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POVERTY AND MACROECONOMIC POLICIES: CHILE 1987-94*

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Abstract

Poverty has declined substantially since 1987 in Chile. Has this reduction in poverty benefited all groups and regions? Are there specific sectors of the economy that have been left out of this reduction? These and other question are discussed in this paper. To do so, we characterize the poor in terms of education, employment, demographics and economic activity, as well as the economic policy framework prevailing during the last decade. It also discusses issues such as informality and minimum wages. This paper shows that there are no significant biases in poverty changes across gender or rural-urban distinction. In addition, education has increased at all levels of income and demographics have not shown significant changes. Overall, one can conclude that the reduction of poverty has been equitable with just one exception, which is that poverty is much more concentrated in the non-mining primary sectors, mainly agriculture.

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1. Introduction

During the last ten years Chile's economic performance has been remarkable: GDP growth has averaged 7 per cent per year, while employment has increased at annual rates of 3.3%. In many occasions Chile has been pointed out as a successful example of an early reformer, potentially a model to be followed by other countries in the region. However, in recent years the issue of social progress has become an important topic in the public debate, as well as a priority in the government's agenda. Slow, or null, progress in primary income distribution, even in the face of a strong expansion in social expenditure and sharp reduction in poverty together with continuously improving social indicators have set the stage for an ongoing debate regarding growth and economic development.

This paper looks at one dimension in the issue of social progress, namely poverty. As can be seen in Figure 1, country wide measures of the incidence of poverty and extreme poverty have declined substantially since 1987. Has this reduction in poverty benefited all groups and regions? Are there specific sectors of the economy that have been left out of this reduction? These and other question warrant a deeper analysis of the evolution of poverty in this period.[1] To do so, this paper characterizes the poor in terms of education, employment, demographics and economic activity, as well as the economic policy framework prevailing during the last decade. It also attempts to uncover the main reasons why poverty has declined, discussing issues such as informality and minimum wages. Although the paper does not deal directly with income distribution,[2] it addresses some aspects of it in relation to the role of social policies as well as the role of its changes in the evolution of poverty.

The paper follows in six sections. The next section sets out poverty profiles. Then, section 3 discusses the main macroeconomic developments of the last decade. Section 4 discusses developments in the labor market and minimum wages. In section 5 there is a discussion of social policies whilst section 6 performs poverty decompositions. Finally, section 7 presents some conclusions. We focus on the 1987-1994 period due to data limitations: there is no comparable source of socioeconomic data prior to 1987.

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1 Figure 1 uses recently released data, CASEN 1996. They have changed slightly respect to those of CASEN 1994 which is the main source of data for this paper.

2 For details on income distribution in Chile see Beyer (1996), Cowan and De Gregorio (1996) and World Bank (1997).

2. Poverty Profiles: 1987 - 1994

The most commonly used measure of poverty in Chile is the income method. Household per capita monthly income is measured against two distinct poverty lines. The first is known as the indigence, or extreme poverty line, and represents the cost of minimum food bundle which covers the nutrition needs of one person per month[3]. The second is the poverty line, which represents the cost of two monthly minimum food bundles. It must be noted that the indigence line measures the ability of a household to satisfy minimum nutrition needs, while the poverty line includes the costs of other needs (housing, transportation, health, etc.)[4]. Specific characteristics of the rural area, that is, the fact that their inhabitants have a greater caloric demand, and that the prices for most elements in the bundle are cheaper, have justified the calculation of different poverty lines for these zones. For rural areas the extreme poverty line is estimated as being 77% of the line estimated for urban areas (using Santiago prices), and the poverty line is 1.75 times the cost of the rural bundle[5].

In Chile, household income is measured with the national socio-economic characterization survey (CASEN), carried out at a national level every two years since 1987. Under or over reporting of the various sources of income is adjusted by the Economic Commission for Latin America and the Caribbean (ECLAC) using national account information from the household income and expenditure account provided by the Central Bank.

Although broadly used, the income method is not free of criticisms. First, the results are strongly influenced by the macroeconomic conditions at the moment the surveys are carried out. As is discussed below, this is extremely relevant for the period we have chosen to study. Furthermore, the method does not consider the availability of services and non monetary entitlements available for different households across the country and in different periods; certainly, it is not the same to be poor in a wealthy municipality or in a remote community, or to be poor if the government is embarking on an ambitious education program

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3 The minimum bundle is constructed combining recommendations from the FAO and WHO with information from household budget surveys. For more information see ECLAC (1990).

4 Peso and dollar values of the poverty and indigence lines and the 60US$ poverty lines are included in Appendix 1.

5 Due to this definition, the measurement of income poverty in Chile is particularly sensitive to urban-rural definitions. These definitions where revised in the 1996 CASEN survey.

or cutting back on social expenditures. Additionally, the CASEN does not take into account the socio-demographic characteristics of the population, in particular family composition, i.e., the caloric needs of an infant are not the same of a working adult. As explained before, needs beyond feeding have been represented in all surveys by a second basic food bundle included in the poverty line. The prices of the basic food bundle, which is almost entirely made up of tradable goods need not have varied at the same rate as the non tradable goods that fall in the poverty line. In Chile, the strong appreciation of the real exchange rate during the nineties is certainly a source for underestimating poverty due to this effect. A final source of potential errors in the measurement of poverty arises from using an uniform poverty line, when important regional price differences or differences in regional consumption patterns may exist.

Official estimates of poverty and poverty indices constructed with an alternative US$ 60 poverty line are presented in Table 1.[6] Table 1 also presents poverty estimations using an adult equivalent scale and adjusting for regional price differences, as calculated by Contreras (1995). For all measures, both the head count ratio and the poverty gap show important reductions for the 1987-1994 period: the first measure fell by 30%, and the latter by 38%. This shows that the incidence, as well as the depth of poverty has been reduced. In absolute figures, the number of poor people fell from 5.5 million in 1987 to 3.9 million in 1994. The poor in 1994 are on average closer to the poverty line than in 1987. Recent figures show that in 1996 the number of poor was reduced to 3.3 million, or 23.2% of the population.[7]

In a country which is on the whole ethnically homogenous, a regional analysis of poverty should focus on economic, rather than racial or social differences. For example, as can be seen in Table 1, the only region where poverty increased during the period (region XI), is a remote region with a small population (80,000 approx.), and very little infrastructure. Its output is dominated by primary production, specifically agriculture and forestry. On the other hand, the region with the greatest fall in the incidence of poverty (region I) has an output dominated by services. It follows, that relative composition of output has an

6 The US$ 60 line was constructed with a purchasing power parity (PPP) exchange rate, using the Summers and Heston international data set for 1987 and consumer price index variations for later years. The purpose of this line is to provide figures that are internationally comparable. The 60 dollar poverty line is considerably lower than the official poverty line (see Appendix 1).

7 See previous footnote and Figure 1 for warnings on comparability of this data.

important role in the success or failure of regional poverty alleviation and that consequently the pattern of growth is as important as the level of growth in explaining poverty alleviation.

What does explain the relative slow down in poverty alleviation between 1992 and 1994, particularly when using the 60 US$ poverty line? As we will explain in greater detail later, although the country continued to grow between 1992 and 1994, the position in the business cycle in both periods was radically different. This is reflected in rising unemployment rates between 1992 and 1994, particularly in the lower quintiles, increased informality, etc.

The distinction between urban and rural poverty is described in Table 2. It is interesting to note, first that rural poverty as a percentage of total regional poverty declines in all regions, except in the first region, which in turn is a region in which poverty is mostly concentrated in urban areas. Second, as one might expect, rural poverty is a larger part of total poverty in those regions that are traditionally agricultural areas and almost insignificant in the Metropolitan Region (RM) consisting mostly of the city of Santiago.

At a national level, poverty incidence has fallen in both urban and rural areas, although the reduction is greatest in the rural zones. This increased reduction has led to an evening out of poverty incidence between urban and rural zones: in 1987 poverty was significantly more severe in rural areas, in 1994 poverty incidence is almost identical. The sharper decline in the incidence of rural poverty together with a decline in urban population as a percentage of total population would tend to indicate that part of the poor rural population has been migrating to urban areas during the 1987-1994 period. How important is this phenomenon in explaining overall poverty alleviation? The simple calculation shown at the bottom of Table 2 shows that most (if not all) poverty reduction is in fact due to falling poverty incidence within urban-rural groups. The effect of this country-city migration may in fact be negative. The table also shows that as a whole, most (75%) of total poverty reduction has taken place in urban areas due to the relative importance of the urban sector in total population.

Another important issue is whether poverty has changed according to gender. To give economic significance to our definition, we define the household head, as the main income recipient.[8] This is the *de facto* definition for heads of households. Using the above definition

8 Traditional measures have used an alternative definition: the person recognized as such by its members (definition used in the CASEN surveys). One problem with our definition is that income surveys tend to attach

Table 3 shows that during the 1987 - 1994 period there was an increase in the proportion of households headed by women. For the entire population, the proportion of female headed households grew from 22.8% in 1987 to 24.5% in 1994. In the case of poor households this process is somewhat more severe: 21.0% of the poor households were headed by women in 1987, while in 1994 this proportion increased to 24.8%. However, the changes are not large enough to conclude that there are different trends. In particular, the changes amongst poor households are mainly the results of changes between 1992 and 1994, and are not persistent between 1987 and 1992. We also report the *de jure* definition of head of household (the one declared in the survey rather than the effective according to source of income). In this case the 1994 increase is not perceived, which could indicate that the de facto increase may be a transitory effect related perhaps to higher unemployment levels amongst those that are traditionally considered the household heads, mainly males. In turn, higher levels of unemployment may increase female labor force participation and further increase the amount of the *de facto* female household heads without showing up in the *de jure* figures. According to Beyer (1995) female labor force participation in Chile amongst the poorer quintiles of the income distribution, is highly counterciclycal, increasing whenever overall employment opportunities are reduced.

Poverty profiles according to sectorial characteristics of poverty are presented in Figure 2. The figure shows that the distribution of the total population across sectors of economic activity has not changed significantly between 1987 and 1994: nearly half of the population depends on income from the service sector, followed by a quarter in the primary sector, and the remaining 25% in industry, construction and mining[9]. Not surprisingly, although mining makes up for a large fraction of GDP (8 % in 1994) and an even larger fraction of exports, only a small fraction of employment is generated in this sector. Amongst poor households the main economic sector of income recipients is the primary sector, followed by service sector. This sector has grown increasingly important amongst the poor population, growing from 32% in 1987 to 41% in 1994. Poverty, therefore, is increasingly

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income from sources not generated by the head (for example family subsidies), to the household head. Hence, to avoid this bias, we use labor income since it is the only income that can be attributed with certainty to its recipient.

9 Throughout this paper the primary sector refers to agriculture, fishing and forestry. Due to its importance in the Chilean economy we treat mining separately.

associated with the non-mining primary sector and decreasingly associated with the industrial and service sectors.

As we discussed above, poverty in Chile is not a rural problem. Roughly speaking, the share of poor population living in rural areas is similar to the share of total population living in rural areas. Therefore, poverty is evenly distributed between rural and urban population. However, as we just discussed, 41% of the poor work in the non mining primary sector, mainly in agriculture. This apparent contradiction has to do with the fact that there has been a tendency to urbanization in rural areas, so apparent migration may be just the movement from rural areas to small cities around the countryside and not a interegional displacement towards the large cities like Santiago.

A potential reason for the changes in rural life, beyond factors associated to development, may be that government subsidies tend to favor the urban households. The expansion of education, as well as housing policies, generally benefit those who live in cities or villages, not in the countryside. This may be causing a uniform distribution of poverty among rural and urban areas, but concentrated in primary sectors, mainly agriculture. Another factor may be that people move to small cities looking for new opportunities, but the poorest finally end up working in agriculture.

One of the reasons why, in a context of decreasing poverty and unemployment, households that remain poor have heads working in the primary sector, is the structural problems that the agriculture sector has been experiencing during the 1990s. In the late 1980s, with a depreciating real exchange rate, agriculture boomed. Indeed, the second half of the eighties was the only period during the last 30 years that employment in agriculture actually increased. In the 90s rising real wages and a declining real exchange rate have reduced the profitability of this sector. Hence, although agricultural GDP grew at an annual rate of 4.8% during the nineties, employment in agriculture has been declining at a rate of 0.8% per year.

Poor households in Chile in 1994 where 20% larger than average households, a difference that has actually been increasing since 1987, not because poor households have been growing larger but because the rate at which average households are shrinking is faster in for the non-poor. Increases in income and increased spending on public housing are probably behind these changes. The size of the poor household has declined slightly, with an average size of 4.88 persons in 1987, and 4.64 in 1994 (Table 4). Amongst the poor

population, most of the changes in household size are due to a reduction in the percentage of households with more than six members: from 18% in 1987 to 13% in 1994. At a national level there is a large increase in households of one and two members.

The dependency ratio of poor households has fallen slightly from 4.31 to 4.18, which amounts to 3% (Table 5). This is a small decrease when compared to the 11% decline in the national dependency ratio from 2.95 to 2.62. Most of this decline is explained by the growth of the employment rates, but also by changes of the demographic characteristics of the population described in previous paragraphs. Non working adults among the poor have declined from 28% in 1987 to 26% in 1994. However amongst the poor female population the fraction of non-working adults has remained constant. The analogous figures for the overall population are 26% and 23%. The main demographic change is that the elder population has declined as a fraction of total poor population, while the younger population (less than 18 years), has grown in relative importance. As these youngsters enter the labor force, they will increase the probabilities of their households to overcome poverty. As we will see later, the youngsters in poor households are in general more educated than their parents, which may further help to reduce poverty in the future.

The average years of schooling of the poor population is 15% lower than that of the total population (Table 6). Most of this difference can be explained by the large differences at both ends of the "educational distribution": those with incomplete primary education and those with some form of post-secondary education. During the 1987-94 period, however there has been widespread improvements in educational attainment that have benefited the poor and non-poor equally. At a national level, the average years of schooling have grown from 8.3 to 9.1; within the poor population they have increased from 7.0 to 7.8. These improvements in overall education should be a future source of growth and poverty alleviation. This is not to say that there is no room left for improvements as 46% of the poor population still have incomplete primary education. But, it is interesting to note that enrollment ratios in Chile are currently quite large and have been so since the seventies: approximately 100% primary enrollment and 65% secondary enrollment. As those benefiting from this increase in educational coverage enter the labor force overall income levels should increase and with them poverty should fall.

A similar picture can be obtained from Table 7. Educational levels amongst the poor population are higher than amongst the poor income recipients. This is consistent with

improvements in educational attainment: poor children are better educated than their parents.

The distinction between formal and informal sectors is shown in the lower panel of Table 7[10]. In 1994 informality was higher in the poor population than in the overall economy. Surprisingly, however these differences are not very large: in 1990 the percentage of population depending on informal income was similar amongst the poor and the total population. The differences are clearer when you look at informality as a fraction of total employment. In 1994 30% of employment in the total population was informal. This figure rises to 45% amongst the poor. In fact, this table shows that while formality among the non poor increased and informality remained relatively constant, among the poor there is an opposite movement: stability in formality, and increase in informality. The somewhat more restrictive macroeconomic environment of 1994, compared to the previous years of CASEN, may explain changes in employment, the diverging experiences between the poor and non poor may be an indication of a trend problem rather than a transitory phenomenon. We return to this issue in the analysis of the minimum wage. Unemployment is much higher (more than twice in 1994) amongst the poor.

3. Macroeconomic Developments

Chile is often presented as a model of economic reform. High levels of growth, stability and falling inflation are only some of the variables cited to illustrate this success. What is often forgotten, however, is that the positive results of the reforms are taking place nearly 20 years after they where initiated in 1974. In the meanwhile Chile has passed through two severe economic recessions and unemployment only dropped below 10% in 1987. Inflation, now under control, was below 30% for the first time in 1981 and has been close to 20% for most of the last decade. The favorable macroeconomic setting is, therefore, a characteristic of the last ten years. It is in this favorable context that we examine the recent trends in poverty. This does not mean that the reforms lack importance, on the contrary, in the latest 10 years Chile has enjoyed fully the benefits from earlier reforms. This is why the first part of this section briefly describes the main structural reforms and economic

[10] In this study we use the definition of informality proposed by the National Planning Ministery (Mideplan), that considers as informal those who are self-employed except for proffessionals, unpaid family workers, employed in microbusinesses (less than six workers), and those working in the trade and services sector without a contract.

performance between 1974 and 1985. A discussion of macroeconomic developments and policies in the last 10 years makes up the second part.[11]

The reforms carried out between 1974 and 1985 fall into six main areas:

- A wide ranging privatization program that significantly reduced state participation in the production and distribution of goods.
- Labor market reforms that decentralized wage negotiation and increased labor market flexibility, and substantially altered the balance of power in the union-firm relationship.
- Financial sector reform, which after the financial crisis in the early 80s was significantly corrected, in particular by the enacting of new prudential regulation.
- Implementation of a private fully-funded pension system, that replaced the traditional pay-as-you-go system.
- Trade reforms that replaced a high multiteered tariff system with a uniform tariff, combined with specific export promoting incentives, that aimed to become the basis of an export led growth strategy.
- Public sector reforms aimed at increasing macroeconomic stability and public sector efficiency.

The results of many of the reforms were dramatic; the budget deficit was cut from 25% of GDP in 1973 to 1% in 1975, average tariffs dropped from over 100% in the 60s to a flat rate of 10% in 1979 and all quantitative controls where removed from international trade. Currently, and after some increases during the 80s and further reductions, the tariff rate is 11%.[12]

After an initial recession in 1975, brought on by the drastic reduction in government spending, a money-based stabilization, and negative external shocks, the Chilean economy began, what many believed to be the final recovery and confirmation of the success of the reforms. The system collapsed in 1981 under a combination of overvalued exchange rate and large and growing trade deficit, massive external borrowing by the private sector, financial sector crisis, and a large external crisis. Only in 1985, and after a substantial depreciation of the peso, did the economy enter its final, and most favorable phase.

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11 For further discussion on reforms and macroeconomic developments see Edwards and Cox-Edwards (1987) and the papers in Bosworth, Dornbusch and Labán (1994).

12 Chile during the nineties has signed several trade agreements, with Canada, Mexico, Venezuela, Mercosur, among others, which has resulted in an average tariff rate between 8 and 9%.

A summary of recent macroeconomic indicators is presented in Table 8. Probably one of the main characteristics of the Chilean economy during the last 10 years has been its unprecedented rate of economic growth. During the 1987-1996 period the economy grew at an average of 7.1% per year, which in turn translated into per capita GDP growth averaging a yearly rate of 5.4%. Taken as a whole, this rate of growth means that per capita GDP is 70% higher in 1996 than what it was in 1986. The rate of growth, however has not been even, varying between a maximum of 11% in 1992 and a minimum of 3.3% in 1990. Therefore, although average economic performance in the 1987-1994 period has been in all terms very good, the averages hide important differences among years, which also has implications to interpret the poverty surveys.

Despite high levels of overall growth, sectorial growth in this period has been uneven (Table 9), although positive for all sectors. In general, the fastest growing sectors have been services (specifically transport and communications; financial services; commerce, restaurants and hotels) and construction; on the whole the nontradable sectors of the economy. It is interesting to note that the services sector, with the strongest growth is also a sector that has reduced its share of employment of poor workers.

In the aftermath of the debt crisis, growth in the Chilean economy was mostly based on the recovery of employment and increased capacity utilization. Unemployment was, after all, more than 10% in every year between 1981 and 1987. As from 1987 however, labor productivity has been growing at average rates above 4% and investment rates have risen considerably, reaching record levels of over 28% of GDP. Furthermore, the quality of investment has also improved; in 1996 roughly 58% of investment was in machinery and equipment, compared with 47% in the second half of the 80s. Along with investment rates, saving rates have also increased after 1987. The high savings rate has been key in allowing high investment rates without relying too much on foreign savings to finance capital accumulation.

Exports, growing at average rates of 9%, have had a leading role in growth during the last decade. Although copper still plays an important role in the Chilean economy, the expansion of exports has been due not only to the growth of traditional exports, but also, and more importantly, to the growth of non traditional exports. Since 1990 non-copper real exports have grown at an average annual rate of 11%.

Macroeconomic policy has been geared towards stability. In the early 80s Chile was characterized by high inflation, and widespread indexation (some of which still remains). The establishment of an independent central bank in 1989, responsible for the conduct of monetary and exchange rate policies and for the management of the capital account, established an institutional setting for price stability. The reforms carried out in the mid 70s eliminated all price and income controls eliminating the possibility of direct government intervention in inflation. In this context the newly independent central bank has carried out a countercyclical monetary policy pushing interest rates up whenever GDP growth or growth in domestic demand have exceeded levels deemed compatible with a downward trend in inflation. Since 1991, inflation has been declining to reach one-digit levels in the last years.

Figure 4, and Table 10, takes a closer look at inflation in the 1987-1996 period: during most of the period inflation of the tradable goods has been lower than inflation in the non tradable sector. This is particularly clear between 1992 and 1996. This trend is consistent with the appreciation of the real exchange rate, mentioned below. As can be seen in Table 10 inflation of the basic consumption bundle[13] which is a better measure of the cost of living of the poor population than the consumer price index has also been following a downward trend since 1990, moving closely with economy wide consumer prices.

4. Labor Market and Minimum Wage

The high rates of economic growth have been accompanied by an average growth in employment of over 3% per year between 1987 and 1996 (Table 11). When added to the growth in real wages this has resulted an average 7% yearly growth in labor income. National Account statistics confirm this result: between 1987 and 1994 labor income has hovered at around 33% of GDP. As with the personal income distribution there appears to have been no major changes in functional income distribution in the period being studied.

Once again, the economy wide average hides significant differences between sectors. Job creation in mining, an extremely capital intensive sector, is considerably lower than average, and employment in the non-mining primary sector has been falling in recent years.

13 The minimum consumption bundle refers to the price of the basket of goods used to determine the poverty line, the only modification being that the index uses moving averages for the prices of highly volatile perishable goods, that make up a high percentage of the basket.

This pattern is particularly relevant when we consider the level and evolution of poverty in this sector and the importance of minimum wage earners in agriculture.

In line with productivity growth, Table 11 shows that real wages also grew considerably: 42% between 1986 and 1996. A more detailed analysis reveals that wage growth has been highest in the construction sector[14].

Another interesting feature of the period is the high rate of growth of the minimum wage. Between 1987 and 1996 the minimum wage grew on average at 4.9% per year, considerably higher than the average wage increase of 3.6% and average productivity growth of 3.7%. This difference is even clearer after 1990 when the minimum wage grew at 5.4% per year while average wages grew at 4.0%.

What impact has the evolution of the minimum wage had on the Chilean economy during the nineties? The government has stated publicly that its objective has been to increase minimum wages in line with growth in labor productivity, the difference being attributed to an "equity (or redistributive) plus" to make up for past losses in purchasing power and help improve income distribution. It is then relevant to ask whether it has had a positive impact on the labor income of those it is supposed to benefit. A definite assessment of this issue is beyond the scope of this paper, and it would require a much more detailed analysis of poverty and minimum wages, but we think there may not be enough observations to perform such analysis.[15]

The incidence of minimum wages and the composition of employment are presented in Table 12, where we distinguish between the poor and overall population. In Table 13 we show the share of workers earning minimum wages or less by quintiles, including informal workers.[16] Table 12 shows that among the poor and in the whole population workers earning minimum wages were relatively constant between 1990 and 1992 and increased their participation towards 1994. For all years since 1987 the share of workers earning minimum

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14 Comparable data on primary sector wages are not available.

15 Lopez (1996) presents panel evidence, for the thirteen regions of Chile for the period 1987-1994, showing that minimum wages have indeed helped to reduce poverty. However, that evidence relies on common minimum wages in the country, and the difference across regions is in the deflator used to convert those wages to real terms. Therefore, the results may be capturing movements in relative prices across regions. Further analysis of minimum wages in the Chilean economy can be found in Bravo and Vial (1997).

16 Although minimum wages are compulsory for all formal workers, the relevant concept to look at in CASEN surveys is minimum wages or less because of understatement, non full-time workers, more than one occupation and very specific labor contracts such as apprenticeships contracts.

wages or less has been higher in the agricultural sector than in the rest of the economy. Moreover, in 1994 more than 26% of minimum wage earners where in the agricultural sector.

The figures also reveal that between 1992 and 1994 formality declined more among the poor than within the overall population. As emphasized above and elsewhere (Cowan and De Gregorio, 1996), the position in the business cycle where the CASEN survey is carried out has important implications in the results of distribution and poverty. It is clear from the figures that unemployment was higher in 1994 as the result of a tighter macroeconomic situation in the country. It is therefore difficult to conclude whether the increase in the share of minimum wage workers was due to a transitory slowdown or to more permanent trend of tighter minimum wage levels. The increased percentage of employment under minimum wages, specially among the poor is of course worrisome. With data from CASEN 1996 it would be possible to further analyze this issue, however preliminary information show that indeed part of the increased importance of minimum wages is a trend of the 1990s. In consequence, the issue is whether the adverse consequences of minimum wages, such as increase in informality and less employment in the formal sector outweigh the benefits of higher wages for the poor that find jobs in the formal sector. Chile may be reaching a point were the margin for further rapid increases in minimum wages could make this trade off more severe.

Another important aspect of minimum wage policy in Chile that is important to comment is the idea that it can be increased at the same rate as that of labor productivity without generating problems in the economy in the form of unemployment and increased informality. The relevant point is then to determine whether the increase in labor productivity for the whole economy is the same as that in sectors where minimum wages apply. As long as sectors subject to minimum wages are those that require essentially no skills, the increase in productivity in the economy associated with the increase in skill levels should not be considered in the increase of low (or no) skill jobs. Hence, although there may have been a margin for large increases in minimum wages in the early 1990s, the policy of maintaining minimum wages growing in real terms with overall productivity is not sustainable in the long run. For example, authors calculations, based on Rojas et al (1996), show that more than 50% of labor productivity growth in Chile during the nineties has been due to

increases in human capital or labor quality. The relevant productivity growth for minimum wage earners would therefore be half that of average productivity growth.

5. Social Policies

On the whole indicators of living conditions in Chile are above the Latin American average and above many other developing countries.[17] These variables are the result of a complex combination of economic conditions and policy decisions ranging back for several decades and can only be partially attributed to current variables or policies[18]. For example, as shown in Figure 5, the life expectancy at birth of a Chilean in 1994 was nearly 75 years, one of the highest in Latin America. Likewise, infant mortality in Chile now stands at 11.8 per thousand live births, one of the lowest rates on record in the developing countries. Regarding education, the situation in Chile is very favorable when compared with other Latin American countries. For international comparisons, Figure 6 plots literacy rates and mean years of schooling for Chile and 20 other countries in 1992. Chile's showing on both counts is among the best in Latin America.

How then can we evaluate social policy and its effects on the living conditions of different groups in the population? A first approach is to look at overall levels of government spending on socially related programs. In line with previous economic reforms, government expenditure fell systematically as a percentage of GDP between 1982 and 1989, leveling out at current levels of 21% of GDP after 1990. Publicly the democratic government, which came into power in 1990, pursued a change in the composition of expenditure towards social expenditure, and within social expenditure to housing, health and education (see Table 14). The resulting redistribution is both the result of this conscious focalization towards key areas, and, of changes in social security due to the development of the private pension system implemented in the early eighties. On the other hand, the employment programs were the government response to the severe unemployment problems

17 The Human Development Report of 1997 includes the Human Poverty Index, which provides a measure of poverty from a human development perspective - i.e., using indicators of basic human deprivation. Among the 78 countries in the index Trinidad and Tobago come out on top, followed by Cuba, Chile, Singapore and Costa Rica. (UNDP 1997)

18 For a detailed description of social policies in Chile see Raczynski (1994).

created after the debt crisis, a situation that clearly did not persist after 1990 and allowed further focalization of resources in the so called "social areas"[19].

In the context of policies that have yielded an average fiscal surplus of 1.7% of GDP during the period 1987-96, and an average growth rate of 4.8% for total government expenditure, social expenditure has grown at a rate of 5.9% (see Table 14). The largest increases in social expenditure have taken place in health, housing and education. Thus from 1990 to 1996 expenditure in health grew at an average rate of 11.5%, 9.8% in housing and 11.5% in education. On the other hand social security expenditure has also been growing faster during the nineties, reaching an average growth rate of 6.9%.

The overall level of expenditure, however , is only part of the overall picture. The effects of this spending will depend both on focalization and the effectiveness of the programs. In Chile, in particular, the fact that social expenditure is focused mainly on the poor, improves secondary income distribution significantly vis-à-vis primary income distribution. Final figures on the impact of social spending in 1994 are not available so Table 15 is an approximation to secondary income distribution of consumption. To construct this table we assume that program targeting remained unchanged between 1992 and 1994, and hence that social spending on each decile rose at the same rate as total spending under that program.[20] On this basis, the average income accruing to each household decile from social programs was estimated, and aggregated to 1994 CASEN data on total cash income.[21]

As illustrated in row II of Table 15, one third of cash grants go to the poorest quintile. While this helps even out the distribution, the improvement is slight because such transfers account for a minimal fraction of total income. In the bottom quintile in 1992, for instance, average cash transfers (such subsidies accounting for one third of the total) were $5,249 (1992 pesos), corresponding to 7.7 percent of mean income in that quintile.

Education and health programs are considerably larger and have a more pronounced effect than cash subsidies. Over 80 percent of all health-care services and 60 percent of all education services are taken up by the poorest 40 percent of Chileans. Moreover, such

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19 Chilean policy responses to the debt crisis and their distributive effects are discussed in Meller (1992)

20 These figures must be analyzed with caution, and allowing for a wide margin of error: apart from the methodology problems typical of income-distribution surveys, there can be problems in imputing social spending (see MIDEPLAN 1990 for a description of the methodology used).

21 According to preliminary MIDEPLAN estimates, the targeting of social expenditure did not changed significantly from 1992 to 1994.

programs also represent a larger share of total household spending. Consequently, while the wealthiest fifth of the population have just over 13 times more "primary" income than those in the bottom quintile, their total is only 8.6 times greater after the impact of social spending is factored in. Clearly a more detailed analysis of the effects of this increased expenditure is required but is beyond the scope of this paper. A brief summary of selected socio-economic indicators is presented in Table 16.

6. Growth and Poverty Decompositions

The impact of growth on poverty alleviation has been very important. Using Ravallion's methodology Larrañaga (1994) has shown that 80% of the reduction of poverty between 1987 and 1992 has been due to growth, while the rest has been due to changes in income distribution. Since income distribution actually deteriorated between 1994 and 1992, reaching levels similar to those of 1987, any decomposition will lead to the result that almost all of the reduction in poverty has been the result of aggregate growth and virtually nothing the result of changes in income distribution. Although this type of exercise is correct from an accounting point of view we think that the interpretation, specially from a policy point of view, may be misleading. Indeed, one could be tempted to argue that growth is all that matters, and social and economic policy are irrelevant. However, social policies also have an effect on growth, which is almost impossible to calculate. For example, there is a wide literature that links income distribution and economic growth (Perotti, 1996), so as long as social policies alleviate inequality they will have a positive effect on growth. Furthermore, since social policies, by spending in education and health have a direct impact on human capital and productivity of the labor force it has another indirect effect on growth, and hence, on poverty reduction. Finally there is nothing to show that in fact social policy has not in fact impeded a deterioration in the distribution of income which may have taken place in the absence of these policies.

Another way to analyze the impact on growth on poverty is to have some measure of the impact that each point of growth has on the reduction of poverty. When growth is high poverty should decline faster than in a period of low growth, but the question is how "efficient" each point of growth is from the point of view of poverty reduction. In addition, it is necessary to take into account that the initial level of poverty matters for poverty

reduction. A decline in one percentage point of poverty is easier when the economy starts with 50% of the population living in poverty than when poverty is only 20%. For this reason, in Table 17 we present poverty elasticities as indicators of efficiency, that is the ratio of the percentage decline in the share of people below the poverty line and the rate of per cápita growth during the period. Table 17 shows that that per each point of growth between 1987 and 1990, poverty declined 0,9%, while in the periods 1990-92 and 1992-94 this figure increased to 1,0 and 1,8, respectively. Regarding extreme poverty the effects have been smaller, mainly as the result of the deterioration of income distribution between 1992 and 1994 mentioned above.

Looking at this evidence, and with no need to hazard any radical assumptions as to economic performance, one might well ask what are the prospects for poverty alleviation. Taking the 1994 income distribution as given, the poverty trend can be forecasted by varying mean income at the rate of per capita GDP growth, with a rate of population growth of 1.5%. Assuming that income distribution is similar in 1996 to the distribution existing in 1992 and assuming no further changes in the distribution we can estimate the prospects for poverty alleviation. According to such an estimation, considering actual figures for GDP growth during 1995-96, and continuing with 6 percent growth per year until the year 2000, by the end of that year only 18 percent would be poor and 3.5 percent indigent. By that standard, extreme poverty would be eliminated by 2006 and poverty would be eradicated by 2019.[22]

To dig further into changes in poverty, Table 18 performs a poverty decomposition following Morley (1995), where we refer the readers for details. The decompositions are performed according to educational level, sector of economic activity, and labor market characteristics of the household head. The first three columns show the percentage of poor by category, and the change between 1987 and 1994. Then, the next two columns weight by the share of population (taken from the sixth column) and thus we have the contribution of each category to poverty. Finally, the last column shows the contribution of each change to the overall decline in poverty. The bottom panel focuses on the labor market and because of data availability only looks at the period 1990-1994.

22 This estimate is constructed holding the value of the poverty line constant, a potential simplification if we consider that as per capita GDP rises estimates of basic needs also tend to rise.

Splitting the poor by educational levels we see that poverty has declined in all groups. Proportionally the largest changes took place amongst those with primary and incomplete primary education. In terms of relative importance the largest contribution to the reduction of poverty was the decline in those households headed by members with only primary education, which explains almost 60% of overall reduction in poverty.

Between 1987 and 1994 those households whose head had no formal education increased their contribution to poverty. It seems, therefore that poverty is increasingly a problem associated with lack of formal education, as these households benefit less than proportionately from the increased income opportunities generated by growth. On the whole reduction of poverty within educational categories explains nearly 80% of the fall in poverty. However, as Table 7 shows, education is still one on the key variables when explaining who is poor and who is not in Chile and improvements in the overall level of this educational are definitively a potential source of further poverty reduction.

Consistent with our previous discussion, poverty declines in all sectors of the economy, although the most important change occurs in the service sector were the proportion of people living below the poverty line declined by 42%, which amounts to 16 percentage points (second column). At the national level poverty declined by 37%. Poverty in the primary sector in 1994 is one of the highest, and reached 35%, similar to the level in construction. Nevertheless the latter experienced a decline in poverty from 57%, and has contributed almost a quarter to the reduction of poverty, while the former contributed relatively less to the decline in poverty. Poverty is increasingly concentrating in the primary sector which increases its contribution to overall poverty from 24.6% in 1987 to 28.9% in 1994

The decomposition according to labor market characteristics also shows a decline in poverty across the board, but larger in magnitude and as a contributory factor among formal workers. Then, job creation in the formal sector is the most powerful poverty reduction factor in the labor market followed by the inactive sector and the informal sector. As can be expected in a country without unemployment benefits reduction in poverty amongst the unemployed is minimum. As a whole poverty reduction within employment categories explain 94% of poverty reduction.

Another informative decomposition of poverty is to look at the sources of income growth of the poor and to separate the effects of increasing income per worker (mainly

wages) and increasing employment. The latter can be separated further, distinguishing features of labor supply, such as participation rates, average size of households, etc. Thus, while Morley's decomposition looks at levels of poverty (determined by a poverty line), our complementary decomposition looks at changes in income of those that were poor in 1990, that is about 40% of the population, the bottom two quintiles of income distribution.

Poverty, measured by income levels, declines because the per capita income of the poor increases. Those with the highest income within this group earn more income than that of the poverty line, and hence leave poverty. Therefore, we can concentrate on the average income per capita of the poor in a given year (y), which can be written as:

$$y = w \times \frac{E}{N} = w \times \frac{L}{N_a} \times (1-u) \times \frac{H}{N} \times \frac{N_a}{H}$$

where w is labor income per worker, which is basically wages, and E/N is employment per capita. Employment can be decomposed further in L/N_a, which is labor force (L) per working age population (N_a), or participation rate, in the employment rate (1-u), in the number of households per capita (H/N), or the inverse of the average size of households, and in the number of working age population per household N_a/H. Then, we can consider the above equation at two points in time, divide them, and then have a series of factors which composed give the total increase in per capita income. We do this for people that were poor in 1990.[23] For comparison purposes we also perform this decomposition for the increase in average real per capita income for the whole population, and we also separate between formal and informal workers.

The results of this decomposition are in Table 19.[24] Between 1990 and 1994 average per capita income of those that were poor in 1990 (40% of the population) grew by 24.2%, and among the poor the increase in income per capita was larger among the informal workers. A different picture is observed at the national level, where the increase of per capita income was greater for all workers (which includes the poor), although larger among formal workers.

Nevertheless, it is interesting to note a first common pattern in the increase in income per capita within the poor and at the national level when employment is divided between formal and informal workers. In both cases the increase in income among informal workers

23 We can only start in 1990 because of unavailability of labor market data in CASEN 1987.

24 The contribution to total per capita income growth is computed as log(1+ "factor")/log(1+ "total") since the total is the cumulative multiplication of each factor.

is more due to increase in employment per capita. Instead, increases in income per capita within formal workers is due in a larger fraction to increases in income per worker. For example, among the poor roughly half of the increase in income per capita of formal workers is the result of increase in income per worker, while among informal workers about one fourth is due to the increase in income per worker. As higher income per worker reflects higher productivity, formal jobs are the ones with more productivity gains, while informal jobs would require less skills and the expansion of income in this sector should be more linked to increases in labor inputs.

It is also interesting to note the differences between the poor and the aggregate economy in the relative importance of increases in income per worker and employment. At the aggregate level the role of wage increases is much more important in explaining the increase in income than employment. Indeed, at the national level, according to the CASEN survey, two thirds of the increase in per capita income is due to the increase in wages. Therefore, the main reason for income growth has been the increase in wages, although at the level of the poor the effect of employment growth is relatively more important. In fact, the overall figure is reversed since almost two thirds of the expansion of income per capita among the poor is the result of more employment, while only one third is increase in wages.

Looking at the changes in employment among the poor the most important factor is the increase in the participation rate and the decline in the unemployment rate. The decline in the size of households also has a positive impact on the increase in employment, but it is partially offset by the reduction in the average of working age people per household, which is related to the increase in the young population. Thus, household size declines, but they also reduce their average age.

7. Conclusions

Chile has had an impressive record in terms of growth in the last decade. The results in income distribution have been disappointing for many, since it seems to have remained relatively stable for ten years. However, in other dimensions of social progress, namely poverty, Chile has shown significant progress. Poverty has declined fast, paralleling output growth.

From a closer look at poverty this paper has shown that there are no significant biases in poverty changes across gender or rural-urban distinction. In addition, education has

increased at all levels of income and demographics have not shown systematic changes which could significantly explain the reduction in poverty. Overall, one can conclude that the reduction of poverty has been equitable with just one exception, which is that poverty is much more concentrated in the non-mining primary sectors, mainly agriculture. Our analysis shows that while in 1990 roughly 30% of head of households living in poverty were in the primary sector, in 1994 this fraction increased to about 40%. It is important to emphasize that poverty reduction occurs in all main sectors. Even in the primary sector the incidence of poverty declined by 28% , while at the national level poverty declined by 37%. For this reason poverty is becoming more concentrated in the primary sector.

In spite of the sectorial evolution of poverty, rural poverty has declined at the same rate as urban poverty, and in many regions even faster. We think this is a phenomenon more related to the urbanization of poor-rural areas, still heavily dependent on agriculture, rather than migration to big cities or changes across productive sectors. In summary, poverty is becoming, at least to a 40% extent, an increasingly agricultural problem. In sectors such as services and others, the incidence of poverty has been declining more rapidly. Of course the public policy implications are not straightforward, and depend mainly on the prospects of the sector. Since it is likely that employment in agriculture will probably keep declining, as many activities move to capital intensive technologies we think that the answer to these problems is to look for non-agricultural solutions to the poor living in rural and semi-rural areas and that still work in the sector.

Prospects for poverty reduction are positive. Regarding growth, we estimate that a 6% rate of growth of GDP and without considering changes in income distribution, poverty should be eliminated by 2012 and extreme poverty by 2006. In addition, population in Chile will keep increasing its average years of schooling. While in 1994 almost half of poor adults had primary education incomplete, enrollment ratios for primary school have been close to 100% for many years, which implies a rising trend in years of schooling of the population.

Social policies, financed mainly through public spending, have had an increasing importance in the 1990s. As we have shown in the paper, the expansion of social expenditure tends to compensate in part the unchanging income distribution of Chile. As a result of long term polices in the areas of health and education Chile has good indices when compared to other countries. The effectiveness of social policies has not been evaluated in

this paper and it is of course an important topic of research in order to draw lessons from the Chilean experience and in order to improve the design of public policy.

Poverty decompositions show several interesting facts. According to educational level the main contributory factor to the reduction of poverty was the decrease in poverty amongst those with primary education. In terms of labor market we observe that the reduction of poverty occurs mainly in the formal sector. The decomposition of income per capita growth also confirms the importance of formalization, since in the formal sector the expansion of wages is more important relative to increase in employment than in the informal sector.

We have also seen that among the poor the share of formal workers has declined, increasing the share of informality, and hence of low paid-precarious jobs. It is difficult to know how much of these has been the results of increases in minimum wages, but at present, and after several years of continuous expansion of minimum wages, it is plausible to argue that further increases in minimum wages may reduce the probability of finding a formal job, thus reducing the possibility for poverty reduction. Of course, an offsetting effect is the higher income of formal workers. This is the trade off that needs further analysis.

The accelerated expansion of wages in the Chilean economy is an important factor for explaining the increase in income per capita of poor households, but increased employment, specially due to the increase in participation rates is the most important factor for poverty reduction.

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Apendix 1 - Values of Poverty Lines

Oficial Lines		1987	1990	1992	1994
Basic Food Bundle	Urban ($)	5.079	9.297	12.875	15.050
	Rural ($)	3.914	7.164	9.921	11.597
Urban Poverty Line	Poor ($)	10.158	18.594	25.750	30.100
	Poor ($ 94)	28.984	30.475	31.419	30.100
	Indigence ($)	5.079	9.297	12.875	15.050
	Indigence ($94)	14.474	15.238	15.710	15.050
Rural Poverty Line	Poor ($)	6.850	12.537	17.362	20.295
	Poor ($ 94)	19.519	20.548	21.184	20.295
	Indigence ($)	3.914	7.164	9.921	11.597
	Indigence ($94)	11.154	11.742	12.105	11.597
60 Dólar Poverty Line					
US$ 60	Poor ($)	5.360	9.320	12.520	15.275
	Poor ($ 94)	15.275	15.275	15.275	15.275

Where: $ are pesos of November each period and $94 are pesos of November 1994.

TABLE 1

HEAD COUNT RATIO FGT(0)

Region		1987			1990			1992			1994			% change 1987-1994		
		Mideplan	Contreras	US$ 60	Mideplan	Contreras	US$ 60	Mideplan	Contreras	US$ 60	Mideplan	Contreras	US$ 60	Mideplan	Contreras	US$ 60
I	*(2.8)*	43.2	38.6	15.6	26.4	21.4	7.0	27.0	18.1	6.8	22.7		6.4	-47.5		-59.2
II	*(2.9)*	39.8	33.5	15.6	34.1	21.8	10.0	31.3	18.6	7.5	26.3		6.8	-33.9		-56.4
III	*(1.4)*	42.6	32.4	15.3	34.2	20.1	9.4	30.4	16.7	7.4	33.9		11.4	-20.4		-25.5
IV	*(3.7)*	50.5	44.7	25.0	45.5	31.0	20.1	38.4	21.9	11.8	33.1		12.1	-34.5		-51.7
V	*(10.4)*	41.7	32.1	18.6	43.0	26.8	16.3	34.5	16.9	9.2	27.1		7.6	-35.0		-59.2
VI	*(4.8)*	46.1	32.5	24.2	41.0	21.7	19.0	30.2	10.3	10.4	34.1		12.1	-26.0		-49.9
VII	*(6.3)*	46.8	35.9	24.8	42.6	27.7	19.4	39.8	17.0	17.3	40.5		17.9	-13.5		-27.6
VIII	*(12.4)*	57.0	44.2	32.8	48.2	27.9	20.2	44.5	25.8	16.8	40.3		16.4	-29.3		-49.9
IX	*(6.0)*	59.6	50.3	39.5	45.1	33.0	24.0	40.6	21.5	14.2	33.6		14.2	-43.6		-63.9
X	*(6.8)*	54.3	41.1	33.0	40.1	24.1	16.7	34.2	17.8	11.6	33.0		12.7	-39.2		-61.6
XI	*(0.6)*	28.3	25.7	10.4	31.0	21.1	9.7	30.5	13.9	8.4	28.8		9.4	1.8		-9.2
XII	*(1.3)*	22.9	28.0	7.3	30.1	23.4	9.0	24.0	15.3	4.1	14.8		2.9	-35.4		-60.0
Santiago	*(40.5)*	38.7	31.5	15.0	33.0	18.6	9.8	26.1	10.5	5.9	20.9		5.2	-46.0		-65.4
Country		**45.1**	**36.1**	**21.9**	**38.6**	**23.5**	**14.6**	**32.6**	**17.7**	**9.8**	**28.4**		**9.5**	**-37.0**		**-56.4**
Std. Dev.		10.1	6.9	9.2	6.6	4.2	5.4	5.9	4.2	3.9	7.2		4.3	-28.7		-53.2
Coef. Var.		0.229	0.190	0.431	0.174	0.173	0.371	0.179	0.241	0.390	0.240		0.414	4.8		-4.0

Data in braquets are % of total population.

POVERTY GAP FGT(1)

Region	1987			1990			1992			1994			% Change 1987-1994		
	Mideplan	Contreras	US$ 60	Mideplan	Contreras	US$ 60	Mideplan	Contreras	US$ 60	Mideplan	Contreras	US$ 60	Mideplan	Contreras	US$ 60
I	16.5	15.8	4.9	9.8	7.1	2.1	9.2	6.4	2.5	7.8		2.5	-52.8		-49.4
II	15.6	13.0	4.9	12.8	9.0	3.7	11.8	6.1	2.2	10.6		2.1	-31.8		-56.5
III	15.7	11.1	4.1	11.9	6.3	2.7	11.8	5.8	2.0	14.1		4.2	-10.3		2.4
IV	19.6	15.7	7.7	17.8	11.1	6.9	13.6	6.6	3.1	13.7		3.5	-30.2		-54.9
V	16.6	11.7	6.5	17.4	10.2	6.0	12.9	5.5	2.6	10.6		2.5	-36.3		-61.5
VI	17.9	11.0	7.8	15.9	88.0	6.8	9.6	2.7	2.7	12.0		3.9	-32.9		-49.5
VII	17.5	12.8	8.1	16.3	10.1	6.5	14.2	5.3	4.6	16.8		6.1	-4.1		-25.5
VIII	25.5	17.7	11.6	19.9	10.7	7.1	21.4	8.8	5.4	20.5		5.3	-19.6		-54.0
IX	27.7	20.8	14.5	20.6	12.7	9.0	14.9	6.9	4.8	12.3		4.4	-55.7		-69.2
X	23.0	15.7	11.3	15.7	8.1	5.2	12.4	5.5	3.3	12.1		4.3	-47.5		-62.1
XI	8.8	8.0	2.6	12.6	6.4	3.0	9.6	4.2	2.4	10.5		3.6	20.3		40.3
XII	7.9	9.8	2.4	11.3	7.3	2.7	7.9	5.0	1.2	3.9		1.0	-51.0		-59.2
Santiago	16.4	11.5	5.1	14.0	6.4	3.1	9.5	3.4	1.7	8.4		1.9	-48.4		-62.1
Country	**18.9**	**13.5**	**7.5**	**15.8**	**8.5**	**4.9**	**12.4**	**5.7**	**2.9**	**11.7**		**3.2**	**-37.9**		**-56.9**
Std. Dev.	5.4	3.4	3.5	3.2	21.2	2.1	3.4	1.5	1.2	4.0		1.4	-26.7		-60.6
Coef. Var.	0.307	0.253	0.497	0.213	1.425	0.428	0.274	0.271	0.413	0.336		0.395	9.3		-20.5

SOURCE:MIDEPLAN, Contreras (1994) and authors estimates based on CASEN surveys 1987-1994.

NOTE: Data for 1994 is not available in Contreras.

TABLE 2

URBAN AND RURAL DIMENSIONS OF POVERTY

	Year			change in %
	1987	**1994**		**1987-1994**
rural pop.(% of total)	*19.5*	*16.5*		
% of poor population that lives in rural areas by region				
I	5.2	10.4	↑	5.1
II	2.0	1.9	–	0.0
III	9.4	8.6	↓	-0.7
IV	35.2	25.5	↓	-9.7
V	15.3	7.4	↓	-7.9
VI	43.6	30.2	↓	-13.4
VII	47.9	39.4	↓	-8.5
VIII	27.0	19.8	↓	-7.3
IX	46.7	36.4	↓	-10.4
X	45.4	30.8	↓	-14.6
XI	37.1	22.2	↓	-14.9
XII	7.0	5.1	↓	-1.9
RM	3.5	3.6	–	0.1
Total	**21.8**	**16.8**	**–**	**-5.0**
poverty incidence by rural and urban areas				
Urban	43.8	28.3	↓	-15.5
Rural	50.5	28.9	↓	-21.6
Total	45.1	28.4	↓	-16.7

poverty decomposition		*% of total poverty change explained*
Contribution of urban areas to total poverty reduction =	-12.5	74.7
Contribution of rural areas to total poverty reduction =	-4.2	25.2
Explained reduction =	-16.7	99.9

SOURCE: Authors calculations based on CASEN 1987 and 1994

TABLE 3

HOUSEHOLDS HEADED BY WOMEN

	1987	1990	1992	1994
De facto				
% of total population	22.8	22.2	21.9	24.5
% of poor population	21.0	20.3	19.2	24.8
Ratio: poor population / total population	*0.92*	*0.91*	*0.88*	*1.01*
De Jure				
% of total population	20.9	18.9	19.3	20.2
% of poor population	21.2	18.9	18.9	19.1
Ratio: poor population / total population	*1.01*	*1.00*	*0.98*	*0.95*

Note: De Facto refers to the main income recipient in each household.
De Jure is the household head as recognized by household members.
SOURCE: Authors calculations based on CASEN 1987 to 1994.

TABLE 4

DEMOGRAFIC CHARACTERISTICS OF POOR HOUSEHOLDS

AGE	Male			Female		
	<15	15-60	>60	<15	15-60	>60
% of Poor population						
1987	39.4	55.4	5.2	35.5	58.8	5.7
1994	45.3	53.1	4.3	38.4	56.5	5.1
% change 1987-1994	*14.9*	*-4.0*	*-17.4*	*8.1*	*-3.9*	*-9.9*
% of Total Population						
1987	30.9	61.2	7.9	28.1	63.0	8.9
1994	30.1	60.8	9.2	28.1	61.5	10.4
% change 1987-1994	*-2.6*	*-0.8*	*16.2*	*0.3*	*-2.5*	*16.3*

SIZE	% of households per size			Average size of households
	1-2	2-6	>6	
Poor population				
1987	8.6	73.6	17.8	4.9
1994	8.6	78.3	13.1	4.6
% change 1987-1994	*-0.2*	*6.4*	*-26.3*	*-4.9*
Total Population				
1987	18.3	69.6	12.0	4.3
1994	22.7	69.4	8.0	3.9
% change 1987-1994	*23.6*	*-0.3*	*-33.9*	*-8.5*
Ratio: poor population / total population				
1987	0.5	1.1	1.5	1.1
1994	0.4	1.1	1.6	1.2

SOURCE: Authors calculations based on CASEN 1987 to 1994.

TABLE 5

ECONOMIC SITUATION OF HOUSEHOLD MEMBERS

		Percentage of group per employment situation					
		17 or Younger	Non-working adults	Older than 60 inactive	Income recipient	Self employed	Dependancy ratio*
Poor Population							
Total	1987	44.7	27.6	4.9	16.7	6.1	4.31
	1994	46.4	26.4	4.0	18.2	4.9	4.18
Males	1987	46.7	12.2	4.2	27.0	10.2	
	1994	48.8	10.3	3.0	29.9	8.4	
Female	1987	42.8	41.3	5.5	7.1	2.3	
	1994	44.2	41.5	4.9	7.4	1.6	
Total Population							
Total	1987	35.8	26.0	7.1	22.5	8.5	2.95
	1994	34.2	23.0	7.7	25.9	8.3	2.62
Male	1987	37.4	12.0	5.7	31.4	13.6	
	1994	35.4	10.0	5.8	35.9	12.7	
Female	1987	34.3	39.0	8.5	14.2	3.7	
	1994	33.0	37.0	9.5	16.3	4.0	
Ratio: poor population / total population							
Total	1987	1.25	1.06	0.68	0.74	0.72	1.46
	1994	1.36	1.15	0.52	0.70	0.59	1.59
Male	1987	1.25	1.02	0.73	0.86	0.75	
	1994	1.38	1.03	0.52	0.83	0.66	
Female	1987	1.25	1.06	0.65	0.50	0.62	
	1994	1.34	1.12	0.51	0.45	0.41	

SOURCE: Authors calculations based on CASEN 1987 and 1994.

* The dependency ratio was calculated as the ratio of family size to working members.

TABLE 6

EDUCATIONAL LEVEL OF POOR HOUSEHOLDS

		Percentage of adults in each group per level of education*				Average years of schooling
		Incomplete primary	Primary	Secondary	Post-secondary	
Poor population						
	1987	53.3	10.9	31.6	4.2	6.97
	1994	45.8	13.0	35.8	5.4	7.79
Change in % 1987-1994		*-7.5*	*2.1*	*4.2*	*1.1*	
Male	1987	52.0	11.2	32.4	4.4	-
	1994	46.0	12.7	36.1	5.2	-
Female	1987	54.4	10.7	30.9	4.1	-
	1994	45.6	13.3	35.6	5.5	-
Total Population						
Total	1987	42.9	9.0	34.6	13.5	8.28
	1994	36.8	8.4	36.1	18.9	9.12
Change in % 1987-1994		*-6.2*	*-0.6*	*1.5*	*5.4*	
Male	1987	41.8	9.1	34.7	14.5	-
	1994	36.0	8.5	36.2	19.2	-
Female	1987	43.9	8.9	34.6	12.6	-
	1994	37.4	8.2	36.0	18.4	-

* Refers to the population older than 17.
SOURCE: Authors calculations based on CASEN 1987 and 1994.

TABLE 7

CHARACTERISTICS OF MAIN INCOME RECIPIENT (% of population group)

	Population in households whose main income recipient´s level of education is:				
	0 years	primary	secondary	post-secondary	total
Total population					
1990	7.0	51.4	28.8	12.8	100.0
1994	4.9	41.7	30.1	23.3	100.0
Change in % 1990-1994	2.1	9.6	-1.3	-10.4	
Poor population					
1990	9.8	63.6	23.6	3.0	100.0
1994	6.9	54.8	31.7	6.5	100.0
Change in % 1990-1994	2.9	8.8	-8.1	-3.6	
Ratio: poor population / total population					
1990	1.40	1.2	0.82	0.23	
1994	1.43	1.3	1.05	0.28	

	Population by employment characteristics of main income recipient				
	Formal	Informal	Unemployed	Inactive	Total
Total population					
1990	44.6	28.3	3.8	23.2	100.0
1994	47.6	28.6	2.5	21.3	100.0
Change in % 1990-1994	-3.0	-0.3	1.4	1.9	
Poor population					
1990	41.5	28.8	7.4	22.2	100.0
1994	41.9	32.0	5.6	20.5	100.0
Change in % 1990-1994	-0.4	-3.2	1.8	1.8	
Ratio: poor population / total population					
1990	0.9	1.02	1.92	0.96	
1994	0.88	1.12	2.25	0.96	

SOURCE: Authors calculations based on CASEN 1990 and 1994.

TABLE 8

MAIN MACROECONOMIC INDICATORS 1980-1996

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
GDP Growth (%)	7.7	6.7	-13.4	-3.5	6.1	2.4	5.6	6.6	7.3	9.9	3.3	7.3	11.0	6.3	4.2	8.5	7.2
Inflation (% change CPI Dec-Dec)	31.2	9.5	20.7	23.1	23.0	26.4	17.4	21.5	12.7	21.4	27.3	18.7	12.7	12.2	8.9	8.2	6.6
Unemployment (% of Labour Force)	11.7	10.4	19.6	17.1	15.2	12.8	10.5	9.3	8.1	6.2	6.0	8.2	6.7	6.5	7.8	7.3	6.3
Total Gov. Expenditure (% of GDP)*+	27.2	29.7	39.5	32.1	33.5	32.8	29.6	25.5	23.9	21.7	21.0	21.8	21.2	21.5	21.1	19.7	21.0
Fiscal Surplus (% of GDP)*+	6.1	2.8	-3.4	-2.6	-2.9	-3.8	-0.8	1.9	1.0	1.4	0.8	1.5	2.2	1.9	1.7	2.5	2.2
Public Savings (% of GDP)*+	8.8	5.2	-3.0	-2.2	-1.2	0.4	1.5	3.6	5.9	3.0	2.5	3.7	4.9	4.8	4.8	5.3	5.6
Domestic Savings (% of GDP)*	13.9	8.2	2.1	4.4	2.9	7.8	11.5	17.3	22.3	23.7	24.2	24.1	24.8	23.9	25.4	27.6	23.3
Gross Fixed Capital Form. (% of GDP)#	20.9	0.0	15.8	13.7	16.3	17.7	17.1	19.6	20.8	23.9	24.6	21.1	23.9	26.5	26.3	27.2	28.3
Current Account (% of GDP)*	7.1	14.5	9.2	5.4	10.7	9.4	7.3	5.0	0.5	1.8	2.0	0.4	2.0	4.8	1.4	-0.2	4.4
Exports + Imports (% of GDP)*	36.9	31.8	30.2	33.8	36.1	40.8	41.1	44.9	49.3	51.9	51.0	47.9	46.6	42.4	43.1	45.8	44.3
Exports (millions of US$)	4,705	3,863	3,706	3,831	3,651	3,804	4,191	5,303	7,054	8,080	8,372	8,941	10,007	9,198	11,604	16,137	15,353
Export Quantum Index (1980=100)	100.0	96.6	109.8	115.7	115.6	131.2	141.4	149.0	160.0	178.4	198.9	212.8	255.0	264.4	290.6	322.0	366.1
Imports (millions of US$)	5,469	6,513	3,643	2,845	3,288	2,920	3,099	3,994	4,844	6,502	7,037	7,353	9,237	10,181	10,879	14,655	16,500
Import Quantum Index (1980=100)	100.0	121.0	76.4	66.1	76.5	66.2	76.3	90.3	106.1	137.9	142.3	152.4	194.4	218.9	233.6	291.3	325.0
Real Exchange Rate (1980=100)	100.0	87.0	97.0	116.5	121.7	149.4	164.5	171.6	182.9	178.7	185.5	175.1	160.5	159.3	155.0	146.5	139.6
Average Productivity Growth (%) -		2.2	-4.5	-7.5	5.3	-2.2	-5.4	3.1	2.1	4.6	1.5	6.3	6.2	0.6	3.3	7.3	5.4
Growth in Real Wages (%)	8.6	9.0	0.3	-10.9	0.2	-4.5	2.0	-0.2	6.5	1.9	1.8	4.9	4.5	3.2	4.9	4.6	4.1

Sources: Central Bank of Chile, National Institute of Statistics and Ministry of Finace.

NOTES:
* % of GDP at current prices.
# % of real GDP.
+ Refers to the Central Government.

TABLE 9

GDP GROWTH 1987 - 1996

		Annual Growth Rate		Standard Deviation	
		1987-96	1990-96	1987-96	1990-96
GDP		**7.1**	**6.8**	**2.2**	**2.4**
National Disposable Income		**8.5**	**7.2**	**4.9**	**5.3**
Agriculture & Fishing	*(8.4)*	6.0	4.7	3.2	2.6
Mining	*(9.1)*	5.1	4.9	3.7	3.4
Manufacturing Industry	*(17.8)*	6.1	5.2	3.1	3.0
Electricity, Gas & Water	*(2.8)*	6.6	8.4	9.5	10.6
Construction	*(6.1)*	8.8	7.7	4.6	4.3
Commerce, Restaurants & Hotels	*(19.5)*	9.6	9.5	4.3	4.6
Transport & Communications	*(9.0)*	10.0	9.8	2.1	2.3
Financial Services	*(13.8)*	7.5	6.9	1.9	2.0
Housing Property	*(3.9)*	2.2	2.5	0.7	0.5
Personal Services	*(6.8)*	3.4	3.5	0.4	0.4
Public Administration	*(2.6)*	0.9	1.6	1.2	0.6
Primary (non mining)		6.0	4.7	3.2	2.6
Mining		5.1	4.9	3.7	3.4
Manufacturing		6.1	5.2	3.1	3.0
Services		7.4	7.4	2.4	2.7
Others (Construction + Housing P.)		5.7	5.4	2.3	2.4
Per Capita GDP		**5.4**	**5.1**	**2.2**	**2.4**
Per Capita Disposable Income		**6.7**	**5.5**	**4.8**	**5.3**

In braquets, % of GDP 1996.

SOURCE: Central Bank of Chile.

TABLE 10

EVOLUTION OF PRICES 1987 - 1996

	Annual growth rate		Standard deviation of growth	
	1987-96	1990-96	1987-96	1990-96
Consumer Prices	15.3	14.5	5.6	6.4
Tradable Prices	13.0	12.4	6.7	7.4
Non Tradable Prices	16.6	16.2	5.1	5.9
Basic food basket *	14.9	14.4	6.2	6.8
Tradables / Non Tradables	-3.1	-3.3	2.9	2.6
Real Exchange Rate	-1.6	-3.4	4.6	3.6

* The basic food basket is made up of those goods used to calculate the poverty line.
SOURCE: National Institute of Statistics, Central Bank of Chile and authors estimates.

TABLE 11

EMPLOYMENT INDICATORS

	Annual growth Rate 1987-96	1990-96
LABOUR INCOME		
Total	7.0	6.6
Mining	3.1	0.8
Manufacturing Industry	9.5	6.7
Construction	14.8	9.2
Services	7.2	8.3
REAL WAGES		
Total	3.6	4.0
Mining	1.6	1.5
Manufacturing Industry	4.0	4.3
Construction	5.0	4.3
Services	4.0	4.7
EMPLOYMENT		
Total	3.3	2.5
Agriculture (19.9%)	0.6	-0.8
Mining (2.1%)	1.5	-0.7
Manufacturing Industry (13.5%)	5.3	2.3
Construction (4.4%)	9.4	4.7
Services (60.1%)	3.1	3.4
Minimum Wage	4.9	5.4

In brackets % of total labour force 1994.

NOTE: All variations are real wage variations: nominal wages are adjusted by CPI.
SOURCE: National Institute of Statistics and Minstry of Finance.

TABLE 12

MINIMUM WAGES AND THE LABOUR MARKET

	Percentage of labour force*		
	1990	1992	1994
Poor population			
a) Formal sector workers earning minimum wage or less	11.3	12.4	16.9
b) Formal sector workers earning more than the minimum wage.	37.6	40.7	29.7
c) Informal workers in micro-businesses (less than 5 workers.)	32.6	31.6	35.0
d) Other informal workers	1.4	3.1	3.3
e) Unemployed	17.1	12.3	15.3
Total Population			
a) Formal sector workers earning minimum wage or less	5.6	5.6	8.0
b) Formal sector workers earning more than the minimum wage.	52.3	53.0	50.3
c) Informal workers in micro-businesses (less than 5 workers.)	32.1	32.6	32.0
d) Other informal workers	1.7	3.3	3.1
e) Unemployed	8.3	5.5	6.7
Agriculture			
Workers earning minimum wages or less:			
a) As a % of total employment in agriculture	19.4	17.3	36.8
b) As a % of total minimum wage earners	25.9	24.8	26.9

* Data on minimum wages is not available for 1987.
SOURCE: Authors calculations based on CASEN 1990-1994.

TABLE 13

WORKERS EARNING MINIMUM WAGES OR LESS

Year	Quintile	As a % of employment in each quintile	As a % of total employment*
1987	1	35.0	3.7
1987	2	16.3	2.5
1987	3	9.7	1.9
1987	4	5.5	1.3
1987	5	1.1	0.3
	Country		9.7
1990	1	43.1	4.4
1990	2	22.4	3.2
1990	3	14.6	2.8
1990	4	7.0	1.7
1990	5	2.7	0.8
	Country		*13.0*
1992	1	38.5	3.3
1992	2	20.8	2.9
1992	3	14.1	2.6
1992	4	7.5	1.9
1992	5	2.5	0.8
	Country		*11.6*
1994	1	63.9	4.6
1994	2	35.2	4.3
1994	3	26.8	4.6
1994	4	15.8	3.9
1994	5	6.4	2.5
	Country		*19.9*

SOURCE: Authors calculations based on CASEN 1987-1994.
* Includes employment in the formal and informal sectors.

TABLE 14

GOVERNMENT SOCIAL EXPENDITURE

	% of GDP		% of total govt. expenditure		Real growth
	1987-1990	1991-1996	1987-1990	1991-1996	1987-1996
Health	2.1	2.3	10.0	11.8	8.9
Housing	1.1	1.1	5.1	5.8	9.1
Social Security	6.4	5.8	31.1	29.4	4.7
Education	2.8	2.8	13.3	14.2	6.8
Employment Programs	0.2	0.0	0.8	0.1	-23.8
Other expenditures	1.2	1.2	5.6	5.0	5.1
Total Social Expenditure	13.7	13.3	65.9	66.3	5.9

SOURCE: Ministry of Finance, Chile.

TABLE 15

SECONDARY DISTRIBUTION OF INCOME

(% of total income 1994)

Type of Income	Quintile of monetary household income					Ratio
	1	2	3	4	5	5/1
I. Autonomous Income (Primary)	4.3	8.2	12.0	18.3	57.3	13.3
II. Monetary Subsidies	33.4	27.8	19.6	13.1	6.1	0.2
III.Total Monetary Income (I+II)	4.5	8.3	12.1	18.2	56.9	12.6
IV. Social Programs	39.1	28.3	20.0	10.4	2.2	0.1
Health	49.3	33.4	23.5	4.1	-10.3	-0.2
Education	34.8	26.2	18.5	13.1	7.5	0.2
V. Total Income (III+IV) (Secondary)	6.3	9.4	12.5	17.8	54.0	8.6
Total Income 1990	5.9	9.8	13.2	18.6	52.5	8.9
Total Income 1992	6.4	9.9	13.2	18.3	52.1	8.1
Total Income 1994	6.3	9.4	12.5	17.8	54.0	8.6

SOURCE: Cowan and De Gregorio (1996), based on MIDEPLAN data and information from the Ministry of Finance.
* Focalization of social programs is assumed constant between 1992 and 1994.

TABLE 16

QUALITY OF LIFE INDICATORS

	GOVT. SOCIAL EXPENDITURE		COVERAGE PRIMARY EDUCATION	ILITERACY	INFANT MORTALITY	LIFE EXPECT.*	MEDICAL COVERAGE OF BIRTHS	DRINKING WATER COVERAGE		SEWAGE
	% of GDP	% social exp.	% of age group	% population	x 1000	years	% total births	% Urban Pop.	% Rural Pop	
	1	2	3	4	5	6	6	7	8	9
1940			60.6	27.1	192.8					
1945	4.4	28.1	59.7		164.5					
1950			66	19.8	136.2					
1955	6	31.7	71.7		116.5		57.8			
1960	8.6	39.6	80.2	16.4	120.3		66.9			
1965	10	45.2	93.2		97.3	58.05	74.3	53.5	12.2	25.4
1970	10.5	42.5	96.5	11	82.2	60.64	81.1	66.5	34.2	31.1
1975	10.3	36	105.3	10	57.6	63.57	87.4	77.4	34.8	43.5
1980	10.3	37.1	103.5	9.2	33	67.19	91.4	91.4	44.2	67.4
1985	15.1	57		6.5	19.5	70.98	97.4	95.2	69.3	75.1
1990	12.8	67.6		5.4	16	71.48				
1994	13.5	67.1	93.29	4.8	12	72				

* Five year period finished in respective year.

SOURCES:

1+2 1920-87: Arellano (1985) Politicas Sociales y Desarrollo, Chile 1924-1984, CIEPLAN, Santiago.
1990 - 97 , Ministry of Finance.

3 1935-1980: PIEE "Las transformaciones educacionales bajo el regimen militar".
Ministerio of Education, Year Book of Education 1995.

4 Arellano (1985) op cit
Central Bank of Chile, Indicadores Economicos y Sociales 1960-88, and Boletín Mensual, Marzo 1997.
Ministerio of Education, Year Book of Education 1995.

5 Ministry of Health, Biodemografic Indicators, 1989.
INE, Anuario de Demografía 1995.

6 Central Bank of Chile, Indicadores Economicos y Sociales 1960-88, and INE, Compendio estadíatico 1993, 1995.

TABLE 17

POVERTY AND GDP GROWTH

	1987 thousand	%	1990 thousand	%	1992 thousand	%	1994 thousand	%
I. POVERTY								
Extreme poverty (Indigence)	2167.0	17.4%	1689.9	12.9%	1191.9	8.8%	1119.5	8.0%
Non indigent poor	3449.8	27.7%	3366.7	25.7%	3223.5	23.8%	2854.8	20.4%
Total poor	5616.8	45.1%	5056.6	38.6%	4415.3	32.6%	3974.3	28.4%
Total population	12454.0	100.0%	13100.0	100.0%	13544.0	100.0%	13994.0	100.0%
			1987-90		**1990-92**		**1992-94**	
II. PERCENTAGE CHANGES								
Extreme poor (a)			-25.9%		-31.8%		-9.1%	
Total poor (b)			-14.4%		-15.5%		-12.9%	
Per cápita GDP (c)			15.6%		15.2%		7.2%	
III. EFFICIENCY OF GROWTH								
Extreme poor (a)/(c)			-1.7		-2.1		-1.3	
Total poor (b)/(c)			-0.9		-1.0		-1.8	

SOURCE:Authors calculations based on MIDEPLAN and Cowan and De Gregorio (1996).

TABLE 18

POVERTY DECOMPOSITION

	Poverty Index FGT(0)			Contribution to Poverty (%)		Contibution to Change in Poverty	
	1987	1994	Change in % 1987-1994	1987	1994	*Pop. Share in 1987*	% of FGT(0) change
By eucational level of household head							
0 years of education	62.8	40.4	22.4	9.8	18.7	7.0	9.4
Primary	55.5	37.2	18.3	63.6	55.8	51.4	56.4
Secondary	36.7	29.8	7.0	23.6	22.6	28.8	12.0
Post-secondary	10.3	7.9	2.4	3.0	2.8	12.8	1.8
Total	45.1	28.4	16.7	100.0	100.0	100.0	79.6
By sector of household main income source							
Primary	48.6	34.9	13.8	24.6	28.9	22.7	18.7
Mining	38.7	25.1	13.7	2.0	2.2	2.7	2.2
Industry	47.6	28.8	18.8	15.7	12.7	14.5	16.3
Services	37.2	21.7	15.5	35.2	32.1	42.5	39.4
Construction	57.4	34.5	22.9	22.4	24.0	17.6	24.1
Total	45.1	28.4	16.7	100.0	100.0	100.0	100.8
	1990*	1994	Change in % 1990-1994	1990	1994	*Pop. Share in 1987*	% of FGT(0) change
By employment situation of household head							
Formal	35.8	24.9	10.8	41.5	41.9	44.6	47.4
Informal	39.1	31.6	7.4	28.8	32.0	28.3	20.6
Unemployed	73.8	63.7	10.0	7.4	5.6	3.8	3.8
Inactive	36.8	27.1	9.6	22.2	20.5	23.2	21.9
Total	38.6	28.4	10.2	100.0	100.0	100.0	93.7

* Data on employment situation are unavailable for 1987.
SOURCE: Authors calculations, based on CASEN 1987, 1990 and 1994.

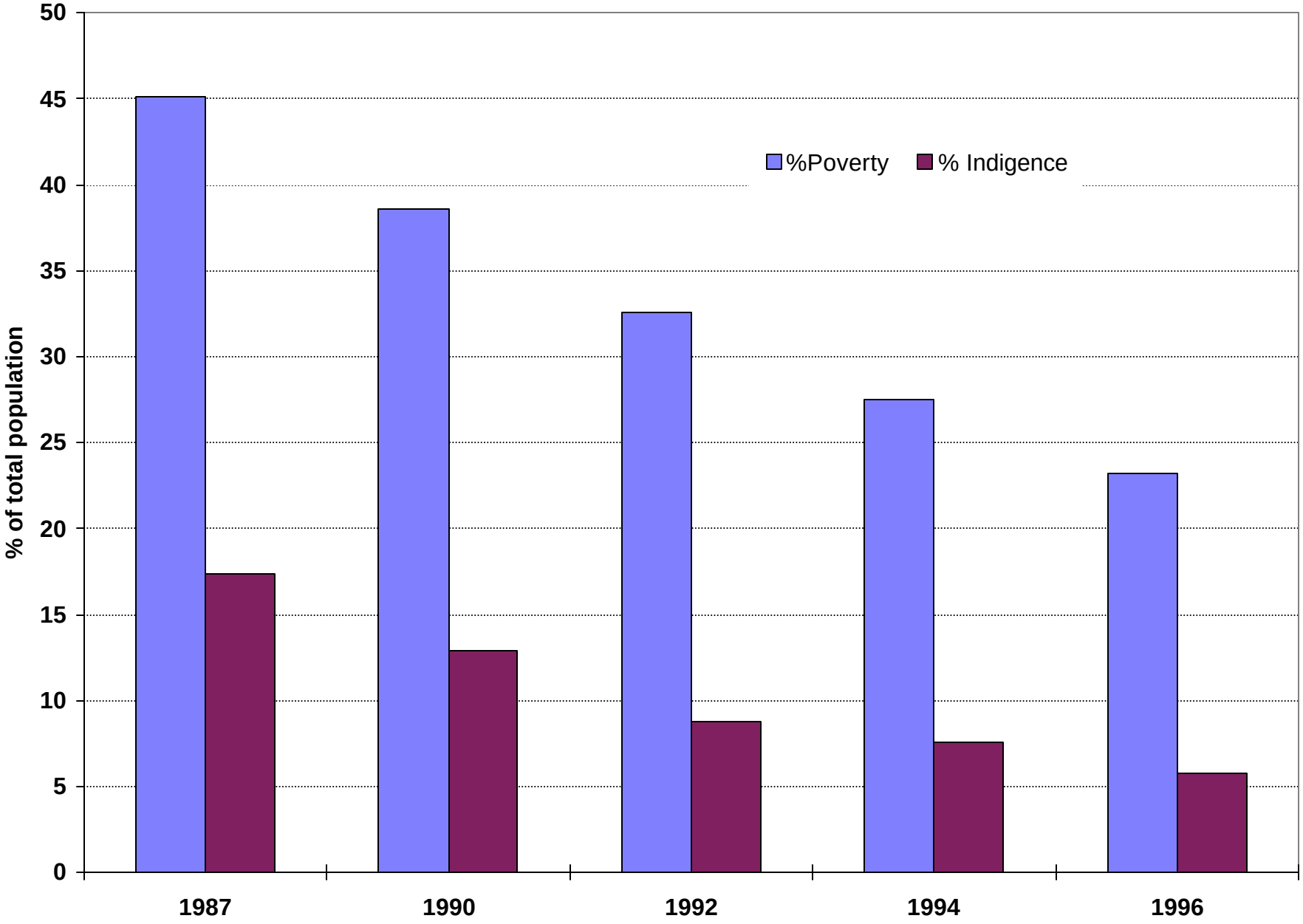
TABLE 19

DECOMPOSITION OF PER CAPITA LABOUR INCOME GROWTH 1990-1994

	Total		Formal		Informal	
	% change	% of per cap income change	% change	% of per cap income change	% change	% of per cap income change
National						
Income per worker	20.2	66.3	24.2	75.4	11.6	47.0
Employment per capita	9.8	33.7	7.4	24.6	13.2	53.0
Employment	*1.9*	*6.9*	*0.9*	*3.1*	*3.7*	*15.6*
Participation rate	*6.7*	*23.5*	*5.4*	*18.2*	*8.2*	*33.8*
Size of household	*4.4*	*15.6*	*4.3*	*19.6*	*4.9*	*22.1*
Adults per household	*-3.4*	*-12.4*	*-3.2*	*-11.4*	*-3.9*	*-17.0*
Income per capita	31.9		33.4		26.3	
Poor						
Income per worker	8.6	32.9	9.7	50.5	8.2	27.8
Employment per capita	14.4	62.1	9.5	49.5	22.7	72.2
Employment	*5.4*	*24.3*	*2.8*	*15.1*	*10.0*	33.6
Participation rate	*6.7*	*29.8*	*6.0*	*31.4*	*8.3*	*28.2*
Size of household	*4.2*	*19.0*	*3.7*	*16.6*	*4.4*	*19.9*
Adults per household	*-2.3*	*-11.0*	*-3.0*	*-16.6*	*-1.4*	*-4.9*
Income per capita	24.2		20.2		32.8	

SOURCE: Authors calculations based on CASEN 1990 and 1994.

Figure 1: POVERTY

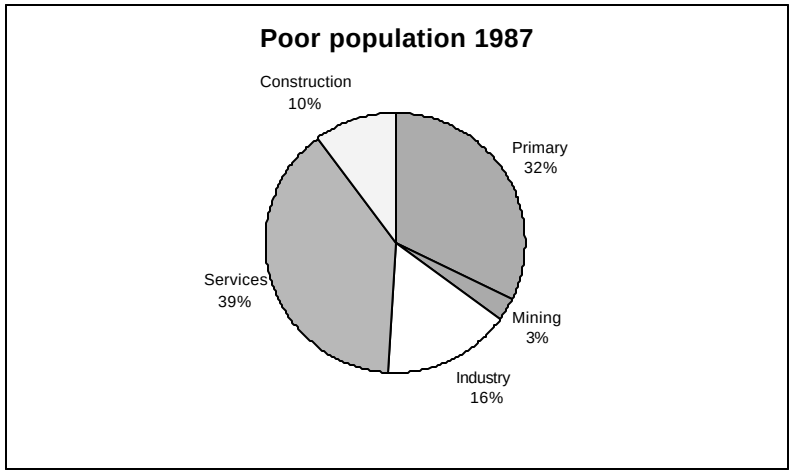


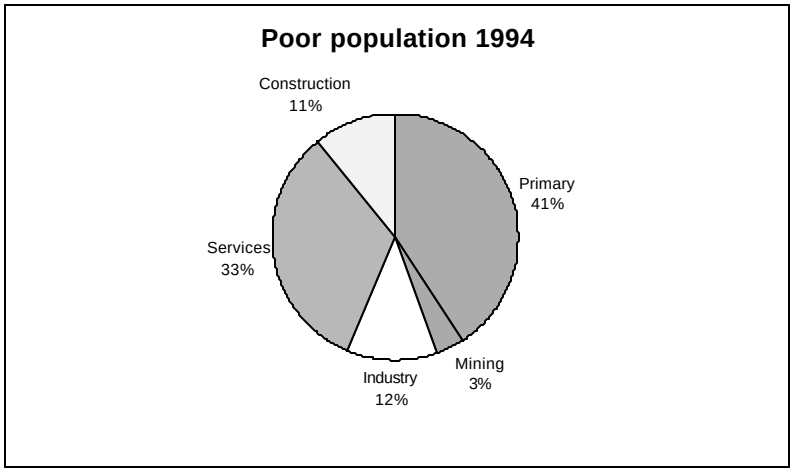
SOURCE: MIDEPLAN, CASEN surveys 1987 to 1996.
NOTE: The data in this figure was published in 1997 with the CASEN 1996 survey and does not coincide with that presented throughout the paper, due to variations in national account statistics and urban/rural definitions.

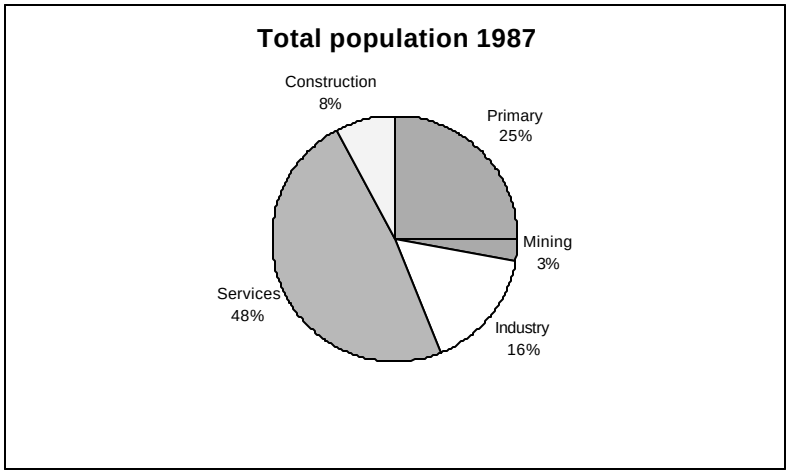
Figure 2

SECTORIAL COMPOSITION OF EMPLOYMENT

Economic sector of main income recipient of each household 1987 vs 1994







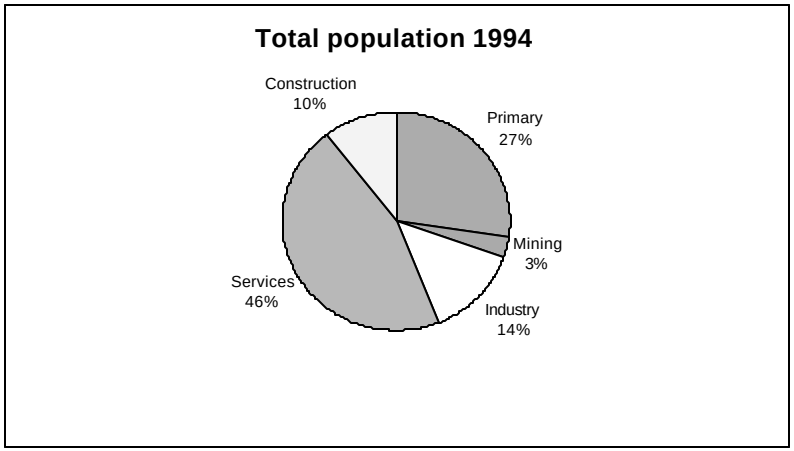


Figure 3: INFLATION

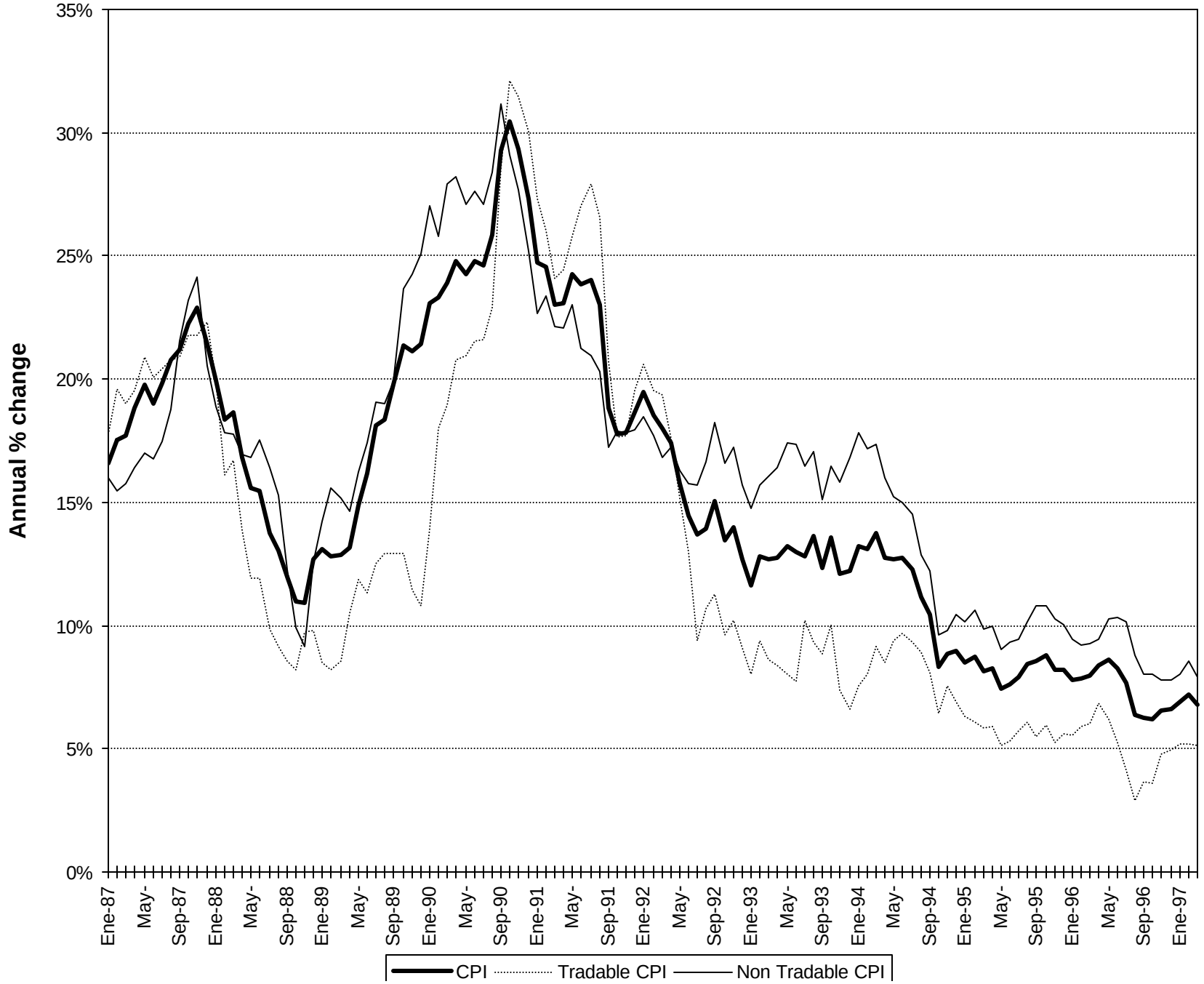
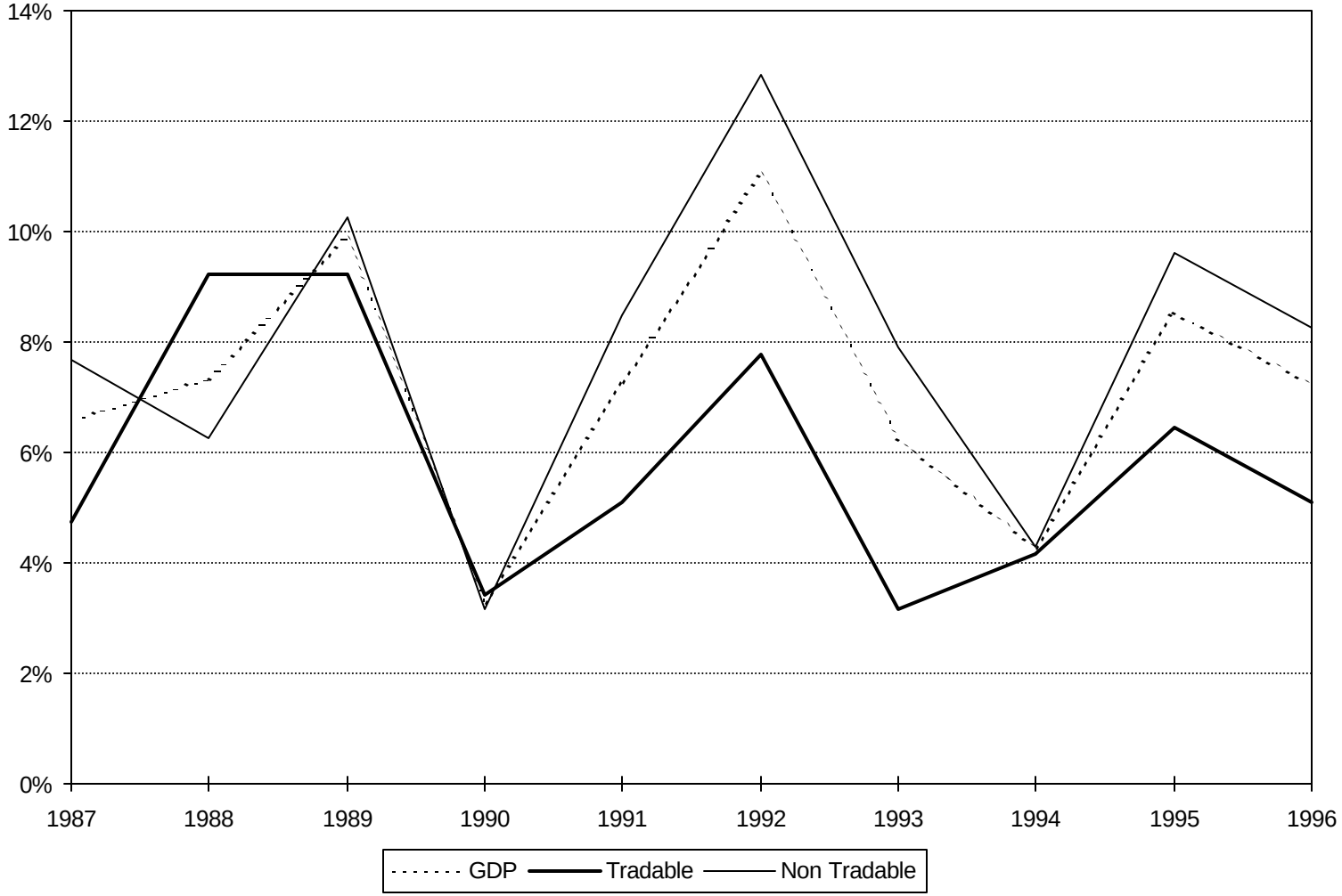
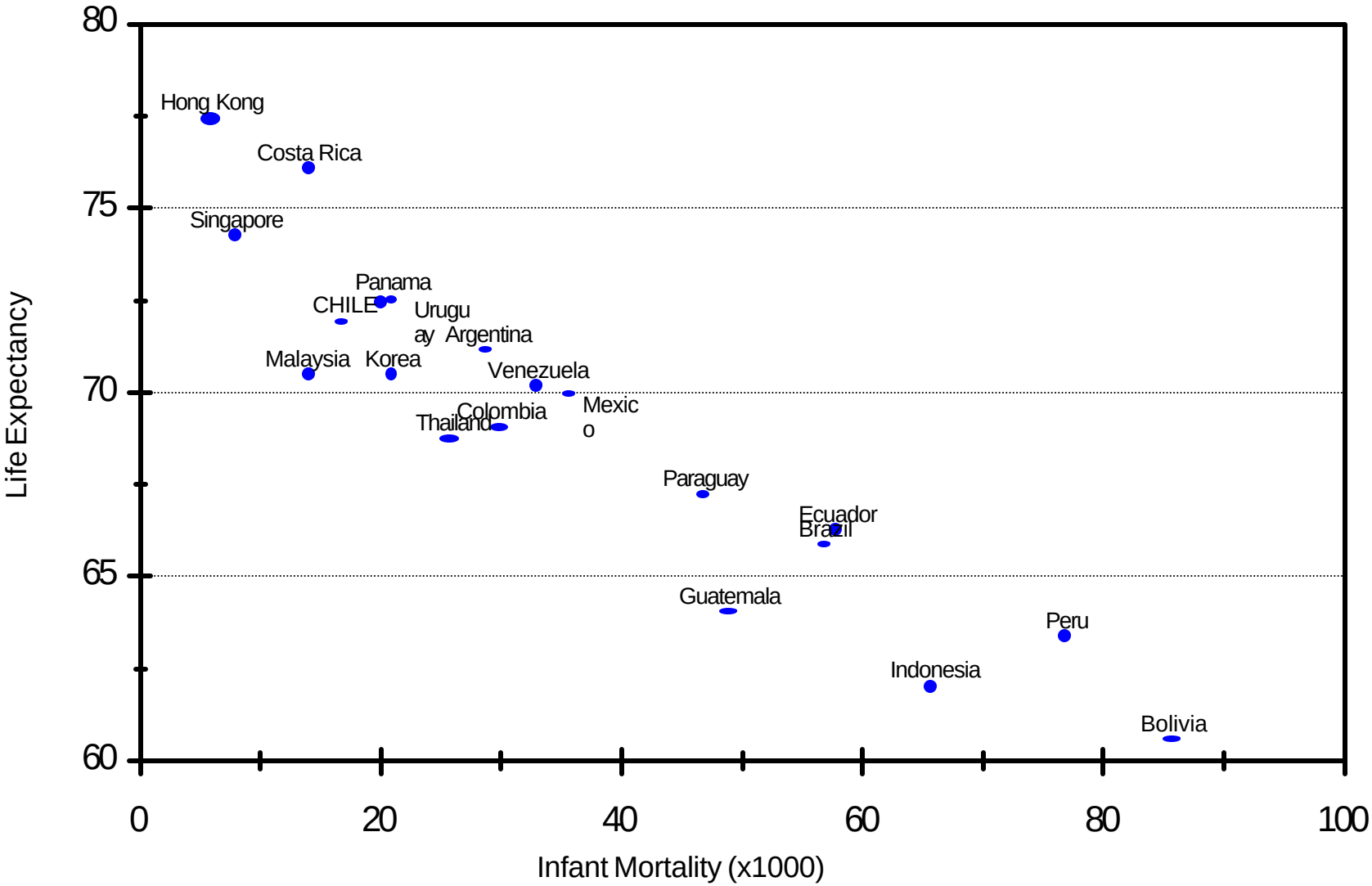


Figure 4: GDP GROWTH 1987-96



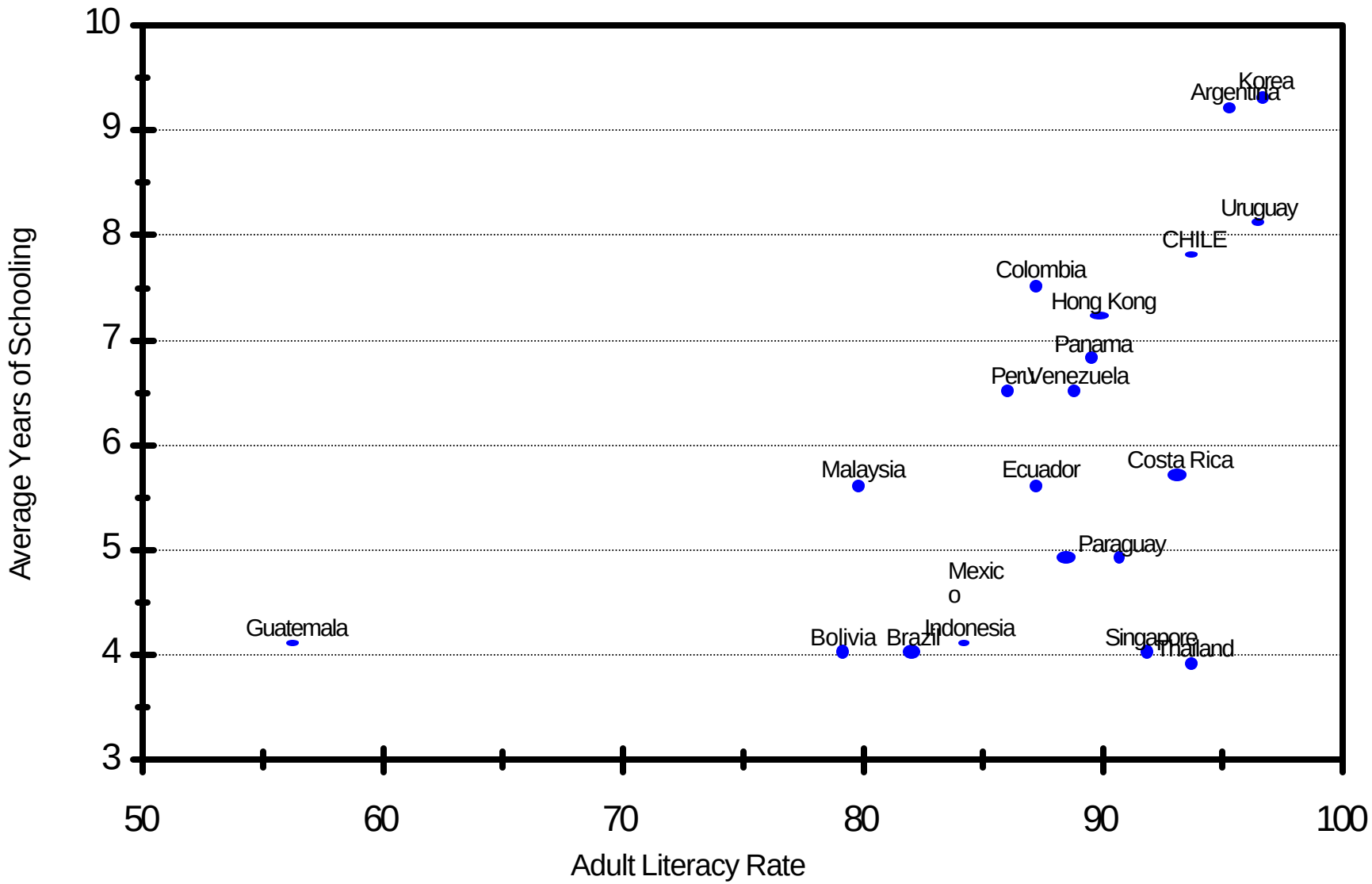
SOURCE:Central Bank of Chile.

Figure 5: HEALTH INDICATORS



Notes: Data for 1992. The graph shows data for Latin America and countries of South East Asia.
SOURCE: UNDP, Human Development Report, 1994.

Figure 6: EDUCATION INDICATORS



Notes: Data for 1992. The graph shows data for Latin America and countries of South East Asia.
SOURCE: UNDP, Human Development Report, 1994.