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NESI SURVEY: IMPROVEMENTS IN EMPLOYMENT AND REDUCTION IN INEQUALITY INDICATORS

- The NESI income survey reveals a wage increase, mainly concentrated on low income households.
- The number of employed persons per household has also increased in all income deciles. In 2010, 42.6% of the household members were employed, and in 2013, 44.3%. In the case of the first decile, in 2010 employment was just 26.5%, and in 2013, 28.2%. While in the tenth decile, 59.5% in 2010 and 61.2% in 2013.
- There is an important reduction of the unemployment rate between 2010 and 2013, which goes from 3.83 to 3.04.
- The 2013 NESI survey also reveals significant improvements in the inequality indexes, mainly explained by the above mentioned employment improvements.

FURTHER INFORMATION:

http://www.lyd.com/wp-content/files_mf/tp1123evoluciondeladesigualdadenchilebajaenelniveldetendencia16082013.pdf

http://www.lyd.com/wp-content/files_mf/tp1119discutiendoacercadelcalculodeladesigualdadenchile1907201335.pdf

The New Supplementary Survey of Income (NESI, in Spanish for *Nueva Encuesta Suplementaria de Ingreso*)[i] reveals positive results, such as wage increase, especially among the vulnerable population. Furthermore, the labor participation grew, the unemployment rate was reduced (especially among women) and thanks to the employment improvements already mentioned, inequality was reduced.

The following paragraphs summarize the main results having a favorable impact on the low income population.

1. Wage increase, especially among the low income population

The wage increase concentrates mainly on low income households. Using the average income per capita, which includes education transfers, we observe that this income goes from CLP$234,429 to CLP$290,934 between 2010 and 2013, improving by 24.1%. Growth for the first decile in the same period was 56.1% and for the second decile, 41.7%. On the other hand, for the tenth decile, growth was 7.5% in the same period (Table 1).

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WAGE INCREASE CONCENTRATES MAINLY ON LOW INCOME HOUSEHOLDS
Table 1: Average income per capita by income decile (thousand CLP$ 2013)

	ALL	i	ii	iii	iv	v	vi	vii	viii	ix	x
2010	234.4	50.6	84.1	108.2	130.9	156.2	188.3	232.0	259.9	428.2	1002.1
2011	255.4	62.8	99.4	124.2	148.6	175.3	208.8	250.5	318.3	450.0	1016.5
2012	275.1	71.3	109.2	135.0	160.5	190.1	224.3	270.2	344.9	486.0	1055.6
2013	290.9	79.0	119.2	147.3	174.4	204.5	242.4	293.0	369.4	516.6	1076.9
Variation 2010-13	24.1%	56.1%	41.7%	36.2%	33.3%	30.9%	28.7%	26.3%	24.8%	20.6%	7.5%

Source: Prepared by L&D based on the NESI survey.

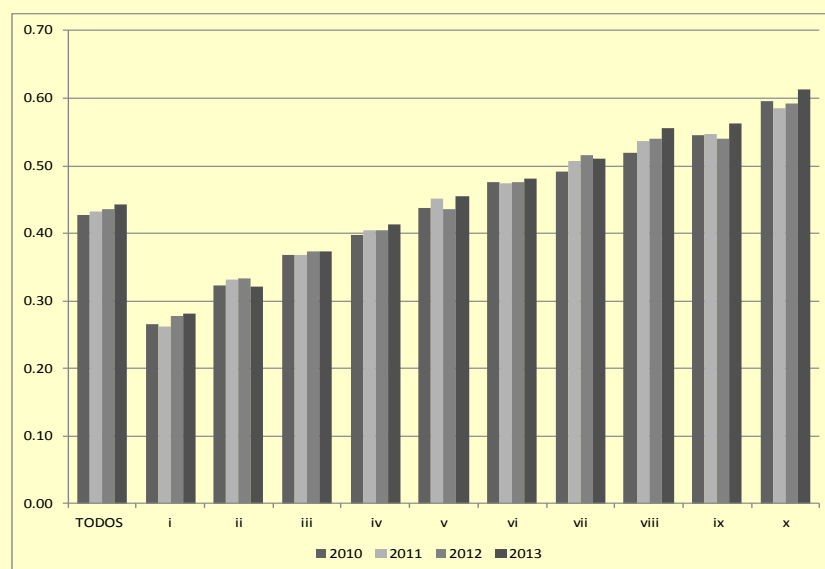## 2. Employed persons per household increase, and unemployment rate is reduced

Improving the labor participation of the most vulnerable groups continues to be a challenge. When comparing low income with high income households, there is still a concerning difference in the labor participation rate and the unemployment rate.

Employed persons per household are the percentage of the number of employed persons and the household members. One of the most relevant results of the 2013 NESI survey is how the number of employed persons per household has improved in the different income deciles. In 2010, 42.6% of the household members were employed, and in 2013, 44.3%. As we mentioned earlier, important differences are observed in all deciles in relation to employed persons per household. In the case of the first decile, in 2010 employed persons were just 26.5%; in 2013, the figure had increased to 28.2%. Meanwhile, in the tenth decile employed persons were 59.5% in 2010 and 61.2% in 2013 (Chart 1).

In turn, between 2010 and 2013 there is a significant reduction in the unemployment rates of the heads of household (Table 2). Among the whole population, this rate goes from 3.83 to 3.04. In the case of men, it goes from 3.13 to 2.65, and women go from 5.90 to 4.05 in the same period. As in the employment rate and wages, unemployment also revealed a difference between low income and high income groups, showing a faster drop in the first deciles in relation to the richest ones.

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NUMBER OF EMPLOYED PERSONS PER HOUSEHOLD IN THE DIFFERENT INCOME DECILES HAS IMPROVED
Chart 1: Evolution of the employed persons per household by income decile, 2010-2013

Source: Prepared by L&D based on the NESI survey.

Additionally, the difference between men and women regarding the unemployment rate of the heads of household is higher in low income deciles in absolute terms, which is partly due to childcare or the time women have been away from work, which complicates their incorporation to the working world. In spite of this, the unemployment rate of female heads of household of the first decile dropped sharply (more than in richer deciles) from 17.94 in 2010 to 12.23 in 2013. While the unemployment rate of male heads of household of the first decile went from 10.47 in 2010 to 7.62 in 2013 (Table 2).

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UNEMPLOYMENT RATE OF MALE HEADS OF HOUSEHOLD WENT FROM 10.47 IN 2010 TO 7.62 IN 2013.
Table 2: Evolution of the unemployment rate of heads of household by income decile, 2010-2013

		DECILE GROUP										
		ALL	i	ii	iii	iv	v	vi	vii	viii	ix	x
ALL	2010	3.83	12.71	5.88	3.58	3.42	3.06	2.75	3.13	2.45	1.46	0.54
	2011	3.62	11.76	5.16	3.98	5.05	4.24	2.09	2.36	1.22	0.78	0.46
	2012	3.28	10.71	5.00	2.54	4.45	2.55	2.25	1.89	1.53	1.56	0.82
	2013	3.04	9.02	4.31	3.29	2.98	3.34	2.66	1.89	2.15	0.75	0.75
MAN	2010	3.13	10.47	4.27	2.99	3.17	2.90	2.21	2.41	2.41	1.48	0.38
	2011	2.79	10.23	2.81	3.27	3.88	3.46	1.60	2.32	1.23	0.54	0.27
	2012	2.62	9.36	4.40	1.73	3.49	1.94	1.73	1.29	1.33	1.20	0.89
	2013	2.65	7.62	3.92	3.26	2.86	3.17	2.62	1.22	1.87	0.47	0.71
WOMAN	2010	5.90	17.94	10.39	5.30	4.03	3.51	4.40	5.61	2.57	1.41	1.13
	2011	5.87	14.81	10.82	6.03	8.39	6.21	3.25	2.47	1.20	1.50	1.20
	2012	5.02	13.42	6.54	4.36	6.55	4.38	3.58	3.68	2.08	2.52	0.55
	2013	4.05	12.23	5.14	3.35	3.25	3.81	2.76	3.57	2.99	1.47	0.91

Source: Prepared by L&D based on the NESI survey.

3. Inequality reduces

The 10/10, 20/20 and 40/10 inequality indexes show the income ratios between the household's income owned by the richest 10, 20 or 40%, and the household's income owned by the poorest 10, 20 and 10%, respectively. As we already mentioned, the NESI survey distinguishes between incomes excluding education transfers and those including them. It is to be expected that income inequality indexes that incorporate education transfers will be lower, since in general this type of transfers is allocated to the poorest households. We can observe that in 2013, when these transfers are incorporated, the average income per capita increases by CLP$16,700 and for a household belonging to the first decile, by CLP$22,100.

As Table 3 shows, all indicators present improvements in inequality, which is consistent with the income improvement and the higher unemployment reduction already observed for low income households. When analyzing the income that excludes education transfers, the 10/10 ratio goes from 22.1 to 18.9 between 2010 and 2013; the 20/20 ratio goes from 11.6 to 10.3 and the 40/10 ratio goes from 2.8 to 2.4. While in the income that includes education transfers, the 10/10 ratio goes from 19.8 to 13.6 between 2010 and 2013, the 20/20 ratio goes from 10.6 to 8.0 and the 40/10 ratio goes from 2.7 to 2.1, in the same period.

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ALL INDICATORS SHOW IMPROVEMENTS IN THE INEQUALITY LEVEL
Table 3: Evolution of the inequality indexes, 2010-2013

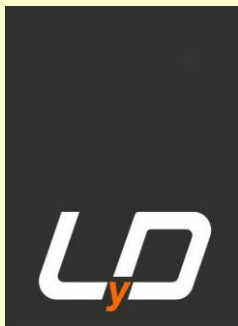|	Excludes Education Transfers Monetary & Non-Monetary				Includes Education Transfers Monetary & Non-Monetary			
	10/10	20/20	40/10	Gini	10/10	20/20	40/10	Gini
2010	22.1	11.6	2.8	0.47	19.8	10.6	2.7	0.46
2011	21.5	11.2	2.7	0.46	16.2	9.0	2.3	0.43
2012	20.1	10.8	2.6	0.45	14.8	8.5	2.2	0.42
2013	18.9	10.3	2.4	0.44	13.6	8.0	2.1	0.41

Source: Prepared by L&D based on the NESI survey.

On the other hand, if we make the exercise of assuming that each income decile is one person, whose income is the average per capita of that group, we can calculate the Gini coefficient of the respective years. In this manner, a significant improvement in inequality is observed with the Gini coefficient in the income including education transfers: 0.46 for 2010, 0.43 for 2011, 0.42 for 2012 and 0.41 for 2013. Between 2010 and 2013, the Gini coefficient tended towards a reduction of 0.05 percentage points.

CONCLUSION

One of the main results of the 2013 NESI income survey is the improvement in the employment variables affecting all the population, but especially the low income population. First, it reveals that the wage increase is concentrated on the poorest households. Second, it shows improvements in employment and a reduction of the unemployment rates, especially for women. However, if we compare low income households with high income households, there is still the challenge for more vulnerable households to increase their employment rate and reduce their unemployment rate still further.

The 2013 NESI survey also reveals significant improvements in the inequality indexes. As we mentioned above, these improvements in the inequality rates are mainly due to the wage increase and more employment for the low income population.

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[i] The NESI income survey is conducted by the National Statistics Institute (INE, in Spanish) and aims at collecting information from people's labor incomes and other household income sources. The NESI survey is

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part of a complementary module of the New National Employment Survey (*Nueva Encuesta Nacional de Empleo*). This survey has national and regional representativeness, and it is applied on a yearly basis during the quarter of October-December. It uses ordinary income, which captures net employment incomes, excluding legal deductions and taxes. Additionally, the NESI survey distinguishes between incomes that exclude monetary and non-monetary education transfers, and incomes that include them.