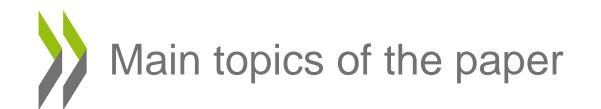
DETERMINANTS OF HOUSEHOLD POSITION IN THE WEALTH DISTRIBUTION IN CHILEAN HOUSEHOLDS

BY FRANCISCA URIBE AND FELIPE ESTEBAN MARTINEZ (CENTRAL BANK OF CHILE)

IARIW General conference Dresden, 21-27 August 2016 Discussant: Jorrit Zwijnenburg





- Analysis of the distribution of net wealth in Chile
- How does this distribution relate to the distribution of income?
- Which factors influence the household position in the wealth distribution?
- What is the specific impact of age?

Distribution of net wealth in Chile

- On the basis of Survey of Household Finances 2014.
 - Information on income, assets and debts, as well as sociodemographic characteristics (age and housing status).
 - Voluntarily, self-reported.
 - No data on mandatory pension funds.
- Statistical unit is the household.
- Classification according to wealth, age and housing status.

Distribution of net wealth in Chile

Table 2:	Distribution	of household	by net	wealth quintiles
----------	--------------	--------------	--------	------------------

Categories	% Household	% of household with negative wealth	Wealth proportion	Wealth median	Wealth IQR	
Total population	100.0	15.3	100.0	30,890	72,758	
Household wealth quintile	_e 73% of w	ealth is concen	trated wit	thin the	richest quint	ile
I	20.0	76.4	0.0	-630	2,698	
II	20.0	0.0	1.8	5,075	9,447	
III	20.0	0.0	8.4	30,923	11,038	
IV	20.0	0.0	17.0	61,2 <mark>3</mark> 9	22,463	
V	20.0	0.0	72.8	169,558	178,872	
Age of the reference person	76% of hou	seholds in first	quintile s	how ne	egative net we	eal
< 35	20.0	25.3	8.1	5,256	38,678	
35 a 44	23.5	16.6	20.3	27,332	61,710	
<mark>4</mark> 5 a 54	23.2	14.0	22.6	33,870	71,694	
55 a 64	17.2	10.3	23.5	47,548	89,376	
65 a 74	9.7	7.3	14.1	51,903	88,645	
> 74	6.4	9.2	11.3	58,727	94,543	
Housing status	Wealth	increases with	age			
Outright owner	45.4	0.3	70.8	55, <mark>395</mark>	74,488	
Owner with mortgage	16.5	6.9	22.6	50,343	79,595	

Notes: (1) IQR corresponds to the interquartile range. (2) Median and IQR are expressed in United State dollars 2014.

Source: Own calculations, based on SHF 2014.



Focus on joint distribution:

- Matrix showing how households are distributed over wealth quintiles, per income quintile.
- Looking at the percentage and medians of wealth and income per income and per wealth quintile.
- Comparing measures of inequality for income and wealth.



Table 3: Joint distribution of income and wealth across household quintiles

% of household in	% of household in quintiles of net wealth					
quintiles of income	I	II	III	IV	V	Total
Ι	24.65	21.80	26.93	16.50	10.12	100
II	24.73	19.94	23.54	22.48	9.31	100
III	24.53	24.47	22.68	18.32	9.99	100
IV	15.72	20.16	16.57	25.15	22 40	100
V	10.37	13.71	10.23	17.53	48.16	100

Source: Own calculations, based on SHF 2014.

Not a strong relationship between wealth and income ...

... except for the richest quintile

Relation between Wealth and Income

Table 4: Distribution of wealth and income by quintiles of wealth and income

	Wealth		Income	
Categories	Proportion	Median	Proportion	Median
Total population	100.0	30 ,890	100.0	1,338
Household <u>wealth</u> quintile				
I	0.0	-630	13.6	1,083
Percentages and median weal	14.9	1,254		
much across the first three inc	13.5 17.9	1,052		
Percentages and median incom much across the first three we			40.0	2,821
Household income quintile				
I	11.6	21,489	3.3	405
II	10.5	24,046	7.4	824
III	10.9	20,060	11.9	1,343
IV	20.3	42,011	19.5	2,156
	46.8	86,209	57.9	4,689

Note: Median is expressed in United State dollars 2014.

Source: Own calculations, based on SHF 2014.



Measures of distribution show that wealth has a more skewed and unequal distribution than income:

Variables	Gini Index	Coefficient of Variation	Mean/Median	P90/P50
Income	0.54	1.55	1.69	3.50
Wealth	0.74	2.24	2.37	5.49

Table 5: Inequality measures of income and wealth

Source: Own calculations, based on SHF 2014.

Patterns are similar to results for the United States and European countries.

Factors that influence position in wealth distribution

- Estimation of a generalized order model to predict the household wealth quintile.
- Control variables include:
 - Income quintile
 - Financing structure of housing when it was bought
 - Number of household members
 - Retirement of one of the household members
 - Receipt of an inheritance
 - Age
 - Marital status
 - Gender

Factors that influence position in wealth distribution

Main conclusions of the model:

- Positive effects for: income quintile, age, household size, presence of a retired person, receipt of inheritance.
- Financing structure of house purchase shows a mixed effect.
- No significant impact of marital status and gender.

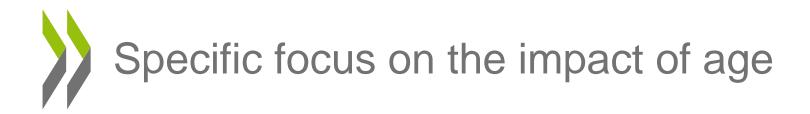
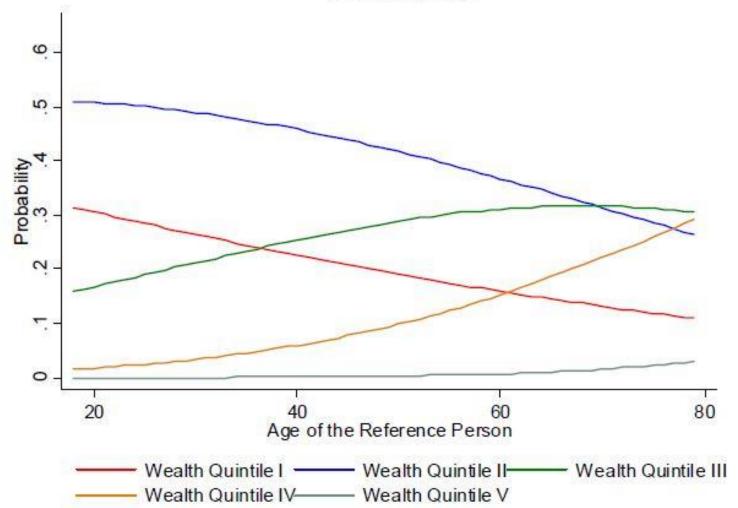
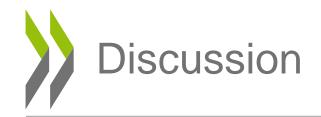
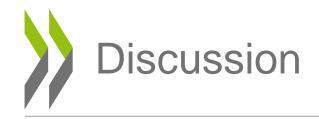


Figure 1: Estimated probability to be in a given wealth quintile as a function of age of the reference person





- Paper provides very interesting insights in the distribution of wealth in Chile (in comparison with other countries), and in factors influencing position of households in the distribution.
- It also shows the importance of analysing distributional results in a multidimensional way (combining income and wealth (and consumption)).



Some questions:

- Focus is on households: Would it be worth wile to look at results for equivalized households (adjusting for household size) as well? If so, what would be an appropriate scale?
- Results are taken from surveys: Do you have an idea of how these results compare with National Accounts totals? Do you think it would make a difference when you start from NA aligned results?
- Retirement resources are not included: Do you think that affects the presumed impact of age in the model (as an important part of wealth of elderly people may be neglected)?
- Would there be other factors that you would like to include in the model? Education, urbanisation, ...?



Thank you for your attention!