Individual and household in-work poverty in comparative perspective

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European Labor Force Survey (EU-LFS) and European Union Statistics on Income and Living Conditions (EU-SILC)

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1. Theoretical framework
   In-work poverty
   Why poor?
Outline

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   In-work poverty
   Why poor?

2. Research questions
Outline

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3. Data and variables
   Data and Variables
Outline

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   In-work poverty
   Why poor?

2. Research questions

3. Data and variables
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4. Results
   Individual*Household
   Individual level
   Household level
   Macro explanatory factors
Main objectives

- Cross country comparison among two competing definitions.
- Size of the phenomenon before and after the economic crisis.
- In-work poverty and macroeconomic variables.
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Competing definitions of working poor

Ambiguity due to the simultaneous presence of 2 analytical levels:

1. **individual**: working poor are the *low pay workers* (wage under 60% of the average wage [Lucifora 1997; Marx and Verbist 1998; Lucifora et al. 2005]);

2. **household**: working poor are *workers living in poor household* (household income under 60% of the average disposal income [Eurostat 2010]).
Competing definitions of working poor

Why the lack of researches considering the household/individual levels jointly?

1. **Workfare approach**: inadequate attention to the *working poor* because work is considered the main solution against poverty.

2. **Economics**: transient phenomenon, not relevant for social policy interventions → focus on low wages.

**Workers who are poor**: focus on work and its characteristics (salary, contracts...). Poverty is given by a certain economic phase (low salary + low productivity + increasing demand of high skilled profiles)
3. **Mixed approaches**: discuss the definitions of the concepts but then consider one of the two - more often the household one [García-Espejo and Ibañez 2004, Gardiner and Millar 2006; Crettaz and Bonoli 2010; Maitre et al. 2012].

**Poors who work**: poverty and social exclusion emerge because of the intersection of the individual and family dimensions. *In work poverty* is though a *social issue* to be targeted by family and social policies.
Micro explanatory factors

1. **Low wage**: low wage vs. family size-driven poverty [Rowntree 2000].

2. **Household earning structure**
   a. *work intensity* [Eurostat 2010]: odd worked/workable months;
   b. *labour force attachment* [Crettaz and Bonoli 2011]: job discontinuity and under-employment;
   c. *full working family* vs. *part working family* [Kenway 2008].

3. **Number of dependent children** (up to 16 years old).
Macro explanatory factors

1. **Welfare system** [Allégre 2008; Lohmann and Marx 2008; Lohmann 2008].

2. **Level of relative inequality** [Eurostat 2010].

3. **Unemployment rate**.
Typology

<table>
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<tr>
<th>Household</th>
<th>Individual (dep.worker)</th>
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<tbody>
<tr>
<td>Not poor</td>
<td>Not poor</td>
</tr>
<tr>
<td>Poor</td>
<td>Poor</td>
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</tbody>
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- **I**: Not poor
- **II**: Poor
- **III**: Not working poor

Filandri and Struffolino

Individual and household in-work poverty
Research questions

A. To what extent does the size of the phenomenon change considering the two definitions in different countries? Changes over time?

Defining working poor profiles taking into account:

1. **employment arrangement** (discontinuity, low wage, part-time);

2. **family structure** (dependent children/members) [Frazer and Marlier 2010, Marx et al. 2012].
Research questions

B. How macroeconomic variables interact with the 3 types of in-work poverty in explaining cross-country differences?

Hypotesis:

1. higher inequality \(\rightarrow\) higher household in-work poverty;

2. higher social expenditure \(\rightarrow\) lower in-work poverty for the 3 types;

3. higher unemployment rate \(\rightarrow\) higher individual in-work poverty.
DATA AND VARIABLES
Data


2. Waves from 2005 to 2010.

3. Cross-section data.

4. 16 countries: *Austria Belgium Czech Republic Estonia France Germany Greece Ireland Italy Lithuania Poland Portugal Spain Slovenia Sweden UK.*

5. Sample employees (18-64).
Micro variables: individual level

- **To be working poor on the individual level**: annual wage less than 60% of the relative average wage.

- **Annual wage**: 
  \[ Y_{\text{annual}} = [Wage_{\text{hourly}}, WorkedHours, WorkedMonths] \]
  * py010n net (DE and UK py010g - gross) 1st and 99th percentiles dropped

- **Employment arrangements**:
  a. **low wage**: relative - monthly wage less than 60% of the relative average wage;
  b. **part-time**: work less than 30 hours/week for about 7/12 months/year;
  c. **job discontinuity**: work less than 9 months/year.
Micro variables: household level

- **To be a worker in a poor household:** equivalized household income* lower than 60% of the average (OECD Oxford scale).

  *hy020 net (DE gross) 1st and 99th percentiles dropped

- **Dependent members:**
  
  \[(\text{TotAdults} - \text{TotEarners}) \times 0.7 + (\text{Children} \times 0.5)\]
Macro variables

OECD 2010:

- Gini index
- Social expenditure (total/percentage of GDP)
- Unemployment rate
RESULTS
To what extent does the estimate change adopting two different definitions?

Individual in-work poverty by gender - 16 countries over 6 years

*Probability of being working poor*

Individual in-work poverty by gender - 16 countries over 6 years

Probability of being working poor

Work arrangement and individual in-work poverty: **women**
Probability of being working poor given different work arrangements

Work arrangement and individual in-work poverty: **women**

*Probability of being working poor given different work arrangements*

Work arrangement and individual in-work poverty: **women**

*Probability of being working poor given different work arrangements*

Work arrangement and individual in-work poverty: **women**

*Probability of being working poor given different work arrangements*

Work conditions and individual in-work poverty: **men**

*Probability of being working poor given different work arrangements*

Work conditions and individual in-work poverty: **men**

*Probability of being working poor given different work arrangements*

Work conditions and individual in-work poverty: **men**

*Probability of being working poor given different work arrangements*

Work conditions and individual in-work poverty: men

Probability of being working poor given different work arrangements

Workers living in **poor household** - 16 countries over 6 years

*Probability of being working poor*

Workers living in **poor household** - 16 countries over 6 years

*Probability of being working poor*

Workers living in **poor household** - 16 countries over 6 years

*Probability of being working poor*

Household characteristics and in-work poverty: dependents

*Probability of being working poor given different number/type of dependents*

Household characteristics and in-work poverty: **dependents**

*Probability of being working poor given different number/type of dependents*

3 levels of in-work poverty and Gini index

3 levels of in-work poverty and **Gini index**

3 levels of in-work poverty and **Gini index**

3 levels of in-work poverty and **Gini index**

3 levels of in-work poverty and **social expenditure**

Social expenditure: percentage of GDP
3 levels of in-work poverty and unemployment rate

3 levels of in-work poverty and **unemployment rate**

3 levels of in-work poverty and unemployment rate

3 levels of in-work poverty and unemployment rate

Summing up

- Different definitions → size of population differs significantly in all countries → different policy implications.

- Phenomenon relatively stable over time according to the 2 definitions → impact of the economic crisis not detectable (yet?).

- Could cross country differences be explained by macro variables?
Thank you for your attention!

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