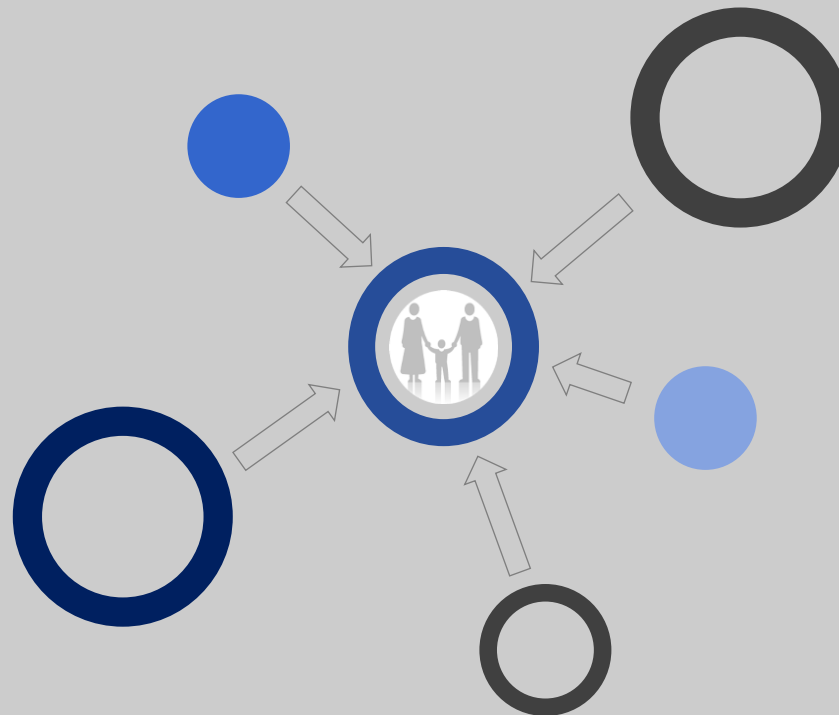


IFMS 2018

Integrated Data Sets as a Source of Information on Refugees

Dr. Gunter Brückner, Jan Eberle – German Statistical Office



Introduction

➤ Administrative data on residence status of foreigners

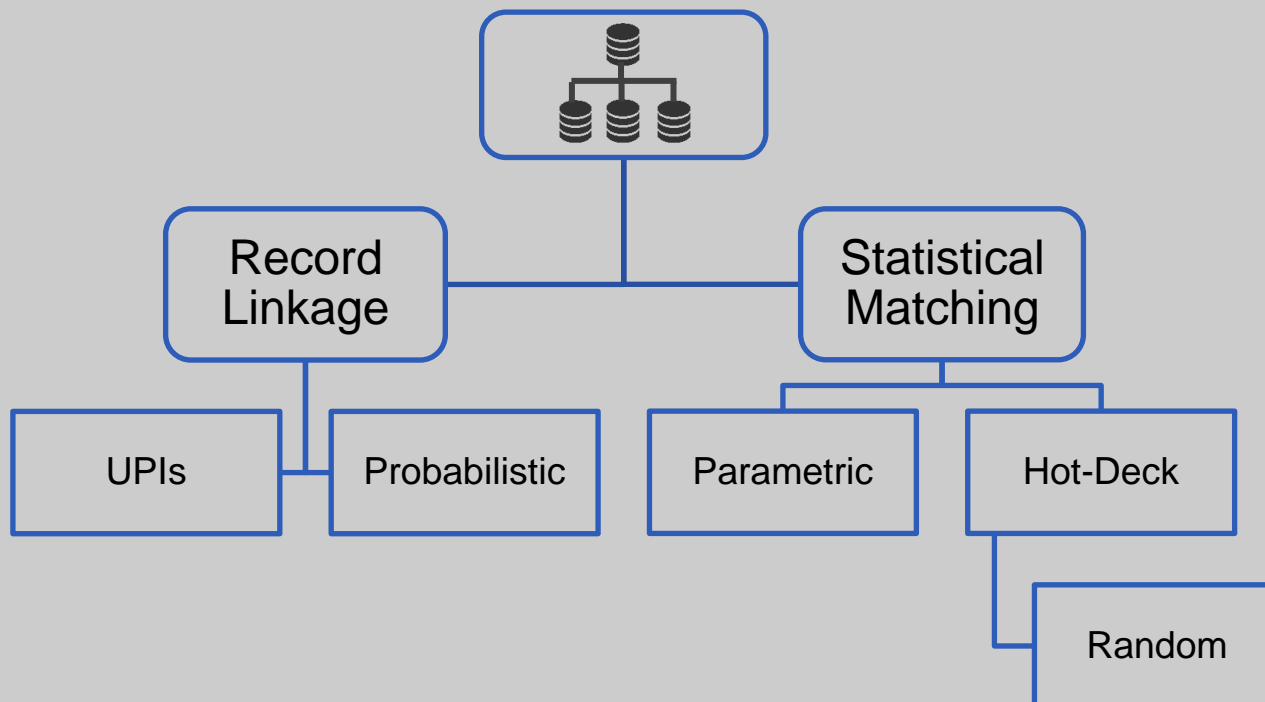
- Central Register of Foreigners (CRF)

➤ Survey data on socio-economic situation of foreigners

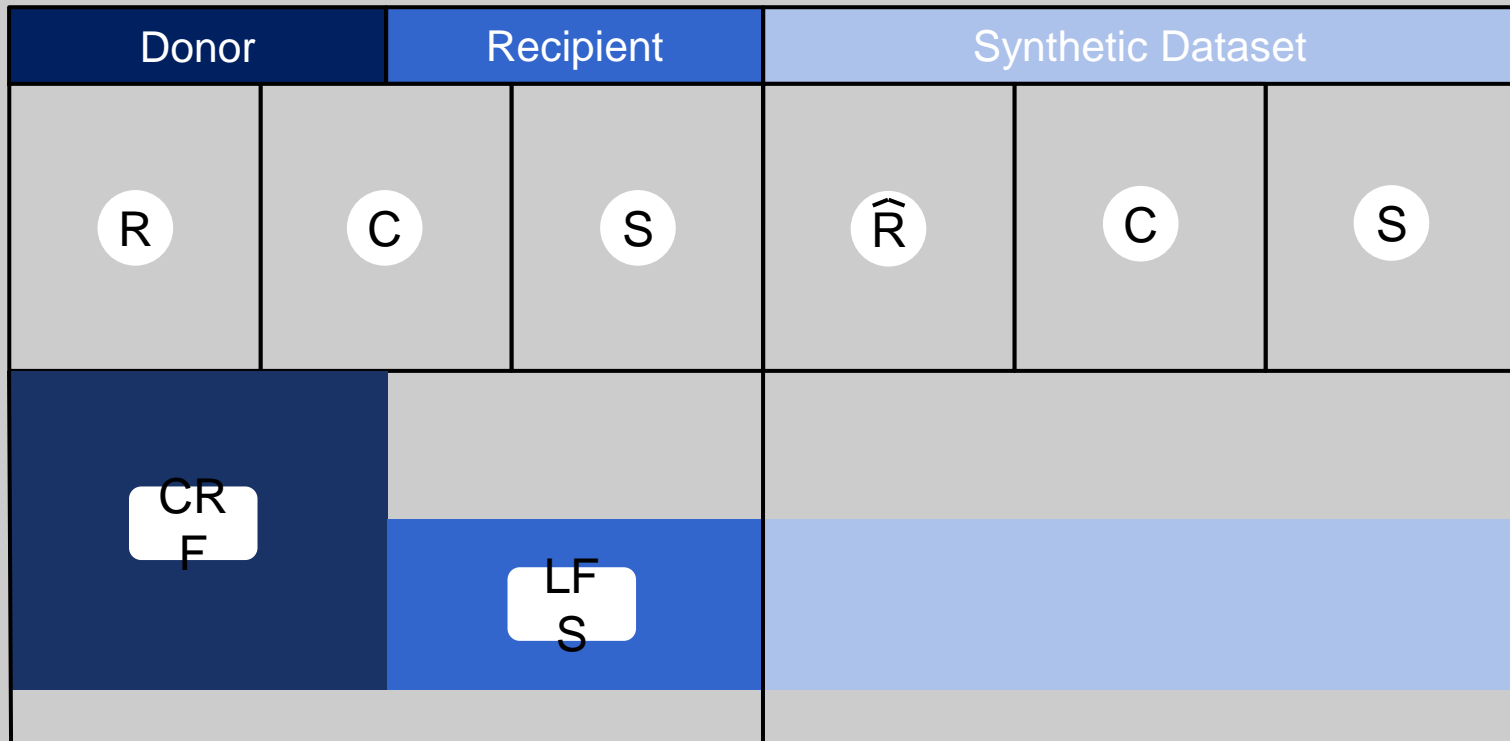
- Labor Force Survey (LFS)

➤ Combine data sources to fill data gaps on refugees

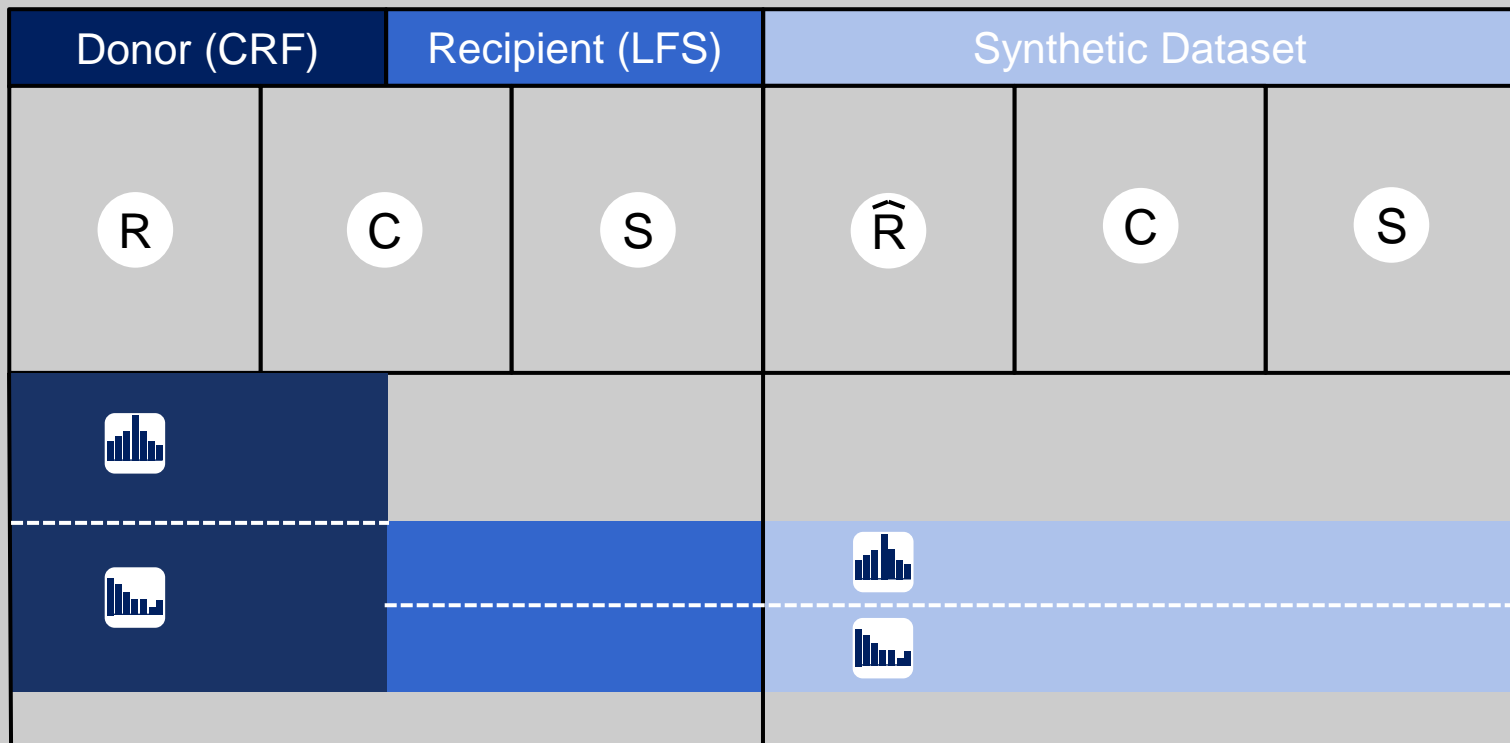
Data Integration Methods



Statistical Matching



Random Hot Deck Matching



Case-Study

- Integrating 2016 LFS and Central Register of Foreigners
- Focus on arrivals between 2013 and 2015
 - Allows for comparison with benchmark survey
- Random hot deck imputation algorithm
 - Donation classes: Country of origin and year of first arrival

Case-Study

➔ Assumption of conditional independence

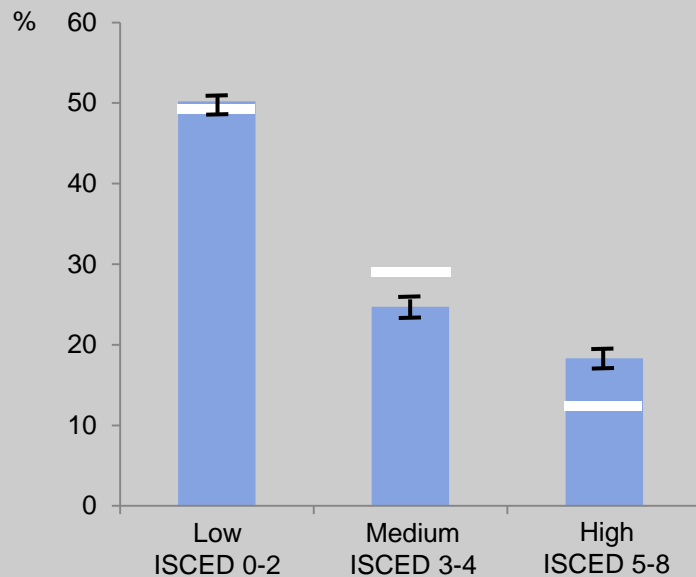
$$P(S, R | C) = P(S | C) * P(R | C)$$

➔ Explanatory power using country of origin and year of arrival

- 70 % of refugees correctly predicted
- 85 % of non-refugees correctly predicted

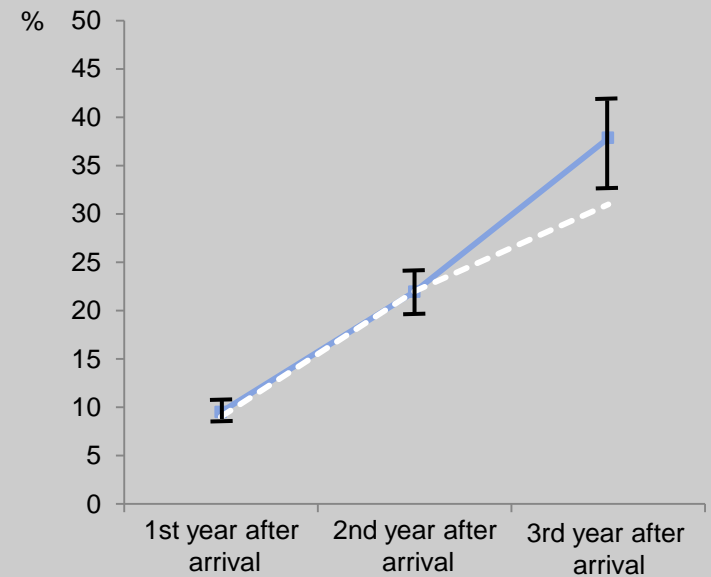
Results

Education



Note: The graph depicts the percentage of people seeking humanitarian protection between age 18 and 65 in Germany between 2013 and 2015 with high, medium and low educational attainments according to ISCED. Error bars indicate minimum and maximum outcomes after one hundred imputations, the colored bar represents the average outcome after one hundred imputations.

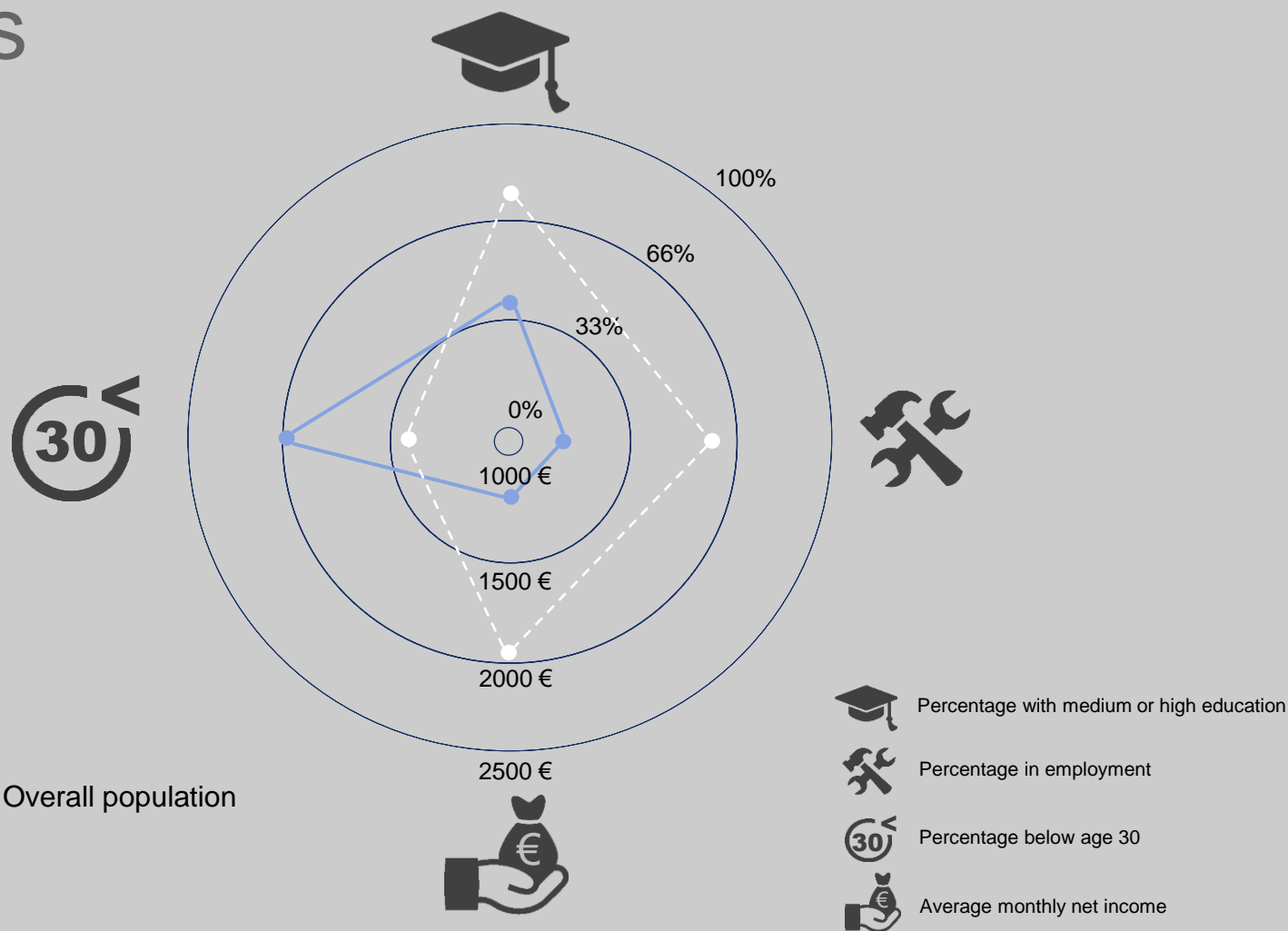
Employment







Note: The graph depicts the percentage of people seeking humanitarian protection between age 18 and 65 in Germany between 2013 and 2015 who are employed according to the ILO-concept of employment. Error bars indicate minimum and maximum outcomes after one hundred imputations, the colored bar represents the average outcome after one hundred imputations.

- Random hot deck imputation
- Benchmark: German refugee survey

Results



■ Refugees
■ Benchmark: Overall population

 Percentage with medium or high education
 Percentage in employment
 Percentage below age 30
 Average monthly net income

Conclusion and outlook

➤ Preliminary results are promising

➤ Open questions

- Adjusting LFS survey weights
- Improving explanatory power

➤ Provide case study for IRRS compilers manual

Thank you for your attention

