

# How Much Cheaper Is Rural Life?

## The Price Levels of German Counties and Cities

Ludwig von Auer (Universität Trier); Sebastian Weinand (Universität Trier)

### 1. Motivation and Data

- *International* comparisons of Purchasing Power Parities (PPP) are inhibited by heterogeneity of
  - products
  - currencies
  - consumption patterns.
- *Interregional* price comparisons are not plagued by such a degree of heterogeneity.
- Knowing a country's regional price levels allows for an accurate comparison of regional
  - real GDPs
  - real wages
  - standards of living.
- However, there is a lack of regional price data.
- For no country regional price levels have been published that
  - are comprehensive (complete country) and
  - include cities as well as rural counties.
- This poster presents such price levels for Germany (data from May 2016).
- The price data have been collected for CPI measurement purposes by the Federal Statistical Office of Germany.
- The regionalized structure of these data allow for spatial price comparisons.

### 2. Methodology

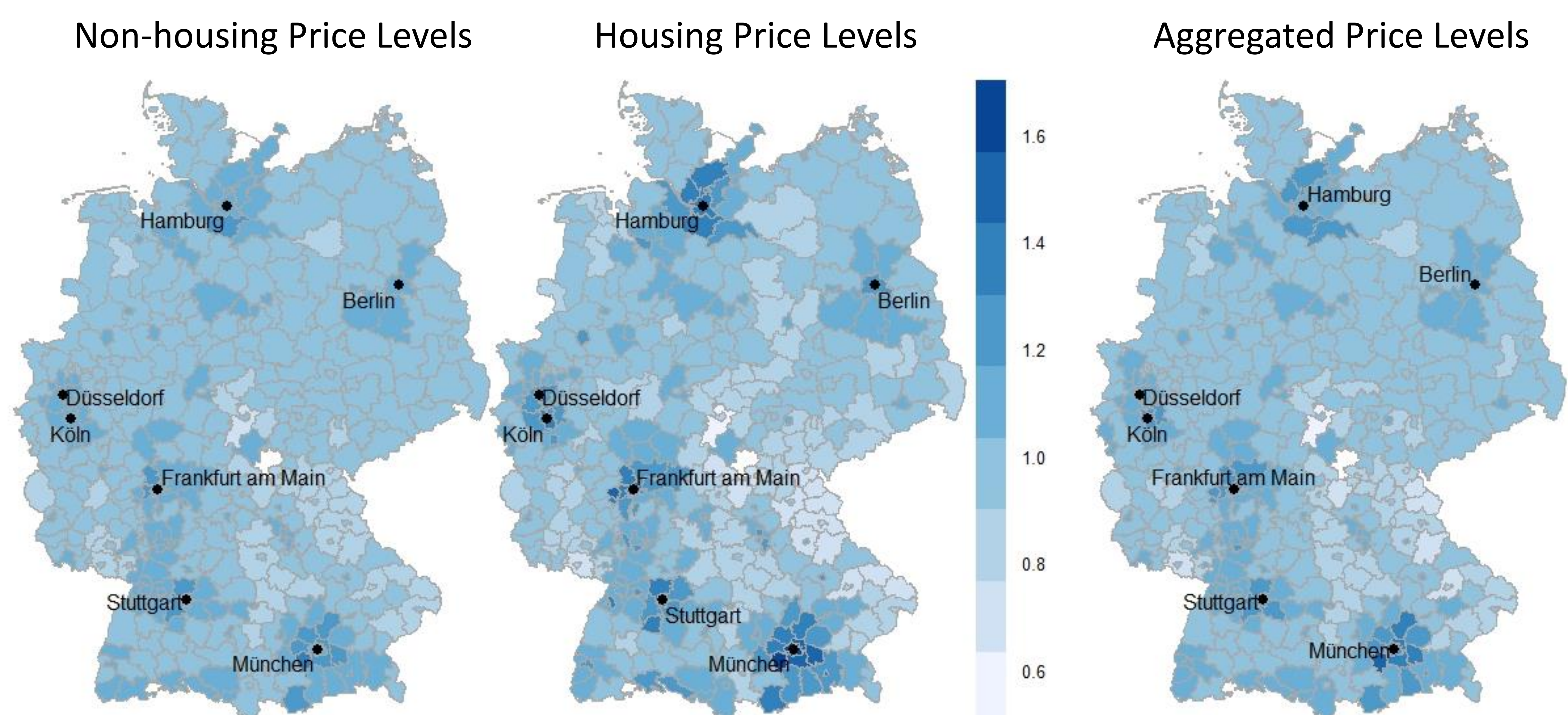
- On the lowest level of product classification there are large data gaps.
- Therefore, a multi-stage version of the Country Product Dummy (CPD) method is used; unweighted below basic headings and weighted by expenditure shares above basic headings.
- Hedonic regression for rents below basic heading:

$$\ln(\text{rent} / \text{sqm})_i = \alpha_1 D_i^1 + \dots + \alpha_r D_i^r + \dots + \alpha_{335} D_i^{335} + \beta_1 \ln \text{sqm}_i + \beta_2 \ln \text{duration}_i + \dots + u_i$$

for all regions  $r = 1, 2, \dots, 335$  and flats  $i = 1, 2, \dots, 13969$  (regression includes categorical variables for residential quality, equipment, and public housing).

- Average rents for further 65 regions are directly computed based on 3792 observations.

### 3. Regional Price Levels in Germany



### Contact

Ludwig von Auer  
Universität Trier  
Email: vonauer@uni-trier.de

Fifteenth Meeting of the Ottawa Group  
International Working Group on Price Statistics  
May, 2017