

ECONOMIC GROWTH MAKES THE DIFFERENCE WHEN IT COMES TO UPROOTING POVERTY

- Between 1990 and 2013, and according to the historical methodology, economic growth accounts for 67% of the reduction of poverty and 25% is a result of the distributional impact.
- Between 2006 and 2013, and based on the new methodology, economic growth accounts for 77% of the reduction of poverty and 13% is a result of the distributional impact.
- Economic growth does make the difference: with an economic growth of 1% annual, it is possible to estimate a poverty rate between 11.8% and 13% for 2020. Instead, with a 5% annual average growth, people under poverty conditions would significantly decrease with a resulting poverty rate between 3.7% and 8.6%. This fact represents a difference between one million four hundred twenty one thousand and eight hundred thirty five thousand people.

In the nineties, Chile was characterized by its high and persistent growth rates, focalized social policies and decrease of the poverty rate. However, since the middle of 2013, the economic projections have shown serious deterioration, together with a possible stagnation in uprooting povertyⁱ. At times when the focus of the social policy has been transferred towards the redistribution of resources, with reforms that neglect our economy's growth as a whole, it is convenient to revise how this could affect the reduction of poverty.

Thus, the results of a studyⁱⁱ are presented below, which estimate the possible impact of economic growth on reducing poverty from 1990 to date, and also forecasts the poverty rate by 2020 under different scenarios of future growth. This study is an evidence in favor of not neglecting our economy if the goal is uprooting poverty.

METHODOLOGY

Gaurav Datt and Martin Ravallion (1992) developed a methodology that breaks down the changes in povertyⁱⁱⁱ into three components: the effect of economic growth, redistribution and a residual term^{iv}. This methodology considers the economic growth effect as how much the poverty rate decreases as a result of improvements in the population's income by keeping the income distribution constant. Meanwhile, it defines the distributional effects as how much the poverty rate is reduced as a consequence of changing the population's income distribution (dispersion), considering a specific income level. In this manner, it is possible to identify the relative importance of each component in the variation of poverty during the last years.

RESULTS

Based on data from the CASEN national household surveys of the 1990-2013 period, we calculated the breakdown of the evolution of poverty. Therefore, we used the household's total incomes and created subgroups by gender and place of residence.

As in Larrañaga (1994)^v, the Lorenz curve was estimated, which shows the accumulated percentage of the population's income, ordered from the lowest income household to the highest income household. Based on this exercise, we can determine what proportion of the poverty change is explained by changes in the average income and what proportion is due to the dispersion of the income distribution.

Historical Methodology for Poverty Measurement

Using the historical methodology for measuring the poverty rate, between 1990 and 2013, it was reduced by 26.9 percentage points, from 38.6% to 11.7%. From these, 17.9 percentage points are explained by the effect of growth while 6.7, by the distributional effect. As a consequence of this exercise, we may conclude that during the 1990-2013 period, the growth effect accounts for 67% of the poverty reduction and only 25% is due to the distributional effect (Table 1).

THE EFFECT OF GROWTH ACCOUNTS FOR 67% OF POVERTY REDUCTION IN THE 1990-2013 PERIOD

Table 1: Breakdown of poverty reduction with the historical methodology, 1990- 2013

	Poverty Rate Variation	Breakdown of the Poverty Rate Variation
Total	-26.9%	100.0%
Growth Effect	-17.9%	66.5%
Distributional Effect	-6.7%	24.8%
Residual	-2.4%	8.7%

Source: LyD based on CASEN surveys.

New Methodology for Poverty Measurement

In the case of the new methodology^{vi}, we can only analyze the period comprised between 2006 and 2013, since only this period is available in the official databases that are needed for the calculation.

Now, when using the new methodology, poverty decreases around 14.7 percentage points in only 7 years, from 29.1% to 14.4%. From this, 77% is explained by the growth effect (equivalent to 11.32 percentage points); and although it does not correspond to the period of time previously analyzed, it represents a still greater significance when compared to the historical methodology.

On the other hand, the distributional effect contributed with 13% of this reduction (which corresponds to 1.84 percentage points), which is lower than the growth effect. Finally, the residual accounts for 10% of the poverty rate drop (Table 2).

77% OF POVERTY REDUCTION BETWEEN 2006 AND 2013 IS EXPLAINED BY GROWTH

Table 2: Breakdown of poverty rate reduction with the new methodology, 2006- 2013

	Poverty Rate Variation	Breakdown of the Poverty Rate Variation
Total	-14.7%	100.0%
Growth Effect	-11.3%	77.0%
Distribution Effect	-1.8%	12.5%
Residual	-1.5%	10.5%

Source: LyD based on CASEN surveys.

Estimate of the Reduction of Poverty

Based on the new methodology, we are able to estimate how much poverty would decrease under different scenarios of economic growth. Therefore, we calculated the growth elasticity of poverty (which allows measuring how much poverty changes with each additional point of economic growth), and searched for the poverty rate for 2020, assuming that the distribution of income will remain constant. Estimates on the growth elasticity of poverty are shown in Table 3.

AN ELASTICITY OF -3.56 MEANS THAT 1% OF ADDITIONAL GROWTH IMPLIES A 3.56 PERCENTAGE REDUCTION OF THE POVERTY RATE

Table 3: Growth Elasticity of Poverty, 2006 – 2013

	2006	2009	2011	2013
Men	-1.38	-2.02	-2.50	-4.10
Women	-1.51	-1.39	-1.86	-2.66
Total	-1.42	-1.81	-2.25	-3.56

Source: LyD based on CASEN surveys.

Considering an optimistic scenario (with the elasticity of 2013) and a more conservative one (with the elasticity of 2006), we estimated the annual poverty rate from 2013 to 2020, under different scenarios of economic growth (1%, 2%, 3%, 4% and 5%). This is illustrated in Table 4, for each of the already mentioned scenarios (pessimistic-optimistic). A last column is also included with the poverty rate expected for each year, using the economic growth forecasts of the International Monetary Fund (IMF)^{vii}, which are available only until 2016.

THE POVERTY RATE DEPENDS ON HOW MUCH WE GROW

Table 4: Poverty forecast by 2020

Year	1%	2%	3%	4%	5%	Real
2013	14.40%	14.40%	14.40%	14.40%	14.40%	14.40%
2014	13.89% - 14.2%	13.38% - 13.99%	12.86% - 13.79%	12.35% - 13.58%	11.84% - 13.38%	13.43% - 14.01%
2015	13.39% - 14%	12.42% - 13.6%	11.49% - 13.2%	10.6% - 12.82%	9.73% - 12.43%	12.33% - 13.56%
2016	12.92% - 13.8%	11.54% - 13.21%	10.27% - 12.64%	9.09% - 12.09%	8% - 11.55%	11.23% - 13.08%
2017	12.46% - 13.6%	10.72% - 12.84%	9.17% - 12.11%	7.8% - 11.41%	6.58% - 10.74%	...
2018	12.02% - 13.41%	9.96% - 12.47%	8.19% - 11.59%	6.69% - 10.76%	5.41% - 9.98%	...
2019	11.59% - 13.22%	9.25% - 12.12%	7.32% - 11.1%	5.74% - 10.15%	4.45% - 9.27%	...
2020	11.18% - 13.03%	8.59% - 11.78%	6.54% - 10.63%	4.92% - 9.58%	3.66% - 8.61%	...

Source: LyD based on CASEN surveys.

Based on this exercise, it is possible to conclude that there is a close relationship between economic growth and poverty reduction. An annual growth rate around 5% would allow us to have a much lower poverty rate by 2020 than what we could achieve when growing at 1%. Considering the last estimate of the National Statistics Institute (INE, in Spanish), which forecasts 18,896,684 people by 2020, in the first scenario (1% annual growth) the poverty rate for 2020 could range between 11.18% and 13.03% (2,112,649 and 2,462,238 people respectively). Under a more positive scenario (growth at 5% annual), the poverty rate for 2020 would oscillate between 3.66% and 8.61% (691,619 and 1,127,004 people in poverty conditions, respectively). We are talking about a difference between one million four hundred twenty one thousand and eight hundred thirty five thousand people.

Finally, in the nineties, the average annual variation of the Gross Domestic Product was 6.1%, while in 2014 it was barely 1.9%^{viii}. If we estimate what would happen if we keep both growth rates for 2020, it implies that with a 6.1% growth the poverty rate would range between 2.6% and 7.7% (that is, between 491,313 and 1,455,045 people). Meanwhile, with a rate of 1.9%, the poverty rate would range between 8.8% and 11.9% (between 1,662,908 and 2,248,705 people). A difference ranging from 963 to 586 thousand people between both scenarios.

CONCLUSION

The present study evidences how economic growth, expressed as higher incomes among the population, is the main tool for people to uproot poverty. Although the redistribution effect has partially helped to reduce the poverty rate in the last years, its impact is rather limited in relation to the contribution of economic growth in this sense. Furthermore, when we talk about redistribution, it is not clear that it is independent from growth, and it is possible that greater

growth can trigger better incomes for the most vulnerable population and thereby reduce the dispersion in the distribution of the population.

It should be noted that evidence shows that the poverty rate tends to reduce more in periods with greater growth. Between 1990 and 2000, annual growth was 6.6% and the variation of the annualized poverty rate was 6.3% (dropping from 38.6% to 20.2% in that period); while between 2000 and 2013, the annualized growth was 4.4% and the variation of the annualized poverty rate was 4.1% (from 20.2% to 11.7% in those years).

The results of this study show that, based on the historical methodology for measuring poverty, between 1990 and 2013 economic growth accounts for 67% of poverty reduction and 25% is explained by the distributional impact. Meanwhile, with the new methodology for measuring poverty, between 2006 and 2013 economic growth accounts for 77% of poverty reduction and 13% of this decrease is due to the distributional impact.

Therefore, how much we grow is a relevant matter. If the objective is uprooting poverty, we find that with an economic growth of 1% annual, the poverty rate would go from the current 14.4% (following the new methodology that officially measures poverty) to a rate between 11.8% and 13% by 2020. Instead, if the annual average growth were 5%, the poverty rate would be in the range of 3.7% and 8.6%. In other words, the consequence of achieving four additional points of annual growth is reducing between 1,421,030 and 835,234 people in poverty conditions by 2020.

Considering the results of the present study, we estimate that Chile should get back on the track to strengthen economic growth in order to generate more employment and better incomes. This is the only way to make progress towards the final uprooting of poverty and improving the quality of life of lower income families.

ⁱ The employment survey of the Universidad de Chile evidences that the reduction of poverty has stagnated. LyD (2015). *“Se estancó la reducción de la pobreza”*. Public Issues N° 1235.

ⁱⁱ Henocho and Larraín (2015). *“El rol del crecimiento económico en la reducción de la pobreza”*. Social Report Series N° 154. Libertad y Desarrollo. December 2015.

ⁱⁱⁱ It determines poverty as the population under a certain threshold known as poverty line.

^{iv} The residual is the difference between the variation of poverty with estimate of the effect of growth and inequality.

^v Larrañaga, O. (1994). *“Pobreza, crecimiento y desigualdad”*: Chile 1987-92.

^{vi} In a general way, the new methodology uses data from the *VII Family Budget Survey* (EPF, in Spanish) carried out by the INE (National Statistics Institute) between 2011 and 2012, it does not adjust by National Accounts, it eliminates the urban and rural distinction, and it incorporates economies of scale in the household.

^{vii} IMF (October 2015). The International Monetary Fund estimates an economic growth rate of 2.3% for 2015 and 2.5% for 2016, while it establishes a growth of 1.9% for 2014.



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^{viii} According to the Banco Central.