The odd one out or the key component? Low work intensity as a part of multidimensional poverty measure in the EU

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Introduction

MAIN OBJECTIVE

assess the contribution of the LWI to poverty measurement in terms of the population that its inclusion in the AROPE allows to capture

KEY QUESTION

what are the socio-economic characteristics of individuals who are identified as poor by the AROPE only on the basis of the LWI criterion, compared to those who experience income poverty and/or material deprivation
Background

**POVERTY RATE**
Proportion of the population living on less than 60% of the national median equivalised income

**DEPRIVATION RATE**
Proportion of the population experiencing an enforced lack of at least
- 4 out 9 predefined material items
- 7 out of 13 deprivation items (6 related to the individual and 7 related to the household)

**LOW WORK INTENSITY**
Proportion of the population living in households whose members of working age worked no more than 20% of their total potential during the previous year
- 18-59 y.o.
- 18-64 y.o.
Hypothesis

People close to the income poverty, but not always captured by the threshold due to budget patching

People with an alternative source of income who do not need to work

Potentially exposed to increased risk of poverty

Likely not at all exposed to increased at risk of poverty
Methodology

Analysis method: Multinominal logistic regression
Source of data: EU-SILC
Period covered: 2010, 2014, 2018
Countries: all EU-28
Variables (presented here): 20
Valid observations: 923,843
Results
Chart 1. Comparing the likelihood of belonging of the poor to a given category against the non-poor – the base model (reference category is in the bracket)

<table>
<thead>
<tr>
<th>Gender (Men)</th>
<th>Women</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Age group (40-49)</td>
<td></td>
</tr>
<tr>
<td>18-29</td>
<td></td>
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<tr>
<td>30-39</td>
<td></td>
</tr>
<tr>
<td>50+</td>
<td></td>
</tr>
<tr>
<td>Country of birth (Respective country)</td>
<td>Non-EU third country</td>
</tr>
<tr>
<td>EU third country</td>
<td></td>
</tr>
<tr>
<td>Registered partnership (No)</td>
<td>Yes, on a legal basis</td>
</tr>
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</tbody>
</table>

- Chart 1 shows a comparison of the likelihood of belonging of the poor to a given category against the non-poor – the base model. 

- The reference category is in the bracket.

- The chart includes categories such as Gender (Men), Age group (40-49), Country of birth (Respective country), and Registered partnership (No).

- The chart uses bars to represent the likelihood of belonging to each category, with colors indicating only LWI and other poor.

- The Nagelkerke R² value is 0.065, and N is 923,843.

- The chart highlights the comparison between different categories and their likelihood of belonging to the poor category.
Chart 2. Comparing the likelihood of belonging of the poor to a given category against the non-poor – education level (reference category is in the bracket)

Control variables: Gender, Age group, Country of birth, Registered partnership

Nagelkerke $R^2 = 0.123$
N= 855,438
Chart 3. Comparing the likelihood of belonging of the poor to a given category against the non-poor – occupation group (reference category is in the bracket)

-2 7

Elementary Occupations
Plant and Machine Operators and Assemblers
Craft and Related Trades Workers
Skilled Agricultural and Fishery Workers
Service Workers & Shop & Market Sales Workers
Clerical Support Workers
Technicians and Associate Professionals
Professionals

Control variables: Gender, Age group, Country of birth, Registered partnership

Nagelkerke $R^2 = 0.160$
N = 794,549
Chart 4. Comparing the likelihood of belonging of the poor to a given category against the non-poor – activity status (reference category is in the bracket)

Control variables: Gender, Age group, Country of birth, Registered partnership
Chart 5. Comparing the likelihood of getting by the poor a given type of income against the non-poor (reference category is: no)

Control variables: Gender, Age group, Country of birth, Registered partnership

* Interests, dividends, profit from capital investment in uncorporated business
Chart 6. Disposable income among the only LWI according to obtaining income from a certain source

* Interests, dividends, profit from capital investment in unincorporated business
Conclusion

- Age: 50+
- Marital status: single
- Activity status: not employed
- Income – source and its composition: No one pattern

For further research:
- Impact of changing the AROPE’s measurement
- Impact of country specifics on AROPE levels after measurement change
- Dynamics
Thank you

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References

## Appendix: other sources of income crosstab

<table>
<thead>
<tr>
<th>Income from Interests, dividends, profit from capital investment</th>
<th>Yes</th>
<th>No</th>
<th>total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Income from rental of a property or land</td>
<td>0.64</td>
<td>0.79</td>
<td>1.43</td>
</tr>
<tr>
<td>No income from rental of a property or land</td>
<td>8.19</td>
<td>18.28</td>
<td>26.46</td>
</tr>
<tr>
<td>No income from pension and other benefits</td>
<td>2.25</td>
<td>2.44</td>
<td>4.69</td>
</tr>
<tr>
<td>No income from rental of a property or land</td>
<td>19.62</td>
<td>47.79</td>
<td>67.42</td>
</tr>
</tbody>
</table>

| total | 30.70| 69.30| 100.00 |
Appendix: activity status & education

Nagelkerke $R^2 = 0.272$

- **Primary**
- **Secondary**
- **At work**
- **In (early) retirement**
- **Other inactive person**

- **only LWI**
- **other poor**

N = 854,276
Appendix: education & occupation

Nagelkerke $R^2 = 0.272$

$N = 854,276$

### Education
- Primary
- Secondary

### Last / current occupation
- Elementary Occupations
  - Plant and Machine Operators and Assemblers
  - Craft and Related Trades Workers
  - Skilled Agricultural and Fishery Workers
- Service Workers & Shop & Market Sales Workers
- Clerical Support Workers
- Technicians and Associate Professionals
- Professionals

- only LWI
- other poor