Expert Meeting on Measuring Poverty and Inequality: SDGs 1 and 10

Session B: Supplemental poverty measures
1. Impact of social transfers on poverty

Social transfers in kind for education and health - imputation into EU - SILC data

Eurostat
Outline

• Introduction
• Methodology
• Data sources
• Results
• Discussion
17-30% of ADI in EU

13-29% of ADI in EU

DI (incl. gov. cash transf.) + STIK = ADI
Introduction

- Policy demand to take into account STiK in assessing inequality of well being
- In particular across countries and across time
- Amount of STiK varies largely across countries

Share of total and educational STiK in ADI, NA, 2015
Introduction

• The analysis of distribution of non-monetary income is limited to the two social in kind benefits (received from public spending): education and health care.

• The main purpose of the exercise of allocating the STiK services to the population members is to see how the STiK is distributed in the population. STiK can be thought of as an imputed income to a household with an exactly-matching imputed expenditure. It is expected that adding the value of STiK to the monetary income would decrease total income inequality, as these services are assumed to be equally accessible for all members of society irrespective to their monetary income situation.

• The year of analysis is 2015.
Methodology - valuation of STiK- 'insurance' or the 'actual consumption' approach

- **The insurance approach** is one where the amount of income imputed to a person is based on an estimate of what the equivalent (notional) insurance premium might be, such that the sum of those equivalent insurance premiums across the entire population equals the total costs of the service;

- **The actual consumption approach** is one where the amount of income imputed to a person is based on that person's use of the service.

*Based on experts opinion and previous publications in this field, as well as on practical implementation in this paper the insurance approach is chosen for health STiK, and consumption approach is chosen for education STiK.*
## Methodology - equivalised income including STiK

### Modified OECD equivalence scale

<table>
<thead>
<tr>
<th>Category</th>
<th>Coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>first adult</td>
<td>1.0</td>
</tr>
<tr>
<td>second adult</td>
<td>0.5</td>
</tr>
<tr>
<td>each child aged under 14</td>
<td>0.3</td>
</tr>
</tbody>
</table>

### NET-SILC2 equivalence scale (SNA scale)

<table>
<thead>
<tr>
<th>Category</th>
<th>Coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>0.46</td>
</tr>
<tr>
<td>0-3 years</td>
<td>0.41</td>
</tr>
<tr>
<td>4 years</td>
<td>0.57</td>
</tr>
<tr>
<td>5-13 years</td>
<td>0.69</td>
</tr>
<tr>
<td>14-16 years</td>
<td>0.95</td>
</tr>
<tr>
<td>17-54 years</td>
<td>0.54</td>
</tr>
<tr>
<td>55-64 years</td>
<td>0.60</td>
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<tr>
<td>65-74 years</td>
<td>0.67</td>
</tr>
<tr>
<td>75 years and above</td>
<td>0.75</td>
</tr>
</tbody>
</table>

Monetary income

Monetary income + STiK
## Data sources

<table>
<thead>
<tr>
<th></th>
<th>Educational STiK</th>
<th>Health STiK</th>
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</thead>
<tbody>
<tr>
<td>EU-SILC</td>
<td>⬇️</td>
<td>⬇️</td>
</tr>
<tr>
<td>2016 EU-SILC ad hoc module on access to services</td>
<td>⬇️</td>
<td>?</td>
</tr>
<tr>
<td>National Accounts COFOG</td>
<td>⬇️</td>
<td>⬇️</td>
</tr>
<tr>
<td>UNESCO/OECD/Eurostat education data</td>
<td>⬇️</td>
<td>⬇️</td>
</tr>
<tr>
<td>ECFIN aging report</td>
<td>⬇️</td>
<td>⬇️</td>
</tr>
</tbody>
</table>
Data sources - 2016 EU-SILC ad hoc module on access to services

- **Education:**
  RC070 – payment for tuition fees
  answer categories are: yes/no
Data sources:
RC070 – payment for tuition fees (AD HOC SILC 2016)
Data sources - 2016 EU-SILC ad hoc module on access to services

- **Education:**
  RC070 – payment for tuition fees
  answer categories are: yes/no

- **Health:**
  HC170-payment for healthcare services
  answer categories are: yes/no
Data sources:
HC170-payment for health care services (AD HOC SILC 2016)
Results – STiK: distribution
Results – STiK: GINI

[Bar chart showing income and income STiK for various countries]
Discussion

- **Centralised methodology** was used to calculate educational and health STiK
- The method is based on various general assumptions at central level, results are assumed to be not very accurate
- More precise results could be obtained at doing calculations at national/local level using additional data sources
- **Ad hoc module 2016** adds some precision for education, but not for health.

Next:
- analysis of out of pocket expenditure for health and education (HBS)
- Module will be repeated on 2024- questions needs to be thought further
- Experiments on consumption approach for health
Thank you!