Gender and Territorial Inequality of Opportunity in Chile

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Ethical justification for equality of opportunity

- Not all sources of inequality are equally objectionable (Arneson, 1989; Dworkin, 1981; Roemer, 1993, 1998)

- Inequalities that come from circumstances beyond individuals' control are deemed unfair

- Those derived from people own choices and decision are not (Barry, 1991; Fleurbaey, 1995)

Roemer (1993, 1998)

Equal opportunity policies should create a level playing field, after which individuals are left by themselves.

Circumstances: exogenous factors, such as **parental background**, status and income, **race or ethnic origin**, genetic traits, **gender**, **and place of birth**, among others

Motivation

Lower-bound estimates

Public perceptions causes of inequality

Attitudes to redistribution

This paper

- Comparative analysis of circumstance-specific inequality of opportunity in Chile between the years 2006 and 2013, using the Chilean income survey CASEN
- We provide a disaggregated analysis, in regions, gender, and cohorts of inequality of opportunity measures
- Main results:
  - Although total inequality and inequality of circumstances have decreased, this has not happened across all geographical areas
  - Women's income represents about 60 per cent of men's income nationally, and the gender gap has worsened for many sub-groups since 2006

Measuring Inequality of Opportunity (IOp)

- Decompose total inequality into an 'ethically acceptable' component (due to efforts) and 'ethically unacceptable' part resulting from unequal opportunities expressed by exogenous circumstances

Total Inequality = Inequality due to effort + Inequality due to opportunities

- As effort is private information we attempt to measure the differences in outcomes due to different circumstances holding effort constant, based on the idea that people should not have different outcomes just because they face different circumstances of origin (called ex-ante approach)

Methodology

- Non-Parametric estimation:

Chechi and Peragine (2010)

Average by type

People with parents with no formal education
People with parents with primary education
People with parents with secondary education
People with parents with higher education

Income distribution types

Σ income type $1/n_1$
Σ income type $2/n_2$
Σ income type $3/n_3$
Σ income type $4/n_4$

Counterfactual income distribution

Methodology

- Parametric estimation:

  $$\ln y = \beta c + \varepsilon$$

  Bourguignon *et. al.* (2007)

  $$y_{conterfactual} = \exp[(\hat{\beta}\, C]$$

- Opportunity Inequality: $I(y_{conterfactual})$ IOp level

  Inequality index $I(\cdot)$ applied to:

  $$OI^B = \frac{I(y_{conterfactual})}{I(y)}$$ IOp share

Data

- Chilean National Income Survey CASEN 2006 and 2013 (cross section)

- People at working age. Men and women between 25 and 60, and who are active in the labour market

- Income concepts: individual net market income, household equivalent disposable income and individual hourly earnings

Circumstances:

- Case (a)

Parents' education: highest level reached by either of the parents. 4 categories of completed education; no formal education or primary incomplete, primary, secondary, and higher education

- Case (b): (a) + Region of birth

Region of birth: place where the mother was living at the time the person was born

- Case (c): (a) + (b) + new circumstances

Family composition refers to how many of the parents the person lived with until the age of 15, if it was with both parents, without the parents or with at least one parent

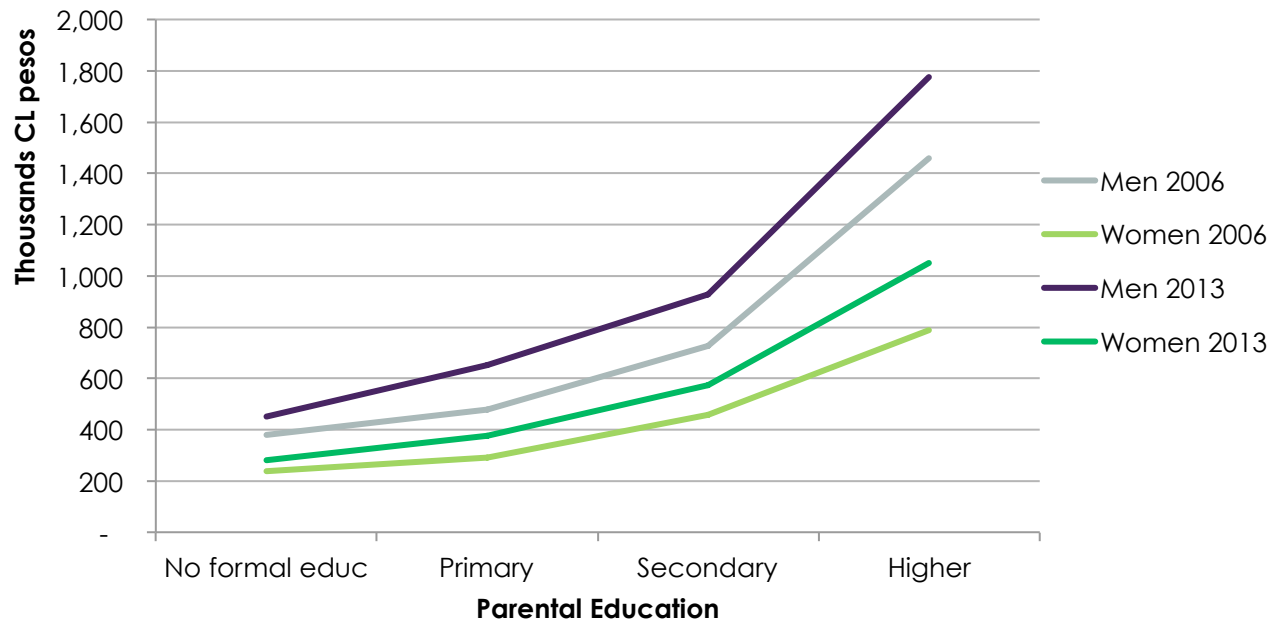**Indigenous background:** if the person defines herself as indigenous

Descriptive Statistics

Average income by level of parental education
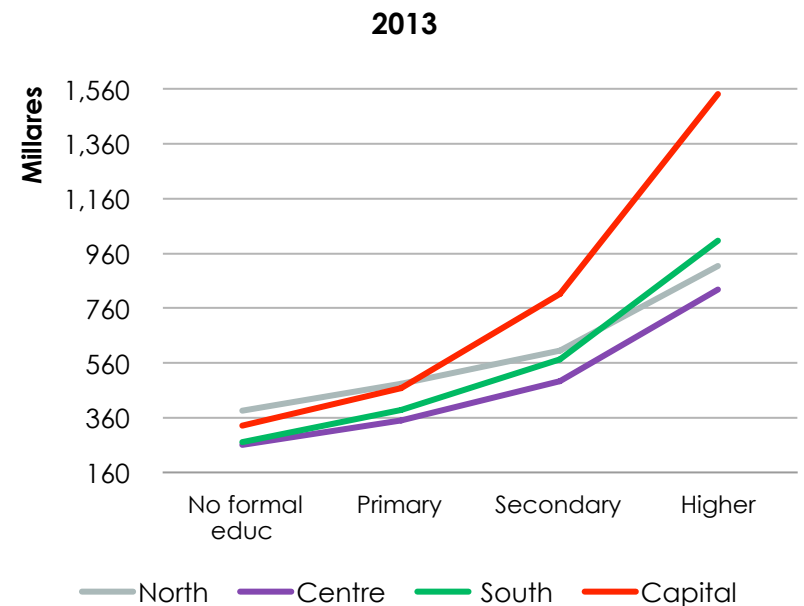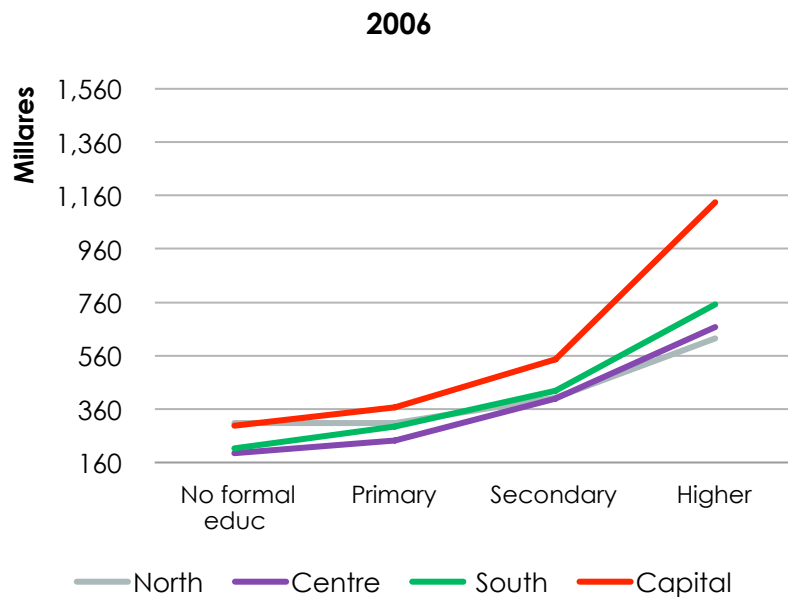**Household equivalent disposable income**
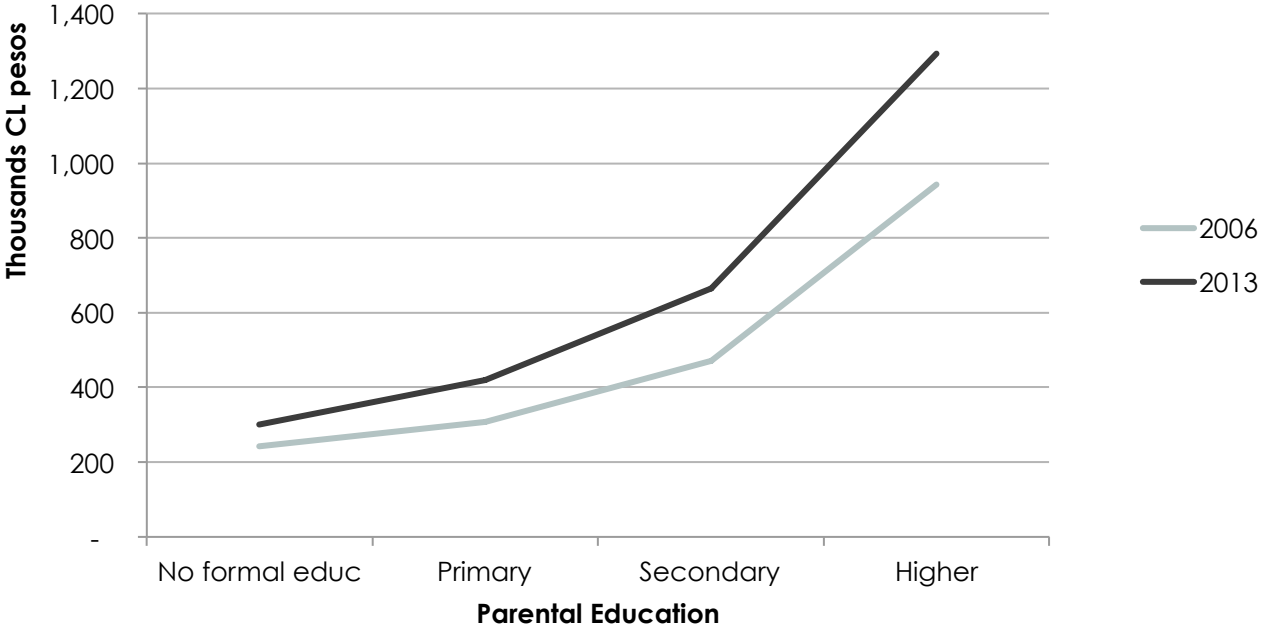
Descriptive Statistics

**Average income by level of parental education
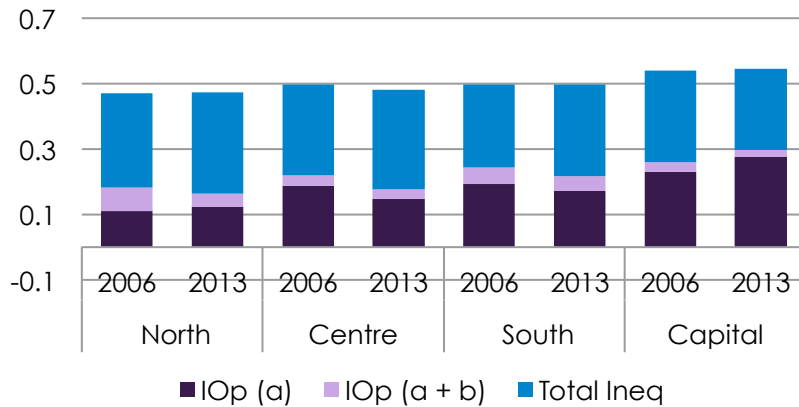market income**

Descriptive Statistics

**Average income by level of parental education
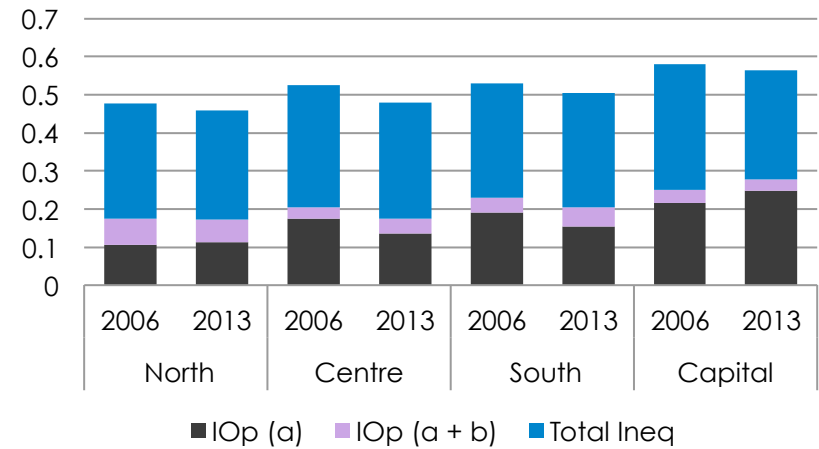and region of residence**
Household equivalent disposable income

Inequality of Opportunity Estimates
IOp levels by region of residence

**Household equivalent disposable income**

Legend: IOp (a), IOp (a + b), Total Ineq

Regions: North (2006, 2013), Centre (2006, 2013), South (2006, 2013), Capital (2006, 2013)

Hourly income

Legend: IOp (a), IOp (a + b), Total Ineq

Regions: North (2006, 2013), Centre (2006, 2013), South (2006, 2013), Capital (2006, 2013)

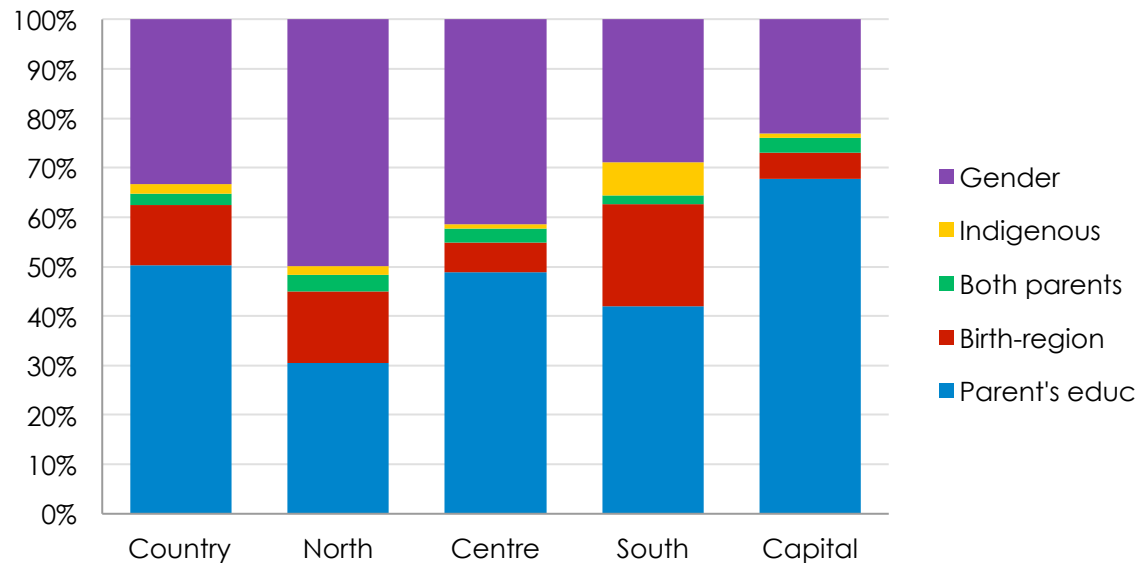# Inequality of Opportunity Estimates
IOp shares = IOp/Total Inequality
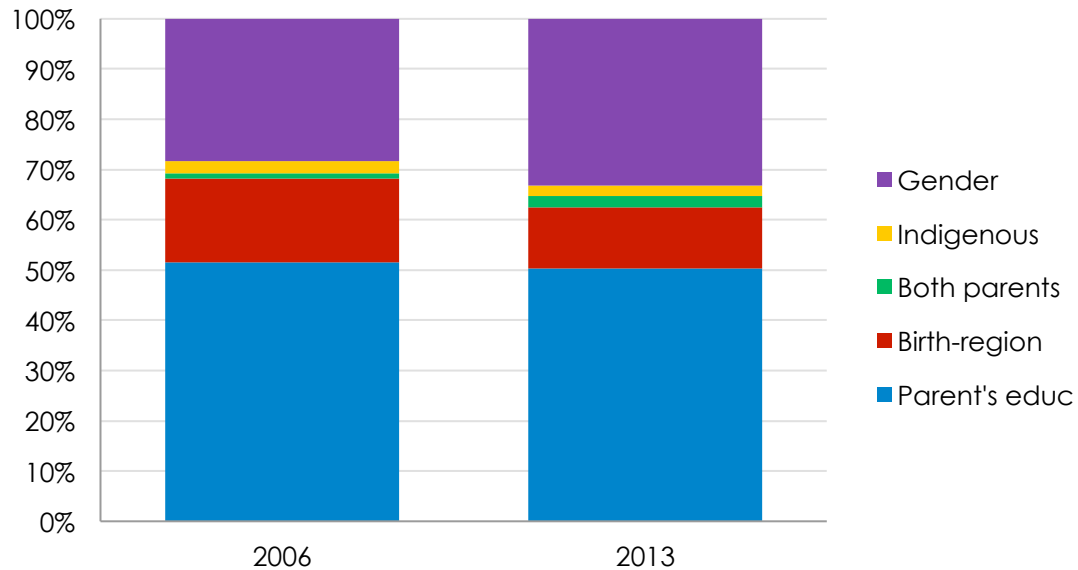### using all circumstances

2013 - GINI index
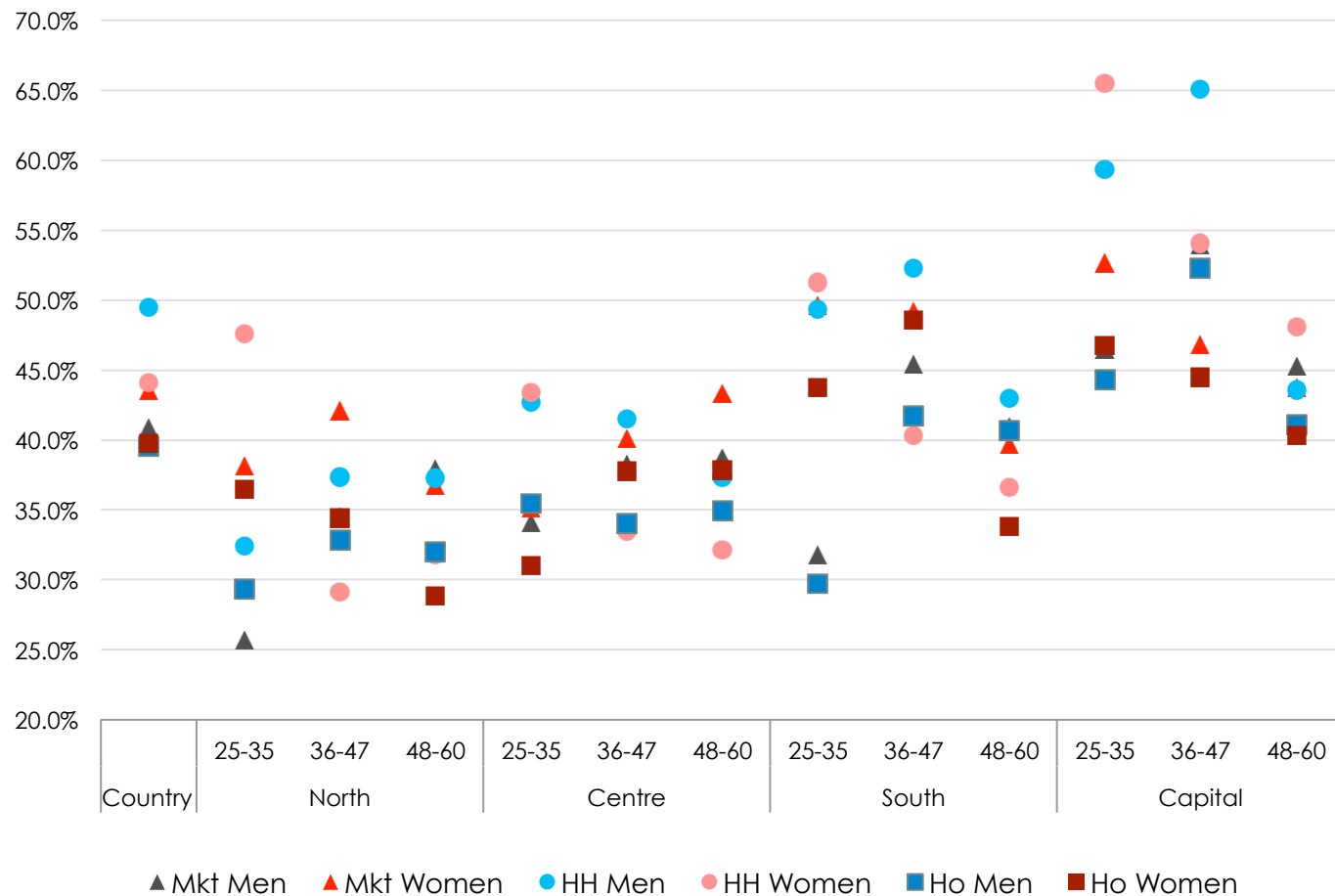
Relative Importance of each Circumstance

Shapley decomposition using the parametric estimation with all circumstances, case (c) – Mkt Income
2013

Relative Importance of each Circumstance

Graph A3.8: IOp decomposition (2013) market income

Concluding Remarks

- Using all circumstances inequality of opportunity has not decreased significantly between 2006 and 2013

- Parental education is the most important circumstance and its relevance has increased for women and decrease for men only in market income

- Gender explain also an important amount of IOp and the relevance has increased between 2006 and 2013

- Great regional disparity: In the metropolitan region, both at the household level and for men and women, inequality of opportunities has increased in the seven years under study. IOp is four times higher in the metropolitan region than in the north of the country

- Regardless of the region of residence, we find that always the most deprived groups correspond to women. Women's income represents about 60 per cent of men's income nationally, and the gender gap has worsened for many sub-groups since 2006