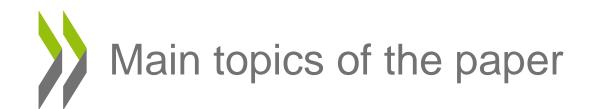
DETERMINANTS OF HOUSEHOLD POSITION IN THE WEALTH DISTRIBUTION IN CHILEAN HOUSEHOLDS

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- 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<br>negative wealth | Wealth<br>proportion | Wealth<br>median      | Wealth<br>IQR  |     |
|--------------------------------|-----------------------|--|----------------------|-----------------------|----------------|-----|
| Total population               | 100.0                 | 15.3                                   | 100.0                | 30,890                | 72,758         |     |
| Household wealth quintile      | <sub>e</sub> 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<br>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        | <b>30</b> ,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<br>17.9 | 1,052          |            |        |
| Percentages and median incom<br>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.

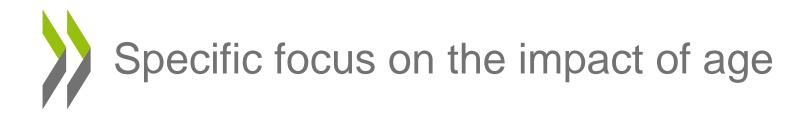
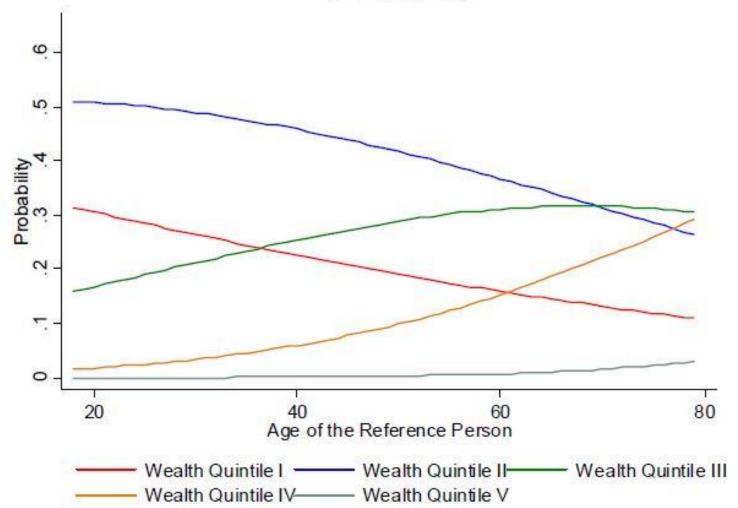
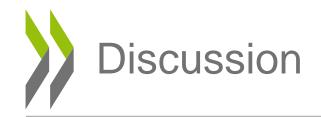
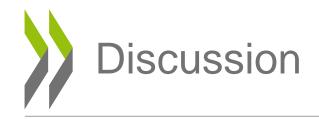


Figure 1: Estimated probability to be in a given wealth quintile as a function of age of the reference person





- 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!