, and (ii) other incomes (pensions, rent of capital, remittances, etc.). Each component of household income is normalized by household size; thus, the analysis is based on per capita income.

Figure 3 shows the share of each income source in total household income between 1973 and 1989. Conditional on the potential data bias discussed earlier, labour was the major source in total income in Chile during the period in question. However, its share in total income declined from 90 per cent to 84 per cent during the relevant period, while other income increased from 10 to 16 per cent. These results highlight the importance of the labour market as the main source of income generation for households, and their limited access to other sources of income. The results also reflect the difficulty for measuring the return to capital.

The evidence shows a high level of labour income inequality (Figure 4). The lowest value of labour Gini coefficient was in 1974, resulting from the policies implemented during the Allende government.[4] The average labour income Gini coefficient was 0.58 throughout the period, except for a peak of 0.64 in 1987. With respect to the 'other sources of income', the Gini coefficient was high and relatively stable during the period, averaging 0.88. These results are consistent with anti-worker labour reforms, i.e., limited union representation and minimum wage policies.

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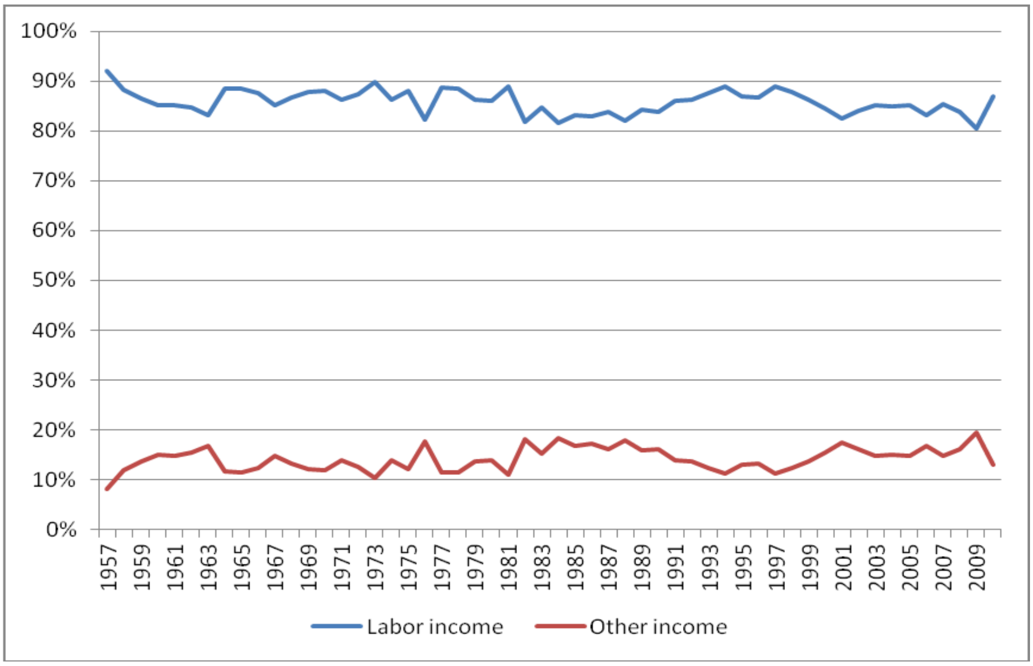
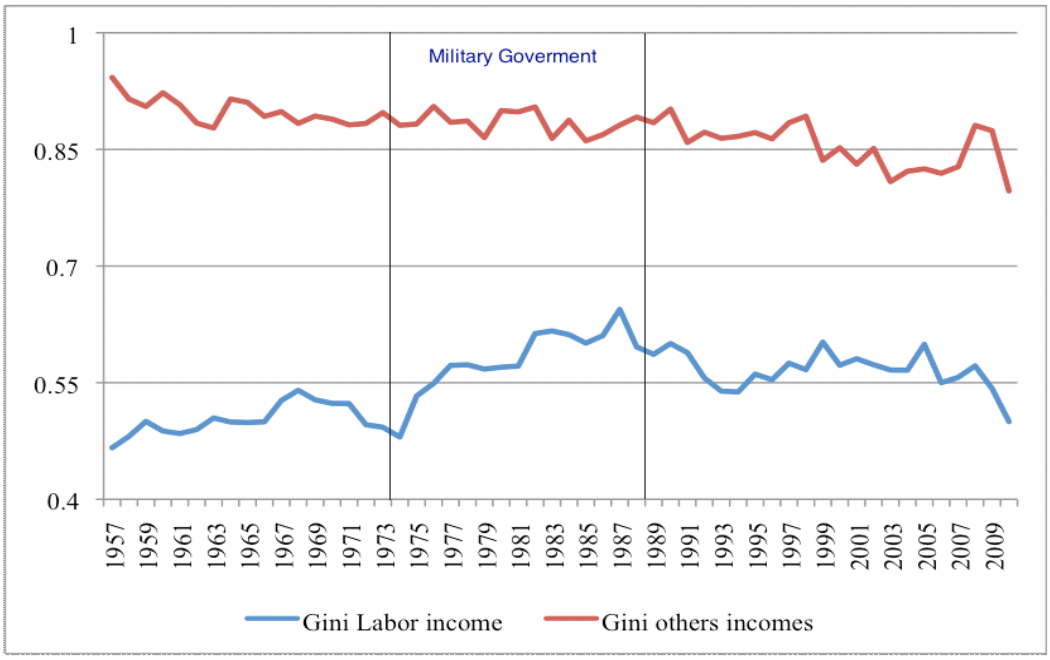
4 The Allende government (1970-73), supported by the Popular Unity (left-wing coalition that comprised most of the Chilean left), attempted to establish an alternative path to a socialist society—'The Chilean way to socialism'—with projects such as increases in social spending, nationalization of copper and various large private firms in the midst of political polarization of the cold war and the serious economic and financial crisis.

Figure 3
Participation of the income sources in total household income



Source: Data based on Employment Surveys (1957–2010), Universidad de Chile.

Figure 4
Gini coefficients by income source



Source: Data based on Employment Surveys (1957–2010), Universidad de Chile.

In addition, the economy was subjected to a massive liberalization process. Once the economy opened up, there was a marked increase in the premium to higher education, resulting in a worsening of the wage-income distribution. The forces behind this change in relative prices were rooted in the relative declining demand for unskilled labour that was accelerated by the abrupt import liberalization and low productive investment. This worked in tandem with the greater human capital requirements in the economy after the neoliberal reforms. In addition, this tendency appeared to be associated with the global technological change that was transmitted via growing trade links with the rest of the world where wage inequality was also on the rise vis-à-vis the rather inflexible composition of the supply of human capital. At the same time, the productive structure was dominated in the 1980s by a natural resource-intensive export sector with little need for unskilled labour, while rest of the domestic economy was in a general slump. Finally, privatization of many public companies, high levels of unemployment during the military government, and large cuts to social spending and social services (Table 1) are also factors associated with Chile's high inequality.

The relative contribution of labour income in total inequality decreased almost in the same proportion as its share in total income. Whereas labour income's contribution to inequality was 91 per cent in 1973, this fell to 84 per cent in 1989. Indeed, labour income became more unequal in 1989 (0.58); its share (Sk) in total income dropped and its correlation (Rk) remained stable, resulting in a lower contribution in total inequality. According to these surveys, the harsh inequality of this period is mostly explained by the high levels of labour-market inequality and of unemployment. However, not only has open unemployment played a role in explaining this variation in inequality. Access to employment has also been a key factor. Although the employment rate averaged 47.5 per cent, it diverged significantly by income quintiles: 32 per cent for the poorest quintile and 62 per cent for the richest.

On the other hand, other income sources increased their contribution to inequality from 9 per cent in 1973 to 16 per cent in 1989. In addition, this share in total income and its Gini correlation (Rk) increased, leading to a higher contribution in total inequality, which indicates that other incomes favoured the rich more than the poor, adding to total inequality throughout the period.

To better understand this trend, we go on to examine labour income, broken down by gender and skilled/unskilled labour income. We defined skilled labour income as earnings received by individuals with more than 12 years of schooling and we considered unskilled labour income to constitute the wages of workers with 12 years of schooling or less.[5] Here we utilized data from 1965 to 1989 due to limitations on statistics for earlier years.

The evidence shows that the relative contribution of skilled labour income increased from 26 per cent in 1965 to 50 per cent in 1989, with a peak of 61 per cent in 1987. In contrast, the contribution of unskilled labour income decreased from 47 per cent in 1965 to 26 per cent in 1989. These results are explained largely by unequal human capital investment opportunities: (i) only a minority of the labour force had achieved more than 12 years of schooling (which was then the threshold denoting a break in the yield curve to school years); (ii) there were significant gaps in the quality of education among students from the different quintiles; (iii) labour training efforts were extremely weak and biased towards trained people, and (iv) the system of higher and professional

[5] Returns to schooling in Chile are convex for both datasets used here. On average, the returns to primary, secondary and tertiary education are 5 per cent, 10 per cent and 22 per cent, respectively. These figures validate the 12 years of schooling as a benchmark in this period.

education became even more retrogressive when public funding for universities was slashed in the 1980s and public institutions lost to private ones in importance. All these elements contributed to historical inequities continuing across generations.[6]

The gender analysis is also informative. The share of skilled male labour income increased from 22 per cent in 1965 to 39 per cent in 1989, reaching its highest value of 49 per cent in 1987. The relative contribution of skilled female labour income to inequality also grew from 4 per cent in 1965 to 11 per cent in 1987. Moreover, the relative contribution of unskilled labour declined, from 36 per cent in 1965 to 12 per cent in 1989 for males and from 11 per cent to 6 per cent, respectively, for females.

In sum, there are three important observations in terms of total inequality. First, inequality became significantly higher with sharp fluctuations: the lowest inequality level was recorded in 1973 and the highest in 1987. Second, economic policies (labour market reforms, trade liberalization and the macroeconomic environment) played a significant role in this trend and its fluctuations. Third, skilled labour income is the main factor explaining the increased inequality over the period. Low quality education and unequal access to quality education add to this pattern.

2.3 Determinants of changes in inequality

Structural reforms had a regressive bias. On the one hand, there were massive, direct negative effects resulting from the adoption of a model that focused, amidst great inequality, on the neutrality of policies. On the other hand, failure to take the structural heterogeneity of agents into account—in conjunction with significant market failures and segmentation—translated into costly adjustment processes and severe recession that generated an environment of low productive investment and high unemployment. Thus these policies indirectly had a negative impact on the unprotected population, and triggered the sharp deterioration that took place between 1973 and 1989. Naturally, deterioration was compounded by the debt crisis, but the severity of its social and economic impacts was associated with the model adopted by the dictatorship.

Reforms to the tax system in 1975 included the elimination of wealth and capital gains taxes, and a substantial reduction of taxes on profits. On the other hand, the adoption of a value added tax was completed and existing exemptions for basic consumer goods were cancelled in an effort to reduce the tax burden and to concentrate on ‘neutral’ taxes. In 1984 a second sizable tax reform took place. The 40 per cent tax on reinvested profits was removed but a 10 per cent general tax on profits was retained. In addition, taxes paid at the firm by its owners were considered to constitute a credit towards personal progressive income tax. Later, extremely generous income tax privileges were created for the purchase of stock of firms being privatized. Finally, before the 1988 plebiscite, VAT was reduced from 20 per cent to 16 per cent, taxes on several luxury goods were reduced or suppressed, and in 1989 the remaining 10 per cent income tax was eliminated in the case of reinvestment of profits. The temporary high price of copper, collected by CODELCO (the public producer of copper) filled the vacuum left by the diminishing tax revenue.

[6] Núñez and Gutiérrez (2004) develop an in-depth research on the persistence in the correlation between the economic level of parents and the probable income level of their children.

The financial market reforms created momentum for short-term financial activism, but weaker support in long-term segments, with annual real interest rates averaging 38 per cent in 1975-82 (Ffrench-Davis 2010: ch. III). Increasing financial inflows steered the economy towards unsustainable current expenditures that culminated in the severe 1982 crisis and a long-lasting recession in subsequent years. The state had to intervene to avoid the collapse of its financial system. The high cost of subsidies to rescue the system and the borrowers (35 per cent of GDP) implied additional reductions in social spending and public sector investment in the 1980s. The investment record was extremely low during the 16-year period (1973-89), significantly lower than in the 1960s. Thus domestic financial reforms had failed to finance new productive capacity, and capital inflows were associated with crowded-out national savings.

The trade reforms introduced in the mid-1970s are a key factor in explaining factorial income behaviour. Trade reforms, on the one hand, had a great impact on the production structure, which led to a significant relative decline in employment in some sectors (particularly in manufacturing). Although reform was accompanied by a positive but weaker dynamism in expanding exports, a subsequent, clear negative net effect on employment, productive investment and economic activity was recorded during the extensive transition period to import liberalization. This net negative balance was strengthened by the 1979-82 exchange rate appreciation and by the procyclical bias of macroeconomic policies (see Ffrench-Davis 2010: ch. II).

The privatization of many production units owned by the state took place after the mid-1970s. Privatization was carried out during a period of domestic recession and extremely high domestic interest rates, hence, only a few private groups with greater access to external credit were able to bid for the enterprises, further strengthening the concentration of wealth and power (see Devlin and Cominetti 1994; Monckeberg 2001).

Major changes in labour legislation also had negative impact on workers. The dismissal of workers was made easier, labour tribunals were abolished (but restored in 1986), and unions were suspended in September 1973. However, in 1979, unions were authorized, albeit with limited powers that excluded collective negotiations inter-firm, restricted the rights of union leaders, and fomented the segmentation of labour unions (Mizala and Romaguera 2001). Legislation, in the context of political repression and economic depression, was effective in reducing the power of social organizations and their ability to defend their rights (Tokman 2004).

In the early 1980s, structural changes culminated in the creation of a dual health care system: a public component that operated through a common national fund (Fondo Nacional de Salud, FONASA) and a private component that consisted of health insurance firms (ISAPRES). At that time, health care was, to a large extent, financed through the payroll tax. The reform initially meant that 11 per cent of the beneficiaries transferred to the new ISAPRES system with 48 per cent of the revenue from health contributions (Titelman 2001).

This regressive bias in the access to public services was also observed in other sectors. During the 1980s, the dictatorship implemented a sweeping education reform package. First, the government decentralized the administration of public schools, transferring responsibility for school management from the ministry of education to municipal governments, where maximum authority was invested with the mayor. Second, the government changed the mechanism for funding. Public schools continued to be funded by the ministry, but municipalities received a per-student voucher for every child attending school within their jurisdiction. As a result, enrolment losses began to have a direct effect on municipal education budgets. Private schools that did not charge tuition also received the same per-student voucher as public schools. Elite private institutions that charged tuition continued to operate without public funding. After the voucher reform was introduced, education has become increasingly privatized. According to the OECD, Chile is among the countries with higher levels of educational segregation. In sum, several reforms instigated during this period promoted segregation in the Chilean society.

Private pension fund management companies (*Administradoras de Fondos Previsionales,* AFPs) began to operate in 1981 in an abrupt transition from a pay-as-you-go system to an individual capitalization one. There are three negative features to be emphasized here. First, the reform led to a decline in public revenue as revenue was transferred to the AFPs while the public sector was left with the responsibility for financing current and future pensions. Consequently, the public social security deficit rose from 2 per cent of GDP in 1980 to 7 per cent in 1983-86 (Uthoff 2001). Second, the reform was unsuccessful in including lower-income, informal or self-employed workers. In 1988 only 55 per cent of the working people were contributing to either pension system. Third, another significant distributive implication was the enormous concentration of power in the hands of AFP owners, who used worker funds to acquire shares and strong voice in appointing directors to the corporation boards. This meant no voice for the actual owners of the funds.

Structural reforms coincided with the two deep crises of 1975 and 1982. Reforms and policies implemented during dictatorship increased Chile's vulnerability to external shocks, exacerbating the severe crises the country faced in 1975 and 1982. Among the worst consequences of the resulting recessions were the leaps in domestic unemployment. By 1975, unemployment had risen to 17.6 per cent of the labour force (including those enrolled in emergency programmes) and this figure had jumped to 31.3 per cent by 1983.[7] The problem was later eased somewhat by the recovery of economic activity, but the return to single-digit unemployment rates did not occur until 1989, when open unemployment was 8 per cent. The erosion of income distribution is easily explained by the fact that unemployment had hit the lowest income groups the hardest, and weakened public social networks.

3 Income distribution and poverty after the return to democracy, 1990 to late 2008

3.1 Changes in inequality

Four periods with different socioeconomic outcomes can be distinguished from 1990 onward. During the first years (1990-95), there were significant real improvements in average and minimum wages and in social expenditure. In parallel, employment, social security coverage and labour participation increased steadily. The macroeconomic environment, with factors of production (labour and capital) operating close to full employment, provided a significant progressive equity dividend. In the second period

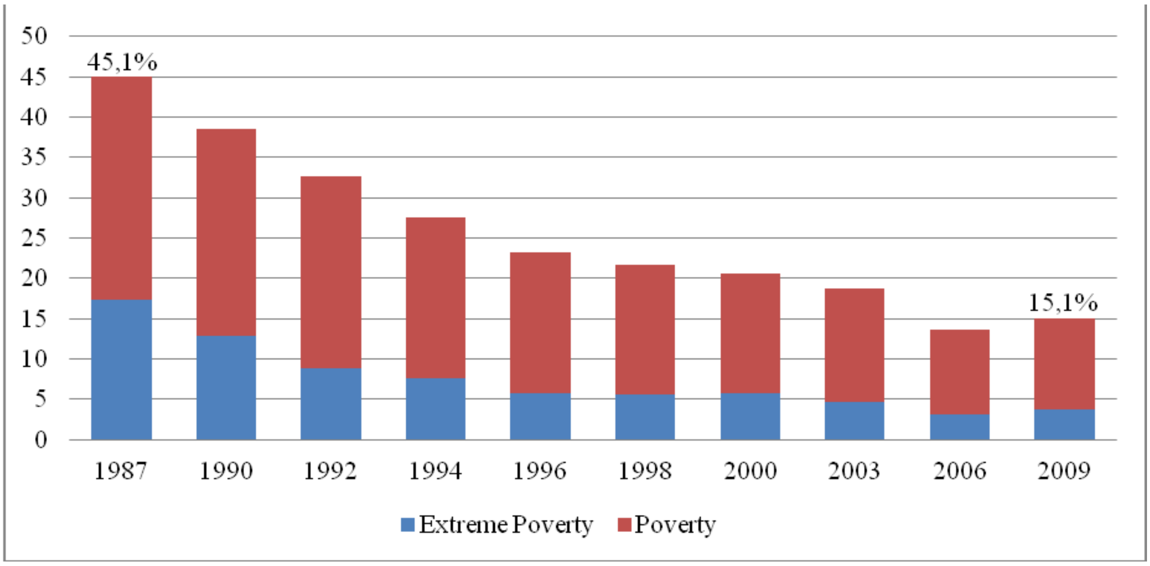
7 The wages paid in emergency employment programmes eventually fell to less than one-third of the minimum wage, with no social security coverage. Unemployment benefits were virtually non-existent, although the emergency jobs scheme served partly as a subsidy in exchange for work.

(1996-98), progress in poverty reduction slowed and wages experienced smaller increases, although other social indicators kept improving. In the third period (since 1999) which encompasses a reappearing recessive output gap, the environment worsened, causing a sharp rise in unemployment and a noticeable moderation in poverty reduction (CASEN 2000, 2003; see also Figure 5). However, the minimum wage, which is proposed annually by the government to Parliament, rose significantly with the establishment of a triennial programme for 1998-2000. Similarly, teachers and workers in national health service received special raises, as did public pensions. The associated higher fiscal expenditure was duly financed through additional tax revenue.

Finally, the fourth period started with the recovery of economic activity in 2004 and strong reinforcement of social policies that were especially intensive in 2008-09 during the contagion of the global crisis. The CASEN 2006 survey showed substantial progress in poverty reduction with respect to the 2003 survey (18.7 per cent versus 13.7 per cent). The moderation in poverty reduction in 2000-03 as well as its acceleration in 2003-06 shows how important the macroeconomic environment is through its impact on the labour market. In parallel, employment recovered, achieving greater formality, and minimum wages continued to rise (as Table 1 indicates, minimum wages in 2009 were equivalent to 2.3 times the real level in effect towards the end of the dictatorship). Social programmes, such as the *Chile Solidario* and the solidarity pillar of the ambitious Social Security Reform of 2008, were actually focused on the poor and more vulnerable people.

The poverty line has remained constant in 'real' terms in the ten surveys conducted between 1987 and 2009 that have been based on the household budget survey of the National Bureau of Statistics of 1987-88. The urban poverty line in 2011 was equivalent to about US$130 monthly per capita, or US$520 for an average poor family of four. In 1987, according to the CASEN survey, 45.1 per cent of the Chilean people were poor. Subsequent measurements by CASEN, keeping a constant 'real' poverty line

Figure 5
Poverty evolution in Chile, 1987–2009
(% of population)



Source: Computed by the authors, based on MIDEPLAN and national data from the CASEN surveys.

(summarized in Figure 5), show that steady progress has been made in this area. The share of the poor had fallen to 21.7 per cent by 1998, and to 13.7 per cent in 2006 (the return to 15.1 per cent in 2009 is discussed below).

Development with respect to income distribution after the return to democracy shows progress. According to several sources, progress was significant in the earlier 1990s, with subsequent reversals in the recessive 1998-2003 period, and some recovery in the late 2000s. In any case, while the available information generally points to a significant advancement in income distribution compared to the 1980s, it is clear that it is still highly regressive. A major national effort is required, then, to correct this sharp inequity.

Demography has also played an important role. Per capita data[8] are more precise than figures per household since a 'representative household' of a given quintile in 1988 is not comparable with one in 1997. In fact, between 1988 and 1997, the average number of household members fell in all quintiles. The households budget surveys (EPF) of INE indicate a 6 per cent drop in the total average, from 4.09 to 3.84 persons, with a further drop to 3.55 in 2007. This change was stronger in the first quintile than in the fifth. Consequently, welfare is better measured with data ranked according to expenditure per capita than household expenditure and this measure shows an improvement between 1988 and 1997 (see Ffrench-Davis 2010: table VII.5).

The results provided by the income data from the University of Chile's employment survey for Santiago are consistent with those from the INE household survey.[9] Figure 1, giving the ratio between quintiles V and I, shows a statistically significant improvement since 1990 (an average of 15.7 times during 1990-2009) as compared to the 1970s and 1980s (with an average of 17.7 in 1974-89, and close to 20 times in the 1980s). Nonetheless, despite this improvement, income inequality is still today significantly worse than it was in the 1960s (12.9 times in the 1960s).[10] Similar conclusions arise from the Gini coefficients.

After the positive development achieved during the early years of democracy's return (to a ratio of 13.7 times in 1992-95), a reversal was recorded, signalling a partial worsening in the second half of the 1990s (an average of 16.3 in 1996-2002, but recovering to 14.4 in 2003-09). Thus, progress in distribution took place mainly in the early years when the *reforms of the reforms* were carried out, injecting a dose of equity into the regressive neoliberal inheritance. This manifested as increased employment opportunities, as well as a sustainable increase in both real average wages and minimum wages in 1991-98 when annual wages rose 4.2 per cent. During the second period (in 1999-2009) annual rises averaged only 1.9 per cent. In parallel, unemployment figures

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8 It would be even more accurate to consider 'an equivalent adult', see Contreras and Ruiz-Tagle, (1997).

9 The comparison of income and expenditure of the same 1997 survey shows indebtedness in the deciles 1 to 7 and savings in deciles 8 to 10 (INE 1999). It must be stressed that expenditure data are much more reliable than income data.

10 These figures are based on a classification by household income per capita (Larrañaga 2001; Ruiz-Tagle 1999). The observations (which refer to June of each year) suffer from a great deal of 'noise', which is why we use three-year moving averages in Figure 1.

were already showing some deterioration in 1998 under the contagion of the Asian crisis, which intensified with the recessive gap in 1999-2003, but recovering thereafter.

The best-known indicator, the CASEN survey, showed an increase between 1987 and 1992 in the monetary income share of the poorest quintile of households and a decrease in the share of the richest quintile. From that time onward, however, the survey depicted ups-and-downs. Still by 1996, all available data, ranked both by household and by per capita income, showed an improvement in the poorest 40 per cent of households (and, in most cases, in quintile I) and a reduced share in the richest. In the same year, the Gini index improved in all cases in comparison to 1987 (Feres 2001). In 1998 when the long-lasting recessive adjustment was started, a minor worsening was observed with respect to the 1996 survey, persisting into the 2000 survey as well. The 2003 CASEN survey, capturing the start of economic recovery, revealed some distributive improvements, and the trend became accentuated in the following years. Consequently, in the 2006 CASEN, the ratio between the richest and the poorest quintile had diminished to 13.1 times, from 14.4 times in 2000 (the Gini improved from 0.58 to 0.54 over the same years).

Finally, there has been a significant increase of the 'investment in people' since 1990. These efforts take time to be felt. For example, income distribution, when corrected for non-monetary items, improved considerably (based on total per capita income and total per capita income plus in-kind subsidies), and bridged the gap between the richest and poorest quintile from 20 to 11 times in the 1998 CASEN survey.[11] Social spending rose significantly under democracy (see Table 1), and the key question is determining whether the additional allocation actually led to an increase in the volume and/or quality of services, or whether the same services were merely provided at greater cost to the state.[12] In the case of education, the number of years of schooling has increased sharply as reported here, but its quality and distribution needs critical improvement.[13]

Despite vigorous economic growth, particularly in the 1990s, Chilean per capita income (in PPP) is still about one-third of that in most developed economies, and income inequality is notably higher. Furthermore, the Chilean economy needs to improve its social protection model by significantly reducing the extreme level of segregation. After four centre-left governments, Chile maintains a dual social system, among others, in health, education and housing. Thus, the political model of 'growth with equity' that has been promoted since the return to democracy has not been able to close the social gaps.

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11 The 1998 CASEN survey considered the imputed value of educational and health services, and housing subsidies (monetary transfers such as pensions of non-contributory seniors, family allowances and unemployment insurance) (Bravo Contreras 2004).

12 A substantial share of the increase in social spending in the 1990s was directed to raising the wages of teachers and national health system personnel, which in 1990 were extremely out of line with the market and below the minimum required for efficient functioning. Unfortunately, the quality of services had fallen as a result of the decline in wages and in the social status of these public servants in the 1980s, and the improvement in salaries was not automatically followed by a recovery in quality. This was particularly evident in the case of education where there was a huge increase in the number of students in secondary and higher education levels.

13 Labour training can contribute significantly to promote the flexibility of the labour supply. There was some moderate progress in this field since the 1990s. Nonetheless, inequities remain, as pointed out by the *Consejo Asesor Presidencial de Trabajo y Equidad* (2008). In fact, 1 per cent of firms captured 42 per cent of the public subsidy, with 80 per cent going to large firms.

3.2 Decomposition of income inequality by source: 1990-2009

In this section, a decomposition of income inequality by source between 1990 and 2009 is carried out. Acknowledging data shortcomings, we decompose total income in labour income and monetary transfers from the government and others sources of income as given in the CASEN. Utilizing the Employment Survey from the Universidad de Chile, we decompose total income in labour income and other income as in the previous analysis (Section 2.2). In order to examine the main factors driving the changes in inequality, decomposition is made for skilled and unskilled workers disaggregated by gender.

Thus, we have two datasets for this period which provide better information for examining inequality and its determinants. But we still face two important limitations which should be considered in any interpretation of the results. First, income from capital is poorly measured in both datasets. Therefore, given that capital is mainly appropriated by high-income households, our results significantly underestimate the magnitude of inequality. Second, only monetary transfers are measured in the CASEN datasets. The government provides other types of in-kind transfers such as health, education and housing that are not included in total household income, and this limits the extent of the analysis.

Table 3 shows the share of various income sources in total household income per year for the period 1990-2009. As is expected, the results indicate that the greatest share comes from labour income, contributing 74 per cent and 81 per cent in 1990 and 2009, respectively. Next is the source of 'other income' showing a weakening share, decreasing from 25 per cent in 1990 to 17 per cent in 2009. Finally, we observe a marginal contribution from monetary transfers to total household income, achieving an average 1 per cent over the same period. Similar percentages are observed for the capital city, Santiago, where according to the employment survey, labour income represents about 85 per cent of total household income.

According to CASEN, the evidence indicates a high level of labour income inequality (Figure 6), with the Gini averaging 0.59 during 1990 to 2009.[14] We observe an increase reaching 0.62 in this coefficient during 2000, while the lowest Gini coefficient (0.58) is in 2006. These results are consistent with the Asian crisis impact on the labour market and policies implemented by the government in the 2000s. As is expected, there is a strong positive correlation between labour income and total household income.

The analysis of monetary transfers also reveals an unequal distribution, with a Gini coefficient of about 0.75 during the period examined, but the nature of this inequality was quite different. There is a negative correlation between total household income and monetary transfers; in other words, poorest households received higher transfers, thus reducing income inequality.

On the other hand, the results indicate a high level of inequality for other income sources. As with the previous cases, this source remained relatively stable during the period 1990-2009, with the average Gini coefficient 0.70. At the same time, the results reveal that its correlation with total income is positive.

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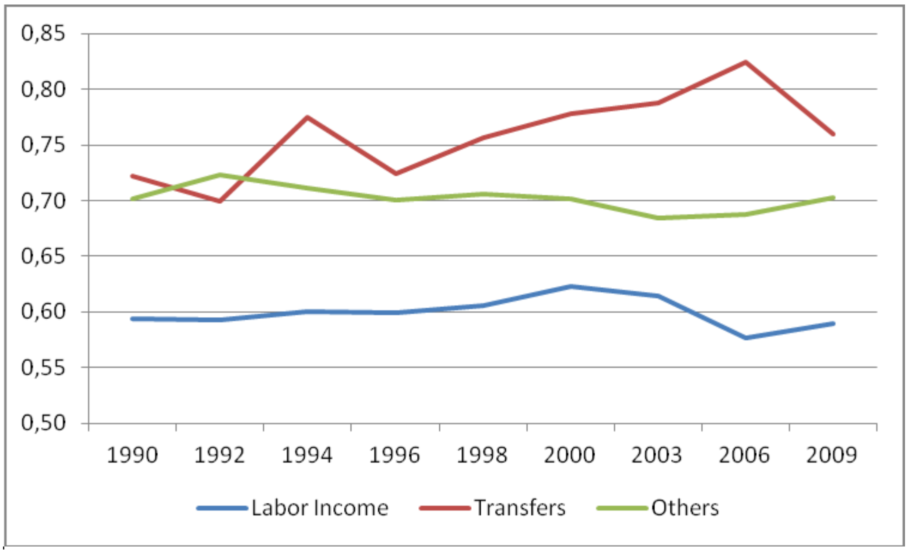
[14] A similar figure is estimated from the employment survey for Santiago, in which the Gini of labour income is about 0.56 in the same period.

Table 3
Participation of the income sources in total household income, 1990-2009

Year	Labour Income	Transfers	Other income
1990	74	1	25
1992	77	1	22
1994	78	1	21
1996	78	1	21
1998	77	1	22
2000	76	1	23
2003	74	1	25
2006	81	1	18
2009	81	2	17

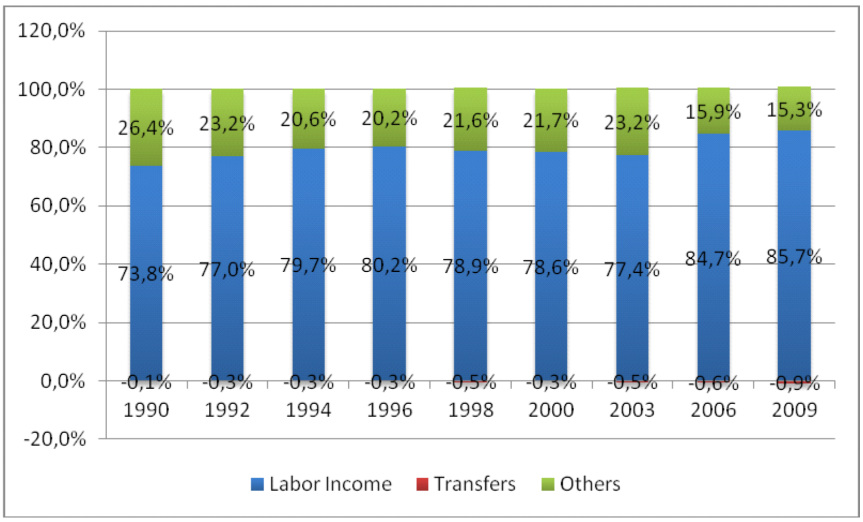
Source: Calculated by the authors, based on CASEN data (1990-2009).

Figure 6
Gini index by source



Source: Computed by the authors, based on CASEN data (1990–2009).

Figure 7
Relative contribution by source



Source: Computed by the authors, based on CASEN data (1990–2009).

Table 4
Relative contribution of skilled and unskilled labour, 1990–2009

	Labour income, %		Government transfers, %	Other income sources, %	Other labour income, %
	Skilled	Unskilled			
1990	42	30	-0.1	26	1
1992	45	31	-0.3	23	0
1994	48	30	-0.3	21	1
1996	51	28	-0.3	20	1
1998	56	23	-0.5	22	1
2000	60	18	-0.3	22	1
2003	58	19	-0.5	23	0
2006	59	25	-0.6	16	0
2009	64	22	-0.9	15	0

Source: Calculated by the authors, based CASEN data (1990–2009).

Table 5
Relative contribution of skilled and unskilled labour, by gender
(in per cent)

	Labour income, %				Government transfers, %	Other income sources, %	Other labour income, %
	Skilled		Unskilled				
Year	Male	Female	Male	Female			
1990	31.70	10.74	23.76	6.65	-0.13	26.37	0.90
1992	34.51	10.81	22.59	8.68	-0.25	23.24	0.44
1994	35.32	13.15	21.18	8.97	-0.25	20.57	1.05
1996	36.71	14.36	20.06	8.04	-0.33	20.16	0.99
1998	39.87	15.75	15.83	6.88	-0.47	21.56	0.58
2000	45.42	14.44	12.50	5.42	-0.30	21.68	0.84
2003	42.21	16.09	13.19	5.71	-0.50	23.15	0.14
2006	40.66	18.72	17.66	7.33	-0.62	15.92	0.33
2009	45.13	18.81	15.84	5.88	-0.93	15.26	0.01

Source: Calculated by the authors, based on CASEN data (1990–2009).

Using the previous decomposition approach, labour income (Figure 7) exhibits a greater relative contribution to total inequality: 74 per cent in 1990, rising to 86 per cent in 2009.

The second major factor contributing to inequality is the other sources of income, which reached 26 per cent during the 1990s and decreased to 15 per cent in 2009. To the contrary to what has been said, monetary transfers work to reduce inequality.

The extent to which income sources may affect the level of total inequality is of particular interest to policymakers. Table 4 presents the relative contribution of skilled and unskilled labour for each income source for 1990-2009. Skilled labour income exhibits a higher relative contribution to total income inequality (42 per cent in 1990; 64 per cent 2009), with a positive trend over time. At the same time, the relative contribution of unskilled labour and other income sources is diminishing over time (falling from 30 per cent in 1990 to 22 per cent).[15] Finally, while government transfers reduce inequality, this effect is greater towards the end of the period, suggesting an increase in transfers to the poor.

Table 5 presents the relative contribution of skilled/unskilled labour income by gender during 1990-2009, revealing an increase in the relative contribution of both male and female skilled labour income. In 1990 the relative contribution of unskilled male labour income was 32 per cent in 1990, and 45 per cent in 2009. The contribution of skilled female labour income increased from 11 per cent in 1990 to 19 per cent in 2009. On the other hand, the contribution of unskilled labour income decreased, as unskilled male labour income contributed 24 per cent in 1990 but 16 per cent in 2009; the contribution of unskilled female labour income had only a marginal effect.

3.3 The determinants of changes

In the 1990s public spending was restructured to increase funding in social areas in parallel with fiscal reform that reduced tax evasion, raised progressive taxation and the VAT rate. In the labour market, the reforms led to a substantial improvement in minimum wages and reduced somewhat the imbalance of power between workers and employers. Furthermore, in the early 1990s innovative social programmes were introduced, such as the prioritization of elementary schools in poor zones and young labour training (Raczynski 1996). During the first decade of the 2000s, three ambitious more comprehensive programmes were implemented which directly benefited the poorest households: the *Chile Solidario*,[16] the gradual health reform AUGE, and a notable social security reform.

In addition, the significant reforms concerning macroeconomic management in the first half of the 1990s had a major positive effect on productive employment and wages. The introduction of the unremunerated reserve requirement and other prudential mechanisms for regulating volatile capital inflows played a key role in achieving sustainability of macroeconomic balances and the 7 per cent average GDP annual growth in 1990-98 (Ffrench-Davis 2010: ch. VIII).

The result of this set of policies was a substantial growth in the real average wage that was 41 per cent higher in 1998 than a decade earlier, and minimum wage jumped 63 per cent. Reflecting the contagion of the Asian crisis, the recessive adjustment initiated in 1998 weakened the growth of wages. Nevertheless, average real wage in 2009 exceeded its 1989 level by 75 per cent, and minimum wages had increased 129 per cent in the same period. Family allowances had almost tripled, which meant that nearly 90 per cent of the fall recorded in the 1980s had been recovered (see Table 1). Per capita public expenditure in education and health, multiplied by 4.2 times over the years 1990-2009 (implying 7 per cent annual average growth), was strongly directed towards regaining the wage levels that had been notably reduced in the 1980s. The unemployment rate also improved considerably, averaging 8.7 per cent in 1990-2009 compared to 18 per

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15 The employment survey also reveals a similar pattern. The relative contribution increased from 60 per cent in 1990 to 65 per cent in 2009. In contrast, the relative contribution of unskilled labour went from 17 per cent to 11 per cent.

16 See Galasso (2006) for a preliminary evaluation of the programme.

cent in 1974-89 (see Ffrench-Davis 2010 table I.1). Naturally, the macroeconomic conjuncture had a significant impact on employment, as indicated by the 6.1 per cent rate of open unemployment during the boom year 1997 compared to 10.5 per cent during the depressed years, 1999-2003, or the 31.3 per cent rate recorded during the debt crisis in 1983.

Two positive trends in the labour market need to be underlined. One is the rising share of workers in the formal segment, as reflected by the numbers contributing to social security. Prior to democracy, few workers were enrolled in the private social security scheme created by the dictatorship in 1981. By 1989 still only 41 per cent of the labour force made monthly contributions. The trend continued to rise, with 46 per cent active by the mid-1990s. However, stagnation followed, lasting until 2004 when worker interest was rekindled in tandem with the recovery of economic activity and a legal reform enforcing some formalization of the labour market,[17] and the share climbed to 56 per cent by 2009. Another outstanding trend is the increase in the participation of women in the labour force, as documented below.

The increasing coverage of the new unemployment insurance for private workers was a remedy against the effects of unemployment. Previously, only an unemployment subsidy of a negligible amount had existed. Severance pay was equivalent to one month's wage for each year on the job with the same employer (with a 11-year limit) and for specific dismissal circumstances. It was relevant mostly for organized workers with steady jobs. The new insurance scheme, becoming effective in October 2002, included two separate funds. One fund is financed through worker and employer contributions, which are credited to the individual account of the worker while the contribution of the employer (1.6 per cent of the wage, in the event of a contract without a timelimit) is credited against the severance liability of the employer. The second is a solidarity fund, which is financed by the government (with a designated annual lumpsum) and contributions by the employer (0.8 per cent of the assessable wage). All private wage earners who had signed new contracts were enrolled in the new system. After seven years in effect (by September 2009), the scheme had 6.2 million registered members (workers who at some point in time had been enrolled in the new system). Of these, 3.2 million were active contributors (about 85 per cent of AFP active private sector contributors). This implies that less than one-in-five waged worker had retained or stayed on the job during the 7-year period. The mechanism had started to operate during a period of relatively high unemployment, mostly as self-insurance.

During the seven year period when the insurance was in force, the economy averaged about 600,000 unemployed, and a large number of workers took advantage of the scheme. Approximately 4.8 million benefits were delivered. The huge number of compensation cases reflected the precariousness or *actual flexibility* of the labour market. But the compensation received, covering an average of 2.5 months per case, was quite small and consisted almost entirely of self-financed contributions made during the worker's term of employment. In turn, up to 2008, only 3 per cent of the paid benefits were supplemented by the solidarity fund. In all, notwithstanding the fact that the insurance scheme was created during an economic downturn, the two funds had

[17] President Lagos enacted legislation demanding large firms to take responsibility for the fulfilment of labour contracts and payment of social security by their sub-contractors (Ley de Sub-contratación).

accumulated stocks equivalent to more than 1 per cent of GDP. Actually, the scheme had pro-cyclical effect, given that it accumulated funds during recessive years.

The unemployment insurance, despite its relevant progress, needed substantial adjustments to (i) the magnitude of the benefits; (ii) access to benefits; (iii) the extent of the solidarity fund; (iv) its macroeconomic impact, and (v) the link to effective training programmes, with the receipt of solidarity benefits conditional on effective participation. In 2009 the parliament approved a government proposal that enhanced the coverage of and access to the solidarity fund. This gave access to workers with short-term contracts, introduced countercyclical features in the benefits, and sought to improve job-seeking intermediation for the unemployed and to provide access to labour training.

Social expenditure has had a progressive element since the 1990s, and accounts for the poor's improved access to free or subsidized goods and services. More recently, sizable programmes are in progress, which means significant flows of monetary transfers. In fact, a major reform of the pension scheme has been under way since 2008, with the objective of changing the balance of the 1981 reform from a basically private self-insurance system to one with an ambitious solidarity pillar (discussed in the next section).

Social policies—together with the more efficient macroeconomic management that laid the foundation in the 1990s for faster growth and large-scale job creation—enabled the drastic reduction of poverty, and some modest improvements to the highly distorted income distribution inherited from the dictatorship in 1990.

4 The global crisis and post-crisis period[18]

Prior to the global crisis, Chile had benefited from notably high copper prices that allowed the treasury to accumulate a sizable stabilization fund (FEES) for possible adverse years. This manifested in fiscal surpluses exceeding an annual average of 7 per cent of GDP in 2006-08, while the treasury became a net creditor. On the negative side, international prices of oil and food were climbing. By mid-2008, the price of food in the Chilean CPI had increased 22 per cent in one year. This generated significant inflationary pressures, and explains half of the almost 10 per cent annual inflation that was recorded at the peak of the commodities boom (the third quarter of 2008; see Ramos 2008). It was mainly an imported inflation. Notwithstanding that fact, the Central Bank of Chile consistently exhibited a bias for the inflation target at the expense of growth. By late 2008, when Chile was already exhibiting negative monthly inflation, the monetary policy interest rate (8.25 per cent) exceeded that of the USA by 7 points.

When the contagion of the global crisis hit in September-October 2008, the economy plunged into open recession. Trade and financial shocks led to a contraction of aggregate demand, followed by a drop in output, employment and investment. In 2009, GDP had dropped 1.7 per cent, and the government adopted a decidedly countercyclical approach, making use of the FEES. This provided space for a strong and effective

[18] See Ffrench-Davis and Heresi (2012) for further details.

countercyclical fiscal policy. Irrespective of the decline in tax revenue, expenditure was increased 17 per cent, which in tandem with the GDP drop meant an actual fiscal deficit of 4.4 per cent. The strong countercyclical fiscal policy was the main force compensating for the negative shocks on exports and finance, and a significant recovery push was already evident in the domestic economy by the last quarter of 2009. Countercyclicality of fiscal policy proved to be effective in 2009.

4.1 The impact of the global crisis: late 2008 to 2009

The crisis meant sharp negative trade and financial shocks. The price of copper, representing at that time half of Chile's exports, abruptly fell to US$1.4 per pound from the record price level of US$4 per pound. Export volumes also plummeted 6.4 per cent in 2009 compared with an annual growth of 7.9 per cent in 1990-2008.

Capital flows were reversed, producing large increases in domestic interest rates and dryness in financing, particularly to small- and medium-sized enterprises (SMEs), eroding both their sales and funding. After an annual growth rate of over 8 per cent between 2004 and the third quarter of 2008, domestic aggregate demand fell 8 per cent during the first three quarters of 2009 compared to the same period a year earlier. At the same time, GDP went from an annual growth rate of over 5 per cent to a contraction of 2.9 per cent. The decrease in domestic demand caused private consumption to stall and led to a significant drop in investment, which had been growing at rates of around 14 per cent. Investment dropped 16 per cent in 2009.

As generally is the tendency during economic crises, income distribution deteriorated. Poverty rates had improved from 45 per cent of the population in 1987 to 13.7 per cent in 2006, but this positive trend was partially reversed. The increase of the poor to 15.1 per cent can be attributed to two situational factors. First, there was an enormous jump in the cost of the basic food basket that is used to measure the line of indigence (and multiplied by two) to mark the poverty line. Increases in international food prices caused the per capita poverty line to rise from CLP53,859 (expressed in 2009-pesos) in 2006 to CLP64,134 in 2009. If prices in 2006 had corresponded to the 2009-adjusted prices, the poverty rate would have been 19 per cent instead of 13.7 per cent.

Second, due to the international crisis, national unemployment rate in 2008-09 increased from 8.3 per cent (classifying those in emergency programmes as unemployed) to 10.7 per cent (see Figure 2 above). Nominal wage adjustments moderated in 2009 to 6.4 per cent (8.5 per cent in 2008), but due to the practice to tie wage increases to past inflation and a sharp CPI break in 2009, average real wages increased 4.8 per cent after the freeze of real terms the previous year.

4.2 The determinants of changes

Fiscal policy took the lead in countercyclical policies. There was a 20 per cent drop in tax revenue reflecting the sluggish domestic demand, depressed copper prices and the short-term tax reductions (on fuels, loans, SMEs). At the same time, expenditure was increased 17 per cent. Consequently, fiscal policy significantly alleviated the impact of the negative external shocks on the domestic market, supporting a rather vigorous recovery already by the last quarter of 2009.

In 2009, the government implemented a series of social policies in order to mitigate the negative effects on the most vulnerable population groups, based on a poverty rate of 15.1 per cent (rather than the 19 per cent mentioned above). It is clear that the temporary setback in the fight against poverty would have been much worse had mitigation policies not been introduced by the Bachelet administration during the crisis. A key element of the contingency plan was the granting of two vouchers valued at CLP40,000 (approximately US$80, equivalent to approximately one-third of the monthly net minimum wage) for each dependent member in lowest-income families.

In addition, wide-reaching efforts were undertaken to improve the pension system through a reform launched in 2008 (prior to the crisis; see Arenas 2010).[19] The process started progressively with household members from the two poorest quintiles, gradually expanding to encompass three quintiles by 2011. Its improvements included (i) a higher basic pension for those who, in 2008, were 64 years or older; (ii) complementary subsidy, gradually decreasing and ultimately leading to a pension equivalent to more or less 1.5 times the minimum wage; (iii) a subsidy equivalent to the value of social security contributions for two years for formal sector workers until the age of 35; and (iv) support, per child, for mothers on retirement. In addition, the reform enabled a public AFP to be created alongside with the private AFPs, a proposal strongly disputed by the opposition. The government did not make use of the 'policy space' gained.

On the other hand, the country's largest state-owned corporation, the National Copper Corporation (CODELCO), capitalized US$1 billion in order to finance its investment projects, and the capital of the Banco Estado (the public bank) increased by 50 per cent. The aim of this measure was to foster lending to small businesses.

In order to finance the resulting fiscal deficit, the treasury withdrew the equivalent of 4.7 per cent of GDP from its sovereign funds in 2009. That countercyclical behaviour coincided with the spectacular (procyclical) outflows by residents, mainly pension fund companies, bringing net capital outflows in 2009 to 2.1 per cent of the GDP, in spite of the 4.7 per cent fiscal inflows.

The central bank was slow to launch measures for monetary relaxation. It was not until January 2009 that the central bank undertook the reduction of the monetary policy rate in a process that brought the rate to 0.25 per cent in July. Over the course of the year, financing of foreign commerce and large corporations normalized. Cost of loans to SMEs, however, remained high and bank profits were also quite high.

The external surplus was recovered by late 2009 as a result of a rebound in copper prices and a strong drop in the domestic demand for imports. Once the greatest uncertainty was over, copper prices returned to their historically high levels, exceeding US$4 per pound.

During the year, the sharp negative external shock was increasingly compensated by the progressive strengthening of fiscal policy. The recessive gap that had existed in 2008 plus the 1.7 per cent drop in GDP in 2009 led to significant space for increases in

19 A substantive solidarity pillar was added to the 1981 reform that had replaced the pay-as-you-go system with an individual capitalization one. The regressiveness of individual accounts resulting from the precariousness of the labour market was compensated for by the solidarity pillar, which was financed by the state.

effective GDP in addition to generating new capacity or potential GDP, duly adjusted by the destruction caused by the intense earthquake of 27 February 2010.

During the last quarter of 2009, the revitalizing boost became dominant, leading to economic recovery that bounced from -2.9 per cent (as of the third quarter of 2009) to nearly 4 per cent. This was temporarily but significantly halted by the earthquake, as economic activity by March 2010 had dropped 2.3 per cent (in twelve months). During the four quarters ending September 2009, domestic demand grew by double digits, sustaining a recovery of GDP that reached a growth rate of nearly 7 per cent, given productive capacity that was close to 5 per cent per year. But despite the recovery of the economic activity and the loss of capacity caused by the earthquake, there was still a gap between actual GDP and potential GDP to be utilized in 2011.

The drop in GDP in 2009 was linked to a decrease in exports, but its repercussions for the domestic economy were less damaging. While export volumes continued to be depressed, production for the domestic market sustained vigorous recovery in 2010 (see Ffrench-Davis and Heresi 2011), and this is where unemployment was concentrated. The recovery of economic activity led to an increase in capital formation, compensating for the dips registered in 2009.

In general, all imports increased notably as a result of the expansion in aggregate demand and a persistent sharp exchange rate appreciation. In fact, between 2003 and 2010, the dynamism that had been seen earlier in export volumes dropped steadily. This trend was most significant in manufactured exports, more value-added intensive.

The economy has increasingly accommodated a real exchange rate that is consistent with copper prices far exceeding its historic average as well as its likely long-term sustainable level. High prices have been explicitly internalized in fiscal accounts via notable increases in the long-term prices considered in the structural budget.[20] Furthermore, the exchange rate has faced additional pressure as a result of growing capital inflows due to the differential between domestic and international interest rates.

In short, the continuation of a free-free exchange rate policy implies renouncing the development of sustainable macroeconomic policies with demand regulated to levels close to the productive frontier and with ‘correct’ macro-prices. In a context of massive and volatile capital flows and highly variable terms of trade, a totally free exchange rate fluctuates notably without settling around a sustainable trend. Such volatility discourages (i) the generation of value-added to natural resources, (ii) the access of SMEs to export markets, (iii) the survival of national industries crowded-out by artificially cheap imports and preservation of the jobs they generate, (iv) productive investment in tradable areas and (v) efforts to take advantage of the opportunities offered by trade agreements. In order to regain growth with equity, Chile must recover its capacity to maintain the equilibriums of the real macroeconomy.

[20] Nominal increase of 114 per cent between the 2006 and 2010 budgets.

5 Conclusions and remaining challenges

This analysis documents Chile's remarkable changes in income distribution and poverty. We have stressed the significant role played by socioeconomic reforms, its corrections and setbacks over the last four decades. The net outcome since the 1970s shows a highly skewed income distribution in Chile. Nevertheless, over time there have been strong fluctuations. Although income distribution worsened notably in the 1970s-80s, a significant improvement was recorded in the first half of the 1990s, resulting from better economic and social policies in democracy than in dictatorship. Subsequently, however, a long-lasting recessive adjustment took place across the economy in 1999-2003, with an increase in unemployment, a delay in the reduction of poverty, and some worsening of income distribution. Then in 2004-08, the recovery of economic activity and a noticeable increase in progressive social reforms partly offset the global crisis, and improved distribution in 2004-09, but only to regain the level achieved during the first years of democracy's return in the 1990s.

Three key variables are behind these diverse outcomes and correspond to (i) the size and allocation of social expenditure which is still constrained today by the low tax burden;[21] (ii) the macroeconomic environment, and (iii) how account is taken of the structural heterogeneity prevailing in the domestic market and of the unfavourable environment in which SMEs operate.

The production process itself has strong effects on poverty and income distribution. The generation of productive employment is one main channel through which economic and social progress is transmitted. Policies intended to strengthen the demand for labour, to reduce gender and training gaps, and to make the supply more flexible and better able to adapt to technological changes—in association with sustainable macroeconomic stability, vigorous physical capital formation, a strong pull to innovation, and increasing investment in people—play a significant role in improving the distribution of opportunities.

Effective action requires a comprehensive shift from 'neutral' policies (that actually are biased in favour of the upper income segments) towards strongly biased policies that improve the productivity and workability of middle- and low-income segments of society. The required financing should come from a higher effective tax burden on the upper percentiles of income where the ownership of capital is notably concentrated. It is clear that the choice is not between growth and equity. Rather, the key issue is to identify the determinants of growth, which, in the context of Chile's present stage of development, encompass crucial complementarities between the sources of growth and equity.

Chile achieved unprecedented economic growth during most of the 1990s. This growth was sustained by a notorious expansion of capital formation and an increase in productive capacity. At the same time, employment and salaries rose steadily, and some improvement was achieved in income distribution. A coherent macroeconomic

21 In recent years the restriction imposed by a rather low tax burden (18 per cent of GDP) has been sharply relaxed by the jump in the price of copper, benefiting fiscal revenue. But permanent expenditures should not be financed with temporarily high revenues linked to a specific commodity price.

approach was a key ingredient of these achievements. During the years that followed, economic growth slowed markedly but the social agenda intensified in an innovative manner. However, the reinforced social agenda did not match with that of productive development. Chile's modest economic growth since the Asian financial crisis is clearly due to (i) a series of shortcomings in macroeconomic policies after the country distanced itself from the path that allowed sustained and more equitable growth in the 1990s, moving from 'productivism' to 'financierism', and (ii) weaknesses and contradictions in microeconomic policies, including the absence of productive development policies.

The message for economic policy is that macroeconomic responsibility is related not only to low inflation and fiscal discipline, but also to the recessive or expansive environment of the domestic economy, and to key macro-prices such as the exchange and interest rates, which asymmetrically affect small and medium firms versus large corporations; traditional versus non-traditional exporters; workers with low qualifications versus highly-qualified workers. Indeed, the macroeconomic environment has a substantial impact on both growth and equity.

Equity and growth capacity also depend upon specific sectoral policies: how trade, financial and tax reforms are designed and executed. These three reforms, implemented with a neoliberal approach in the 1970s, left regressive tracks that contribute to our understanding of why they were associated with low productive investment ratios and deteriorating income distribution.

The challenge is to grow while contributing to equity in the productive process, that is, distributing capacity to operate efficiently in the markets, particularly for small and medium firms and for workers with lesser qualifications. It is in these sectors where the large income and productivity gaps are located. It is in these sectors of the Chilean economy that there is broad room for efficiency gains. Then, growth-with-equity would become attainable.

In brief, to regain strong development convergence, there must be an active macroeconomic policy focused on the real economy ('productivism'), functioning near the productive frontier (or potential GDP). In parallel to the corrections made to the macroeconomic approach, profound microeconomic reforms should take place. These include structural reforms in (i) capital markets, developing long-term financing channels for small businesses; (ii) radical progress in labour training given that the important advances that have been made in school coverage have been accompanied by a deterioration in the overall quality of education; and (iii) vigorous public support for innovation, generating conditions for a boom in small businesses and the emergence of new entrepreneurs and productive activities.

This long-term challenge has been addressed eagerly since the return to democracy, but with inconsistencies. Although considerable progress has been made in reducing poverty, and there has been some improvement in income distribution, this still poses a major challenge.

References

Arenas, A. (2010). 'Historia de la Reforma Previsional Chilena. Una Experiencia Exitosa de Política Pública en Democracia'. *OIT Publicaciones*, 1(1): 1–139.

Bravo, D., and D. Contreras (2004) 'La Distribución del Ingreso en Chile, 1990-1996: Análisis del Impacto del Mercado de Trabajo y Las Políticas sociales'. In *Reformas y Equidad Social en América Latina y el Caribe: Memorias de la primera fase del foro de equidad social*. Washington, DC: Banco Interamericano de Desarrollo, 99–128.

CASEN (various years). Various issues from Chile's National Household Surveys. Santiago.

Consejo Nacional de Innovación para la Competitividad (2007). Hacia una Estrategia Nacional de Innovación. Santiago: Gobierno de Chile.

Contreras, D., and J. Ruiz-Tagle (1997). '¿Cómo Medir la Distribución de Ingresos en Chile? ¿Son Distintas Nuestras Regiones? ¿Son Distintas Nuestras Familias?'. *Estudios Públicos*, 65: 59-80. Verano: Centro de Estudios Públicos.

Cornia, G. A. (2010). 'Income distribution under Latin America's New Left Regimes'. *Journal of Human Development and Capabilities*, 11(1): 85–114.

Devlin, R., and R. Cominetti (1994). 'La Crisis de la Empresa Pública, las Privatizaciones y la Equidad Social'. Serie Reformas de Políticas Públicas 26. Santiago: ECLAC.

Feres, J. C. (2001). 'Evidencia Empírica en Torno a la Medición de la Desigualdad: Algunas Advertencias Metodológicas'. Santiago: ECLAC. Mimeo.

Ffrench-Davis, R. (2006). *Reforms for Latin America's Economies: After Market Fundamentalism*. London and New York: Palgrave Macmillan.

Ffrench-Davis, R. (2010). *Economic Reforms in Chile: from Dictatorship to Democracy*, 2nd edition. London and New York: Palgrave Macmillan

Ffrench-Davis, R., and R. Heresi (2012). 'La Economía Chilena Frente a la Crisis Financiera: Respuestas Contracíclicas y Desafíos Pendientes'. In J. L. León (coord.), La Gran Recesión: Respuestas en las Américas y Asia del Pacífico, México (in process)

FSP (2005). 'Umbrales Sociales 2006: Propuesta para la futura política social', Santiago: Fundación para la Superación de la Pobreza, August.

Galasso, E. (2006). 'Alleviating Extreme Poverty in Chile'. Washington, DC: Development Research Group, World Bank. Mimeo.

INE (various years). 'Encuesta de Presupuestos Familiares'. Santiago: National Statistical Institute.

Jélvez, M., and M. Alvarado (2009). 'Cómo Continuar Avanzando Hacia el Desarrollo: Propuestas Para una Política Nacional de Empleo'. Santiago: ILO.

Larrañaga, O. (2001). 'Distribución de Ingresos: 1958-2001'. In R. Ffrench-Davis and B. Stallings (eds), *Reformas, Crecimiento y Políticas Sociales Desde 1973*. Santiago: LOM Ediciones/CEPAL.

Lerman, R., and S. Yitzhaki (1985). 'Income Inequality Effects by Income Source'. *The Review of Economics and Statistics*, 67(1): 151-56.

MIDEPLAN (2002). ‘Estrategia de Intervención Integral a Favor de Familias en Extrema Pobreza’. Santiqago: División Social Ministerio de Planificación y Cooperación.

Mizala, A., and P. Romaguera (2001). ‘La Legislación Laboral y el’ Mercado del Trabajo en Chile: 1975-2000’. In R. Ffrench-Davis and B. Stallings (eds), *Crecimiento y Reformas Sociales en Chile desde 1973*. Santiago: LOM Ediciones/CEPAL.

Mizala, A., and P. Romaguera (2004). ‘La Legislación Laboral y el Mercado del Trabajo en Chile: 1975-2000’. Documentos de Trabajo 114. Santiago: Centro de Economía Aplicada, Universidad de Chile.

Mizala, A., and P. Romaguera (2004). ‘Remuneraciones y Tasas de Retorno de los Profesionales Chilenos’. In J. J. Brunner and P. Meller (eds), *Oferta y Demanda de Profesionales y Técnicos en Chile*. Santiago: RIL editores.

Monckeberg, F. (1998). *Jaque al Subdesarrollo Ahora*. Santiago: Dolmen Ediciones.

Monckeberg, M. O. (2001). *El saqueo de los grupos económicos al Estado chileno*. Santiago: Ediciones B.

Núñez, J., and R. Gutierrez (2004). ‘Classism, Discrimination and Meritocracy in the Labor Market: The Case of Chile’. Documento de Trabajo 208. Santiago: Departamento de Economía, Universidad de Chile.

Raczynski, D. (1996). ‘Targeting Social Programs: Lessons from the Chilean Experience’. In C. Pizarro, D. Raczynski and J. Vial (eds), *Social and Economic Policies in Chile’s Transition to Democracy*. Santiago: CIEPLAN.

Raczynski, D., and C. Oyarzo (1981). ‘¿Por qué Cae la Tasa de Mortalidad Infantil en Chile?’. Colección Estudios CIEPLAN 6. Santiago: CIEPLAN.

Ramos, J. (2008). ‘El Desarrollo Exportador Chileno: Evolución y Persepctivas’. Documento de Trabajo 289. Santiago: Departamento de Economía, Universidad de Chile.

Rodrik, D. (2001). ‘Why Is there so Much Economic Insecurity in Latin America?’. *CEPAL Review*, 73.

Ruiz-Tagle, V. J. (1999). ‘Chile: 40 años de Desigualdad de Ingresos’. Documento de Trabajo 165. Santiago: Departamento de Economía, Universidad de Chile.

Sanhueza, G. (1999). ‘La Crisis Financiera en los Años Ochenta en Chile: Análisis de sus Soluciones y Su Costo’. *Economía Chilena*, 2(1): April. Santiago: Banco Central de Chile

Tokman, V. (2004). ‘Una Voz en el Camino. Empleo y Equidad en América Latina: 40 Años de Búsqueda’. Santiago: Fondo de Cultura Económica.

Titelman, D. (2001). ‘Reformas al Financiamiento del Sistema de Salud en Chile’. In R. Ffrench-Davis and B. Stallings (eds), *Reformas, Crecimiento y Políticas Sociales Desde 1973*. Santiago: LOM Ediciones/CEPAL.

Uthoff, A. (2001). ‘La Reforma del Sistema de Pensiones y su Impacto en el Mercado de Capitales’. In R. Ffrench-Davis and B. Stallings (eds), *Reformas, Crecimiento y Políticas Sociales Desde 1973*. Santiago: LOM Ediciones/CEPAL.