Low wage and precarious workers in the EU: Chances of upward mobility

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Outline

• Low wage earners
  ✓ Motivation
  ✓ Low wage definition & data used
  ✓ Hourly wage in EU-SILC
  ✓ Evidence on incidence, trend and characteristics of low wage earners

• Transitions to higher wages
  ✓ Wage mobility along the whole distribution
  ✓ Chances of exiting low wages
  ✓ Characteristics connected with upward mobility from low wage

• Conclusions
Motivation

• Disadvantages associated with low wage:
  1. Low income security \(\rightarrow\) higher risk of poverty?
  2. Low wage particularly problematic when accompanied by:
     ✓ \textit{Low job security (non-standard contracts)} \(\rightarrow\) \textit{precarious jobs}
     ✓ \textit{Low work intensity at individual level}
     ✓ \textit{High household needs & low work intensity at household level}
     ✓ \textit{Weak chances of exiting low wage} \(\rightarrow\) \textit{persistent low wage}

• Causes of low wage linked to:
  1. Labour supply constrains
     ✓ \textit{Employer considers employee under-qualified/skilled (or skill mismatch)}
     ✓ \textit{Discrimination (gender, family background, unemployment spells, etc.)}
  2. Labour demand constrains
     ✓ \textit{High unemployment risk aversion/lower demand}
     ✓ \textit{Distortions in design of taxes and benefits}
Low wage definition & data used

• Definition
  ✓ Low wage → Below 2/3 of median hourly wage in a country (Eurostat; OECD; Lucifora & Salverda 2009)
  ✓ Why hourly wage? To include part-time & temporary employees (i.e. non-standard workers)
  ✓ Alternative definitions: minimum wage (used as cut-off point); lowest percentiles

• Data
  ✓ Cross-sectional EU-SILC data 2007 & 2014
  ✓ Pooled longitudinal EU-SILC data 2011, 2012 & 2013
  ✓ Sample: All employees aged 20-64 (self-employed excluded)
Hourly wage in EU-SILC

- Wages in EU-SILC available at annual level
- Hourly wage calculated as:

\[
\text{wage}_{\text{hourly}} = \frac{\text{wage}_{\text{yearly}}}{\text{weeks}_{\text{yearly}} \times \text{hours}_{\text{weekly}}}
\]

**Caveat:** Discrepancy between income reference year & survey year

- Longitudinal data:
  - Allow to correct for discrepancy
  - But no data for DE, “small” sample size, less updated data than cross-section

- Cross-sectional data:
  - Only individuals with same labour market status 7 months or more (income reference year) are included → most stable workers → under-estimation of low wage incidence
Incidence of low-wage differs across the EU

Share of low-wage employees (aged 20-64)

Source: EU-SILC cross-section 2007 & 2014 (UDB)
Poverty risks by activity status

Source: EU-SILC cross-section 2014 (UDB)
Non-standard workers face a wage penalty in comparison with standard workers.

Source: EU-SILC cross-section 2014 (UDB)
Low wage jobs increased more among younger non-standard workers

Share of low-wage earners by type of contract

- Younger workers (20-39)
- Prime age workers (40-54)
- Older workers (55-64)

Source: EU-SILC cross-section 2007 & 2014 (UDB)
One in four low wage earners have "precarious jobs"

Share of low wage employees with non-standard/standard contracts

Incidences of precarious jobs (% of all employees) differs across the EU:

- **PL** → 7.6%
- **CY** → 5.3%
- **ES** → 5.2%
- **EU-28** → 3.2%
- **PL** → 01.%

Source: EU-SILC cross-section 2014 (UDB)
Risk of low wage & labour market precariousness

Risk of being low-wage earner

Sample: all employees (aged 20-64)

<table>
<thead>
<tr>
<th>Category</th>
<th>Average marginal effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Younger worker (20-39)</td>
<td>5.5%</td>
</tr>
<tr>
<td>Older worker (55-64)</td>
<td>-1.5%</td>
</tr>
<tr>
<td>Woman</td>
<td>2.5%</td>
</tr>
<tr>
<td>National</td>
<td>-8.1%</td>
</tr>
<tr>
<td>Low education</td>
<td>4.5%</td>
</tr>
<tr>
<td>High education</td>
<td>-6.1%</td>
</tr>
</tbody>
</table>

Risk of being precarious worker

Sample: low wage employees (aged 20-64)

<table>
<thead>
<tr>
<th>Category</th>
<th>Average marginal effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Younger worker (20-39)</td>
<td>9.0%</td>
</tr>
<tr>
<td>Older worker (55-64)</td>
<td>-3.8%</td>
</tr>
<tr>
<td>Non EU-28 foreigner</td>
<td>11.2%</td>
</tr>
<tr>
<td>Low education</td>
<td>2.6%</td>
</tr>
</tbody>
</table>

Source: EU-SILC cross-section 2014 (UDB)
Accumulation of low-wage & low-work intensity as a cause of in-work poverty

Source: EU-SILC panel data 2013 (UDB)
Longer working time often compensates low wage

Ratio of self-reported hours worked between low-wage & non-low-wage employees

Source: EU-SILC panel data 2013 (UDB)
Transitions to higher wages

• Research questions
  ✓ What chances low-wage workers have to improve their economic situation?
  ✓ To what extent low wages are persistent?
  ✓ Which job characteristics and dynamics are connected to upward mobility at the bottom?
  ✓ Who is more likely among the low wage earners to make an upward transition from low wages?
Wage mobility along the whole distribution (1)

Year-on-year wage transitions

Compared to t-1 wage decile in t is:

- 1 decile higher
- more than 1 decile higher
- stable
- 1 decile lower
- more than 1 decile lower

Source: EU-SILC pooled panel data 2011, 2012 & 2013 (UDB)
Wage mobility along the whole distribution (2)

Year-on-year wage transitions by decile

Compared to t-1 wage decile in t is:

- Higher
- Lower
- Stable
- Trend in t

Wage gap by decile, 2013

Source: EU-SILC pooled panel data 2011, 2012 & 2013 (UDB)
Chances of exiting low-wages

Year-on-year wage upward transitions from a low wage and share of employees who remain low wage earners

In the EU more than 50% of those escaping low wages had wage increase above 25%

Source: EU-SILC pooled panel data 2011, 2012 & 2013 (UDB)
Characteristics connected with upward mobility from low wage jobs

- Woman
- Older 55-64
- High educated
- Low educated
- Family with children
- Job changed between t and t-1
- Temporary contract in t-1

Source: EU-SILC pooled panel data 2011, 2012 & 2013 (UDB)
An exploration of labour market mobility at EU level

Year-on-year transition rates between labour market states

<table>
<thead>
<tr>
<th>Employment states in t-1</th>
<th>Permanent full-time</th>
<th>Permanent part-time</th>
<th>Temporary full-time</th>
<th>Temporary part-time</th>
<th>Self-employed</th>
<th>Inactive</th>
<th>Unemployed</th>
<th>Share of group in t-1</th>
<th>Share of group in t (ppt change)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Permanent full-time</td>
<td>89.5</td>
<td>2.4</td>
<td>1.7</td>
<td>0.2</td>
<td>1.0</td>
<td>2.7</td>
<td>2.7</td>
<td>41.9</td>
<td>6.0 (-0.6)</td>
</tr>
<tr>
<td>Permanent part-time</td>
<td>13.2</td>
<td>73.7</td>
<td>1.1</td>
<td>1.8</td>
<td>1.4</td>
<td>5.6</td>
<td>3.3</td>
<td>6.0</td>
<td>0.3</td>
</tr>
<tr>
<td>Temporary full-time</td>
<td>21.6</td>
<td>1.2</td>
<td>54.6</td>
<td>3.6</td>
<td>1.8</td>
<td>3.6</td>
<td>13.7</td>
<td>5.6</td>
<td>-0.1</td>
</tr>
<tr>
<td>Temporary part-time</td>
<td>5.3</td>
<td>10.1</td>
<td>11.7</td>
<td>47.8</td>
<td>1.7</td>
<td>8.2</td>
<td>15.2</td>
<td>1.8</td>
<td>0.1</td>
</tr>
<tr>
<td>Self-employed</td>
<td>2.8</td>
<td>0.6</td>
<td>1.0</td>
<td>0.4</td>
<td>89.0</td>
<td>3.8</td>
<td>2.5</td>
<td>11.0</td>
<td>0.2</td>
</tr>
<tr>
<td>Inactive</td>
<td>2.7</td>
<td>1.4</td>
<td>1.9</td>
<td>1.1</td>
<td>1.9</td>
<td>85.3</td>
<td>5.7</td>
<td>24.7</td>
<td>-0.1</td>
</tr>
<tr>
<td>Unemployed</td>
<td>7.7</td>
<td>2.1</td>
<td>9.9</td>
<td>3.4</td>
<td>3.5</td>
<td>14.1</td>
<td>59.4</td>
<td>9.1</td>
<td>0.3</td>
</tr>
</tbody>
</table>

Mobility index: 0.335

Source: EU-SILC pooled panel data 2011, 2012 and 2013 (UDB)

Labour market mobility lower (and slower) than wage mobility (year-on-year wage mobility index=0.614)
Wage mobility at the bottom and contractual dynamics

Year-on-year wage transition from low wage by job contract change

Getting a permanent contract increases chances of upward transition from low wage.

Getting a permanent contract does not increase chances of upward mobility from low wage.

Source: EU-SILC pooled panel data 2011, 2012 and 2013 (UDB)
Summing up…

• Great variation in % of low wage earners in the EU
  ✓ One in five low wage earners are poor
  ✓ Low wages are problematic when associated to part-time/temporary jobs (→ precarious jobs, low work intensity)
  ✓ One in four low wage earners have precarious jobs
  ✓ But, in most EU countries low-wage earners work longer

• Chances of exiting low wage are also very different across countries
  ✓ On average 44.5% chances of escaping low wage year-on-year
  ✓ More than half employees exiting low wage have a wage increase of more than 25%
  ✓ Low wage exit associated with change of job and achieving higher education → importance of investing in skills