Intergenerational Structural Change in 40 years
The Role of Occupational Changes for Income Growth, Inequality, and Social Vulnerability in Brazil
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Aim
This paper analyzes the role of structural change on Social Welfare and Development for two fathers and sons generations: from 1972-81 to 1996 and from 1990-99 to 2014.

Estimating fathers’ income
To implement the TSIV, it was used the National Household Sample Surveys of 2014 and 1995, and the editions from 1996 and 1976. The first and third ones, referred as "sons’ sample", give information about their income, as well as the parent’s characteristics of educational levels and occupation reported by the sons. In the other hand, the 1995 and 1976’s sample, or the "parents’ samples" give data about the father’s incomes and characteristics in a synthetic way. I restrict the sample to workers from 30 to 39 years old, so there is two mobility processes, from 1972-81 to 1996 and 1990-99 to 2014. There’s 9 dummies for each occupational category, besides 9 educational levels. For 1996 and 2014, I used 1976 and 1995 PNAD for estimating schooling and occupational status returns, following Bjorklund and Jantti (1997) and Pero and Szerman (2008). The specification for 1996 or 2014 follows as showed, below.

\[ Y_{1976/1995} = \gamma_0 + \gamma_1 \times S_i + \gamma_2 \times Ocup_i + \gamma_3 \times Black_i + \gamma_4 \times Age + \gamma_5 \times Age^2 + \varepsilon 
\]

Where \( Y_{1977/1995} \) is the vector of the observed log of labor income of all men that have children born from 1957 to 1966 (for the 1976 sample) or from 1975 to 1984 (for the 1995 sample). \( S_i \) is their schooling level, \( Ocup_i \) is a matrix of dummies for their occupational category and \( Black_i \) is a dummy for their race. Finally, \( \gamma_0, \gamma_1, \gamma_2, \gamma_3, \gamma_4 \) and \( \gamma_5 \) are parameters to be estimated. After estimating these parameters, we input them in the 1996 and 2014 samples. Then, we have a permanent fathers’ and sons’ labor income measure, given by the formula:

\[ Y_{1976/1995}^{Permanent} = \gamma_0^{Permanent} + \gamma_1^{Permanent} \times S_i^{Permanent} + \gamma_2^{Permanent} \times Ocup_i^{Permanent} + \gamma_3^{Permanent} \times Black_i^{Permanent} + \gamma_4^{Permanent} \times Age + \gamma_5^{Permanent} \times Age^2 + \varepsilon^{Permanent} 
\]

Simulations results for Intergenerational Immobility of Occupations
In Tables below, each scenario i is denoted as "ci". The outcomes from the observed sample are denoted as "o", and the difference from observed and simulated outcomes is denoted as "(o-ci)".

The results show that, for the first period, income growth would fall drastically with I.I.O. in any scenario. On the other hand, Gini would not change much from the observed sample. For the second period, while Gini decrease was higher in observed sample than in any simulation, income grows faster in scenario 2 and 3, in the first of both to the point of compensating the loss of Gini decrease, resulting in a higher increase of welfare index.

Table 5 exposes Gini change decomposition. For all simulations, both P and R decrease, showing that mobility of occupations is accountable for a higher \( \beta \)-Convergence and a larger extent of leapfrogging.