LESS INEQUALITY IN CHILE:
THE EFFECT OF FOCALIZED SOCIAL POLICIES

- Social policies are a relevant part of the family income and they are focused on the lower income population.

- When incorporating both monetary subsidies and benefits on goods and services to the social policy, inequality indicators are significantly reduced: in 2013, the Gini coefficient was 0.512 when estimates were based on autonomous income, and 0.406 when based on monetary income with non-monetary social benefits included.

- Likewise, we observe a significant drop of inequality indicators between 2006 and 2013, which is greater when considering the social policy. When including the income with non-monetary transfers, the Gini coefficient went from 0.432 to 0.406 in those years.

Social policies are more than just receiving monetary subsidies from the State: it means free healthcare, school subsidy, social housing, no-cost food assistance and books, among other subsidies and benefits. When the purpose is to establish differences in the quality of life among people, a more global view on the State's social policy has to be considered. It is to expect that inequality indicators will be significantly reduced when incorporating these non-monetary transfers, since the benefits allocated to the lower income population are considerable.

Although only the autonomous income and monetary subsidies are money available for the families, we consider that social policies delivered in goods and services should also be taken into account as part of the family resources, because these benefits improve the quality of life; if they did not exist, families would have a considerably reduced family income in order to achieve the same level of social welfare.

Using the methodology of the Ministry of Social Development (MDS, 2010)[i], we assigned a monetary value to State health and education benefits. Therefore, we identified households that receive these benefits in the CASEN Survey, then we assigned the total amount of the benefit, which is indicated in the Budget Law of the corresponding year. From here we can calculate the total income per household, which includes autonomous income, monetary subsidies, imputed rent and valorized non-monetary transfers. Regarding the housing policy, imputed rent is considered for home owners, which allows reflecting the income they would perceive if they rented their house.

The new methodology of the MDS seeks to better reflect the population's social indicators. The main difference between the new and the traditional methodology is that the new one no longer adjusts by National Accounts. Therefore, a lower autonomous income and higher imputed rent are to be expected.[ii][iii]

CHANGES IN THE INCOME COMPOSITION

Based on the above calculations, it is possible to conclude that the level of social welfare considered for the different deciles is higher when taking into account the subsidies on education, health and imputed rent. Table 1 shows the household income composition by income deciles, when non- monetary transfers and imputed rent are added to the monetary income.

TOTAL INCOME OF THE FIRST DECILE IS CLP$465,522
Table 1: Average amount of household income with new methodology, by autonomous income decile per capita 2013 (CLP$ of May 2015)

|	i	ii	iii	iv	v	vi	vii	viii	ix	x
Autonomous Income	96,611	243,916	324,210	392,705	471,007	563,535	654,341	784,510	1,084,912	2,473,128
Monetary Subsidies	68,958	43,709	33,999	27,179	23,866	19,875	15,514	9,861	6,282	4,739
Monetary Income	165,569	287,624	358,209	419,884	494,873	583,410	669,854	794,372	1,091,195	2,477,867
Imputed Rent	100,285	102,798	110,530	110,737	120,568	133,371	129,202	143,442	179,993	257,075
Total Income	265,854	390,422	468,740	530,620	615,442	716,781	799,056	937,814	1,271,188	2,734,942
Education Subsidies	112,340	125,293	114,704	95,167	80,929	67,626	57,696	43,251	33,374	14,577
Health Subsidies	87,328	71,772	64,229	51,436	44,162	45,251	23,425	8,463	-5.609	-8,515
Non-monet. Subsidies	199,668	197,064	178,933	146,603	125,091	112,877	81,121	51,714	27,766	6,062
Total Income + Non-monet. Subsidies	465,522	587,486	647,672	677,224	740,533	829,658	880,177	989,528	1,298,953	2,741,004

Source: L&D based on CASEN surveys.

For 2013, the total income for the first decile is CLP$465,522, where more than half comes from the valorization of non-monetary benefits from the State (CLP$199,668 from the non-monetary subsidy and CLP$100,285 from imputed rent).

As for the evolution, it shows that the relevance of social benefits in lower income families during 2006 and 2013 has increased. The income generated by families belonging to the poorest 10%

went from 26% in 2006 to 21% of the households' total income in 2013. The same is observed for the second decile, the income generated by the family went from 49% in 2006 to 42% in 2013.

IN 2013, 79% OF THE INCOME OF THE FIRST DECILE IS NOT GENERATED BY THE FAMILY
Chart 1: Evolution of income composition per household, using the new methodology by autonomous income decile, 2006, 2011 and 2013 (percentage %)
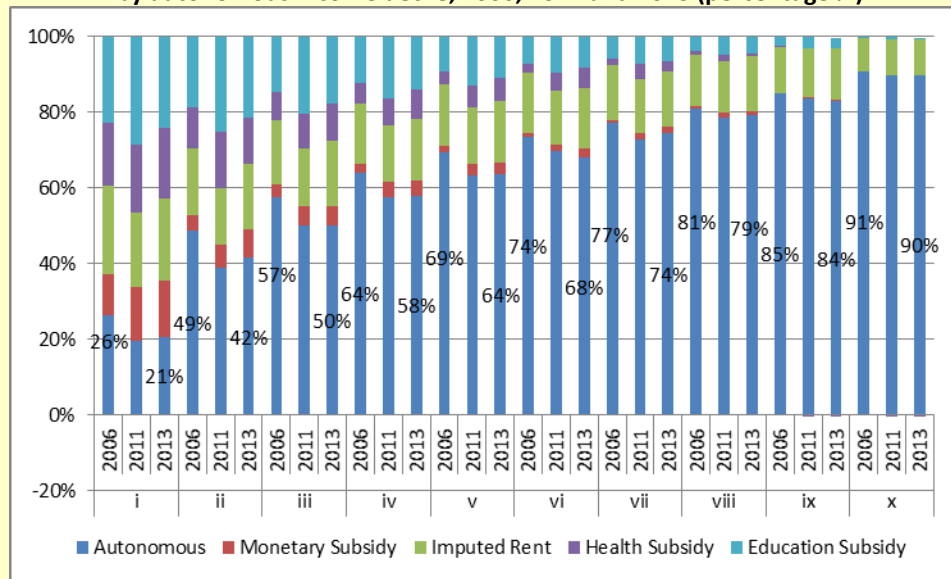
Source: L&D based on CASEN surveys.

ESTIMATES OF INEQUALITY INDICATORS

The following chart shows the redistributive effect of the social policy through monetary and non-monetary subsidies on housing (imputed rent), health and education. We observe that inequality levels in Chile are significantly reduced when these social benefits are incorporated. For example, in 2013, while the Gini index with autonomous income is 0.512, it drops to 0.406 when considering all transfers from the State. In that same year, the 10/10 index drops from 34.52 to 11.52, due to the effect of focalized policies that allow contributing more to those who need it most, improving the redistributive effect and the impact on poverty reduction in its different spheres.

IN 2013, THE GINI COEFFICIENT WITH NON-MONETARY TRANSFERS WAS 0.406
Table 2: Evolution of income distribution with new methodology

| Autonomous Income				
	2006	**2009**	**2011**	**2013**
10/10 Index	36.25	44.46	36.21	34.52
10/40 Index	3.51	3.71	3.43	3.41
20/20 Index	15.28	16.95	15.07	14.65
Gini	0.517	0.526	0.513	0.512
Monetary Income				
	2006	**2009**	**2011**	**2013**
10/10 Index	27.85	27.28	24.57	23.10
10/40 Index	3.24	3.15	3.01	2.96
20/20 Index	13.34	12.72	12.13	11.56
Gini	0.504	0.500	0.491	0.488
Total Income				
(Monetary Income + Imputed Rent)				
	2006	**2009**	**2011**	**2013**
10/10 Index	18.52	17.66	16.24	15.68
10/40 Index	2.60	2.53	2.43	2.39
20/20 Index	10.12	9.69	9.17	8.85
Gini	0.477	0.475	0.466	0.464
Total Income + Non-monetary Transfers				
	2006	**2009**	**2011**	**2013**
10/10 Index	14.00	13.70	11.46	11.52
10/40 Index	2.19	2.09	1.88	1.94
20/20 Index	8.03	7.59	6.68	6.79
Gini	0.432	0.422	0.401	0.406
+ OECD Adjustments				
	2006	**2009**	**2011**	**2013**
10/10 Index	12.36	10.36	10.40	10.39
10/40 Index	1.92	1.67	1.70	1.70
20/20 Index	7.17	6.04	6.14	6.13
Gini	0.405	0.374	0.379	0.379

Source: L&D based on CASEN surveys.

The inequality indicators of the autonomous income decrease between 2006 and 2013, especially when all transfers from the State are included. Table 2 shows the evolution of the inequality measures for different definitions of family income. In relation to the Gini coefficient, the autonomous income goes from 0.517 to 0.512 between 2006 and 2013. Then, if monetary subsidies are considered, the Gini coefficient drops from 0.504 to 0.488 between 2006 and 2013. When imputed rent is considered, the Gini coefficient drops from 0.477 to 0.464, in the same period. Later, when valorized health and education benefits are taken into account, the Gini coefficient drops from 0.432 to 0.406 between 2006 and 2013. Finally, if this income is adjusted by the OECD corrections for economies of scale[iv], the Gini coefficient goes from 0.405 to 0.379 in the same period.

Additionally, the inequality reduction is consistent with the positive evolution of the households' income and the fact that most of the social policies are allocated to the population with lowest incomes. Between 1990 and 2013, the annual growth rate of the total income was higher for the poorest 10% of lower income households. For this period, this rate was 7.6% for the first decile, 6.8% for the second decile, and 4.5% for the tenth decile (Chart 2).

THE FIRST INCOME DECILE INCREASED THEIR INCOME AT AN ANNUAL RATE OF 7.6%
Chart 2: Annual growth rate of the income with non-monetary transfers per capita with the new methodology, 2006-2013
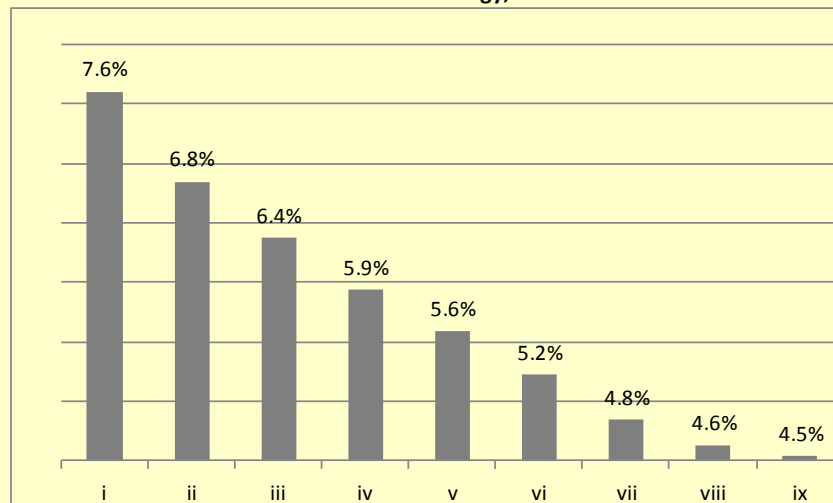
Source: L&D based on CASEN surveys.

CONCLUSION

It is important to consider the social benefits that lower income families receive in order to reflect the social welfare levels in our society more accurately.

Based on this methodology, we observe that inequality is lower when the impact of social policies is taken into account. The Gini coefficient for 2013 drops 10.6 points, going from 0.512 to 0.406, if the effect of non-monetary transfers is considered. This inequality reduction is related to the positive evolution of income and social policies focalized on the lower income population.

We can also observe that inequality has significantly decreased during the past years. Using the OECD's income with adjustments, the Gini coefficient dropped 2.6 points between 2006 and 2013, mainly explained by these transfers from the State.

Although inequality indexes decrease when including the social policies, a high level of dependence from the government is evidenced among the poorest households. According to the new methodology, in 2006 subsidies corresponded to 74% of the total income of the families belonging to the first decile. Then, in 2013, subsidies represented 79% of the total income for this group. The latter represents a new challenge for social policies: to minimize the dependence from the State and incentivize poverty uprooting by means of permanent instruments such as the creation of jobs and not only through temporary aids in the form of subsidies.

[i] MDS (2010). "*Metodología de Valorización de Subsidios Monetarios, en Educación y en Salud, el Impacto Distributivo del Gasto Social*". CASEN Survey 2009. Ministry of Social Development.

[ii] In 2013, the adjustment factor by National Accounts for autonomous income items was 1.188. The elimination of this adjustment should reduce the autonomous income. On the other hand, the adjustment factor for imputed rent was 0.402. Therefore, the elimination of this adjustment should increase the value of imputed rent.

[iii] Also, the new methodology considers the imputed rent for homes where somebody makes use and enjoyment of them, not necessarily the owners. This methodological change is also expected to increase the value of imputed rent in relation to the traditional methodology.

[iv] According to the OECD updated terms of reference, household income is divided by the square root of the number of persons in the household, in order to adjust by the economies of scale in a household. That is, the increase in the number of persons in the household is less than proportional to the increase of a household's requirements.