Income inequality of EU and Non-EU citizens in Germany.
Results on the basis of the German Mikrozensus from 1976 to 2005

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Agenda

1. Introduction
2. Theoretical considerations
3. Data
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1. Introduction

- A huge amount of research deals with the income situation of the foreign population in Germany (Diekmann et al. 1993, Shahriari 2005, von Gostomski 2008).

- We have no information concerning the development of income inequality of the non-German population in Germany.

- Research question:
  - Development of incomes and income inequality of non-German households
  - Effects of becoming an EU Member State
    The example of Spain (and Portugal)
2. Theoretical considerations

- Europeanization facilitates integration
  - harmonization of labor legislation
  - harmonization of vocational training (EuroB), increasing international occupational competence of skilled workers, European qualification frame (EQF)

- Integration restraining effects: Entsendegesetzes (AEntG) 1996
  - Exclusion of “cheap employees“ (e.g. building industry)
  - AEntG is rather extended than diminished
2. Theoretical considerations

- “Gastarbeiteranwerbestopp”: since 1973 foreign workers are not allowed to enter the German job market.

- Becoming a member state of the EU and restrictions for the job market participation.
  - Portugal and Spain enter the EU in 1986. Before 1986 only highly qualified employees could work in Germany (scientists / experts and managers demonstrating a high income level).
  - There have been interim arrangements until 1992. Since then there are no limitations on access to the German job market.
2. Theoretical considerations:
Pull Factors: Gross National Income per Capita in US$
2. Theoretical considerations

Hypotheses

Becoming an EU member state…

→ Hypothesis 1:
  … reduces the income level of Spanish (and Portuguese) households in Germany.

→ Hypothesis 2:
  … reduces the prestige of occupations of Spanish (and Portuguese) heads of households.

→ Hypothesis 3:
  … increases income inequality of Spanish (and Portuguese) households.
3. Data

- This topic is part of the project “Social and economic change in (West) Germany“
  - managed by Christof Wolf (German Microdata Lab)
  - third party finance: Leibniz-Gesellschaft
- The German Mikrozensus: 1 percent of the German resident population is randomly selected
- One wave contains about 800,000 cases, 70% are for scientists (Scientific Use Files). The cumulated file (1962-2005) contains more than 13 million cases
- Data has been collected every year since 1957 (since 1991 “East” Germany is included as well)
- Only parts of the questionnaire are to be answered voluntarily
- Predominantly face-to-face design (14% of the data are collected by postal questionnaires)
3. Data

- Prestige of occupations:
  - Magnitude Prestige Scale (MPS) based on the International Standard Classification of Occupations (ISCO)
  - The German Mikrozensus contains MPS since 1976

- Year of moving to Germany:
  - Non-Germans who have moved to Germany before 1973 were excluded from the calculations.
    (Mikrozensus provides a proper variable since 1976)
3. Data

- Monthly net income
  - Price-adjustment of the net income is calculated by the GML (Lengerer et al. 2008)
  - Pool-assumption of the budget of households
- Assignment of the persons of a household to categories of nationality
  - Assignment by the head of the household in private households
- Reference countries:
  - Italy (belongs to EU since 1957)
  - Turkey (does not belong to the EU, but has the biggest Non-German population)
- Number of cases: 3.6 million households (18 waves, 1976-2005)
3. Data

- Measures of inequality:
  - Citizenship Empowerment Measure (similar to Gender Empowerment Measure, GEM)
  - Gini-Coefficient
4. Results

Development of the price-adjusted average monthly net income of households in Germany (in Euro)

Sources: accumulated MZ interim arrangements

Spaniards in Germany:

test with unequal variances: before vs. after interim arrangements, mean (-1) – mean (1) >0; pr =0.69
4. Results

Citizenship Empowerment Measure related to price-adjusted average monthly net income of households (percent)

Sources: accumulated MZ interim arrangements
4. Results

Magnitude Prestige Scale (MPS) of occupations

Sources: accumulated MZ interim arrangements

Spaniards in Germany:
test with unequal variances: before vs. after interim arrangements, mean (-1) – mean (1) >0; pr =1.0
4. Results

Gini-Coefficient of price-adjusted average monthly net income of households

Sources: accumulated MZ interim arrangements

Spaniards in Germany:
Test 1: variance before vs. after interim arrangements, sd (-1) / sd (1) <1; pr =0.000
Test 2: gini before vs. after interim arrangements (equal variances), mean (-1) – mean (1) <0; pr =0.001
5. Summary

Becoming an EU member state…

- Hypothesis 1: … reduces the income level of Spanish households in Germany. **rejected**

- Hypothesis 2: … reduces the prestige of occupations of Spanish heads of households. **rejected**

- Hypothesis 3: … increases income inequality of Spanish households. **preliminarily confirmed**
6. Remarks on harmonization and data handling

- Comments using Stata
  - Using data with a huge number of cases Stata 64bit and 8GB working memory is recommended
  - Collapse (aggregation e.g. on household level) does not work with more than 5 Million cases
  - Delete missing cases before calculating Gini coefficients (the old fashioned “inequal.ado” works better than “ginidesc.ado”)

- Comments using SPSS
  - Aggregation works properly, but takes time
Many thanks for your attention!

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5. Bonus tracks

Size of Households

Sources: accumulated MZ interim arrangements
5. Bonus tracks

Years of Education

Sources: accumulated MZ interim arrangements
5. Bonus tracks

Equivalent household disposable income (in Euro)

Sources: accumulated MZ interim arrangements
5. Bonus tracks

Number of Spanish households in the dataset

Sources: accumulated MZ interim arrangements

5. Bonus tracks EU, Non-EU

Share of average monthly net income of households to purchase 100 Big-Macs
5. Bonus tracks EU, Non-EU

Development of the price-adjusted average monthly net income of households in Germany
5. Bonus tracks EU, Non-EU

Citizenship Empowerment Measure related to price-adjusted average monthly net income of households (percent)