Income Inequality
Within and Between European Countries

European User Conference for EU-LFS and EU-SILC
Mannheim, 6th March 2009

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Introduction

- Development of income inequality in the EU-15 as a whole as well as in the different member states throughout the time period 1993-2005
  - Effects of inclusion of *new EU member states* in 2004 and 2005

- Identification of the current state of *social cohesion* in the EU area
  - Around 1/4 of the EU Budget are spent on redistributive policies with the special aim of greater economic and social convergence among EU member states

- Huge literature compares *macro aggregates* to analyse convergence process across countries, neglecting the distribution of income (e.g. Kaitila 2004, Hein & Truger 2005, Welsch & Bonn 2007)
Data and Concepts

- Comparable micro data for EU member states
  - European Community Household Panel (ECHP), 1993-2000
  - EUROMOD, 2001 [2003: GE, NL, UK]
  - European Union Statistics on Income and Living Conditions (EU-SILC), 2003-2005; since 2004 also new EU member states (except Malta)

- National monetary amounts are adjusted by current multilateral PPPs provided by Eurostat

- Equivalised disposable household incomes per individual

- Inequality measures: Gini Coefficient and Theil Index
Results

Influence of Business Cycles?

Gini Coefficient of equivalised disposable income – EU-15 as a single economic unit
Results

Inclusion of new EU member states

→ **What are the reasons for the significant increase in overall inequality?**
Results

Income Inequality in the different EU member states

![Gini Coefficient chart for EU-15 and New EU member states over different years.](image-url)
Results

Theil Inequality Decomposition by Countries

Inclusion of new EU member states
Effects of Inclusion of new EU member states

Discrimination of four effects (Beblo & Knaus, 2001)

\[
T(1)^{K+1} - T(1)^K = \left( \sum_{k=1}^{K} (s_k^{K+1} - s_k^K) \cdot T(1)_k \right) + \sum_{k=1}^{K} s_k^{K+1} \cdot \ln \left( \frac{\mu_k}{\mu_{K+1}} \right) + \sum_{k=1}^{K} s_k^{K+1} \cdot \ln \left( \frac{\mu_k}{\mu_{K+1}} \right) + \sum_{k=1}^{K} \frac{K}{s_k} \cdot \ln \left( \frac{\mu_k}{\mu_{K+1}} \right)
\]

Concretely:

2004: \( 0.219 - 0.183 = 0.015 - 0.058 - 0.013 + 0.092 \)

Theil difference \( I \) \( II \) \( III \) \( IV \)

2005: \( 0.202 - 0.170 = 0.016 - 0.056 - 0.013 + 0.086 \)
# Explanation of effects

Differences between EU-15 and group of new member states

<table>
<thead>
<tr>
<th></th>
<th>EU - 15</th>
<th>New EU member states</th>
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<tbody>
<tr>
<td></td>
<td>2004</td>
<td>2005</td>
</tr>
<tr>
<td>Within Inequality $T(1)$</td>
<td>0.174</td>
<td>0.162</td>
</tr>
<tr>
<td>Income Share</td>
<td>92.7%</td>
<td>92.3%</td>
</tr>
<tr>
<td>Mean Income</td>
<td>17,622</td>
<td>17,665</td>
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Conclusion

- U-shaped trend of income inequality in the EU-15 as a whole
  - New EU member countries significantly increase inequality
- Overall trend in EU-15 driven by changing within-country inequality
  - No significant reduction of the inequality between countries
  - Importance of distribution of incomes within countries
  - Contradiction of convergence process of mean incomes across EU-15 member states
- Lower mean incomes of new member countries are responsible for substantial increase in overall EU income inequality
Thank you for your attention.