

An aerial photograph of a small town with a lake. The town is on the left, with many houses and buildings. The lake is on the right, with many sailboats. A small island with a building is in the lake. The background is a forested hill.

# **Segregation in Small Towns.**

## **Findings from eight Upper Austrian Cities**

European Lecture Series „Small Towns in Focus“  
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# 1. Segregation in Small Towns – Background (1)

## I. Small/medium-sized Town Segregation – a Research Gap

- Segregation research is highly focussed on large towns/metropolises (Vienna: Giffinger 1998, Kadi et al. 2022, Musil and Kaucic 2024, Tammaru et al. 2015, Kohlbacher and Reeger 2020)
  - Analyses point to a high level of residential segregation in small/medium-sized towns (Lichter et al. 2007, Lichter et al. 2016, Balogh et al. 2018)
  - Housing market-segmentation, price level, spatial patterns seem to have a strong impact on segregation (Helbig and Jähnen 2017)
- Empirical gap: only few case studies on segregation in small/medium-sized towns
  - Conceptual gap: different drivers of segregation in small/medium-sized towns?

# 1. Segregation in Small Towns – Background (2)

## II. Scalarity of Segregation – Focus on the Microscale

- Increasing focus on segregation on the microscale:  
vertical segregation in Mediterranean cities – Naples,  
Athens (Maloutas and Karadimitriou 2022, Dines 2022, Myofina 2024)
- High level of social variation within the historic  
housing stock of European cities (Musil and Kaucic 2024)
- Segregation in small towns shows small-scale patterns  
(Großmann et al. 2021)

**>> Methodological implications:  
patterns and dynamics of  
segregation are „hidden“ below  
the scale of statistical units**

## 2. Research Questions

**What is the level and the dynamic of ethnic segregation in the eight Upper Austrian cities?**

**Where can we find areas of high ethnic segregation? Which neighborhoods are “hot spots” of segregation?**

**What are the driving forces of ethnic segregation in the Upper Austrian cities?**

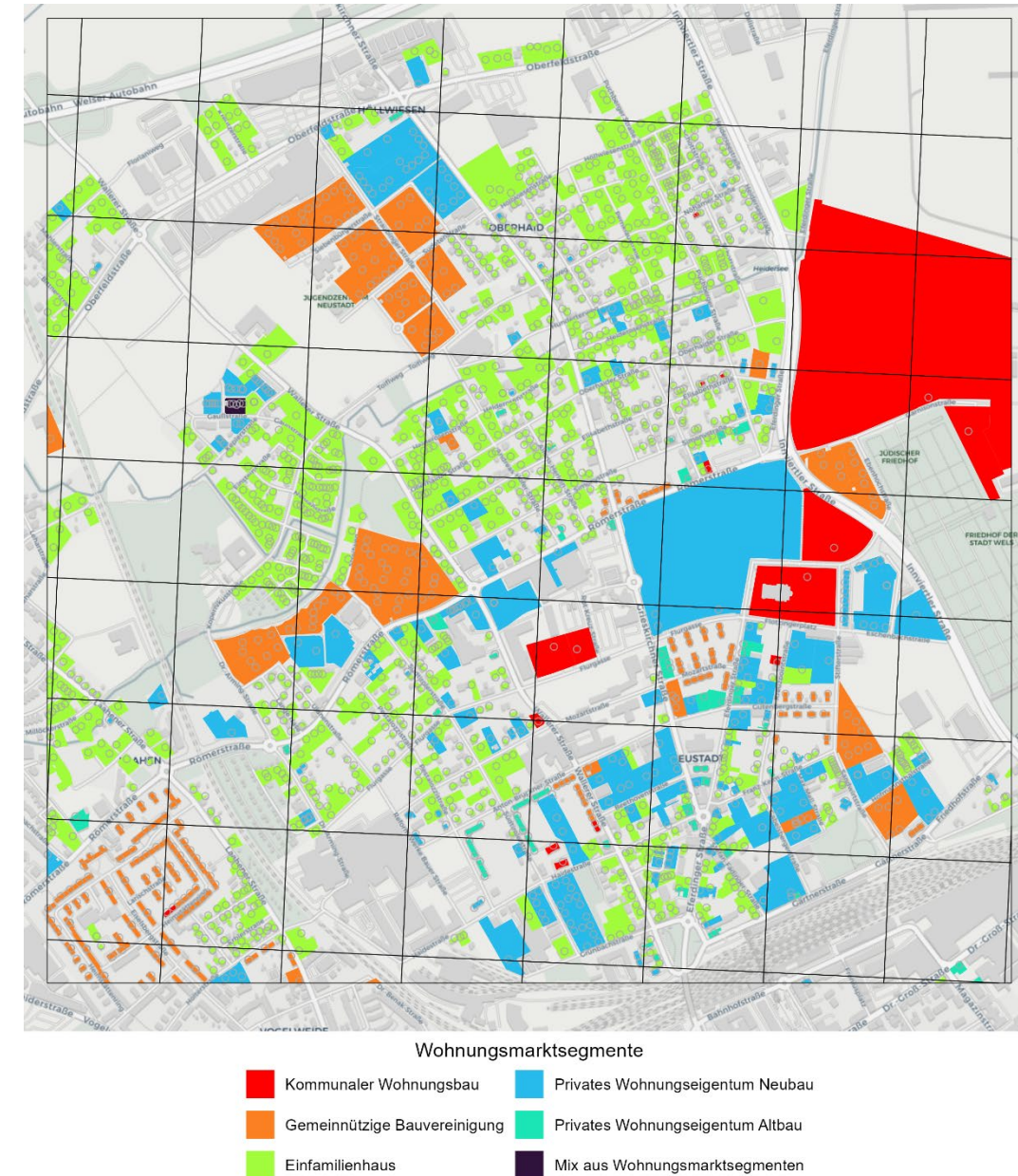
### 3. Method and Research Area

#### (1) Indices of Segregation

- **Global Segregation:** pairwise Dissimilarity-Index (measures the degree of dissimilation of a group compared to all other groups)
- **Local Segregation:** Mutual-Theil's Index (measures the contribution of a single spatial unit on the total segregation)

#### (2) Scale of Analyses

- **Microscale:** Socio-economic data and information on housing market segmentation are linked on the scale of individual building
- **250m Grid Cells:** data of residential buildings are aggregated on the scale of grid cells



### 3. Method and Research Area

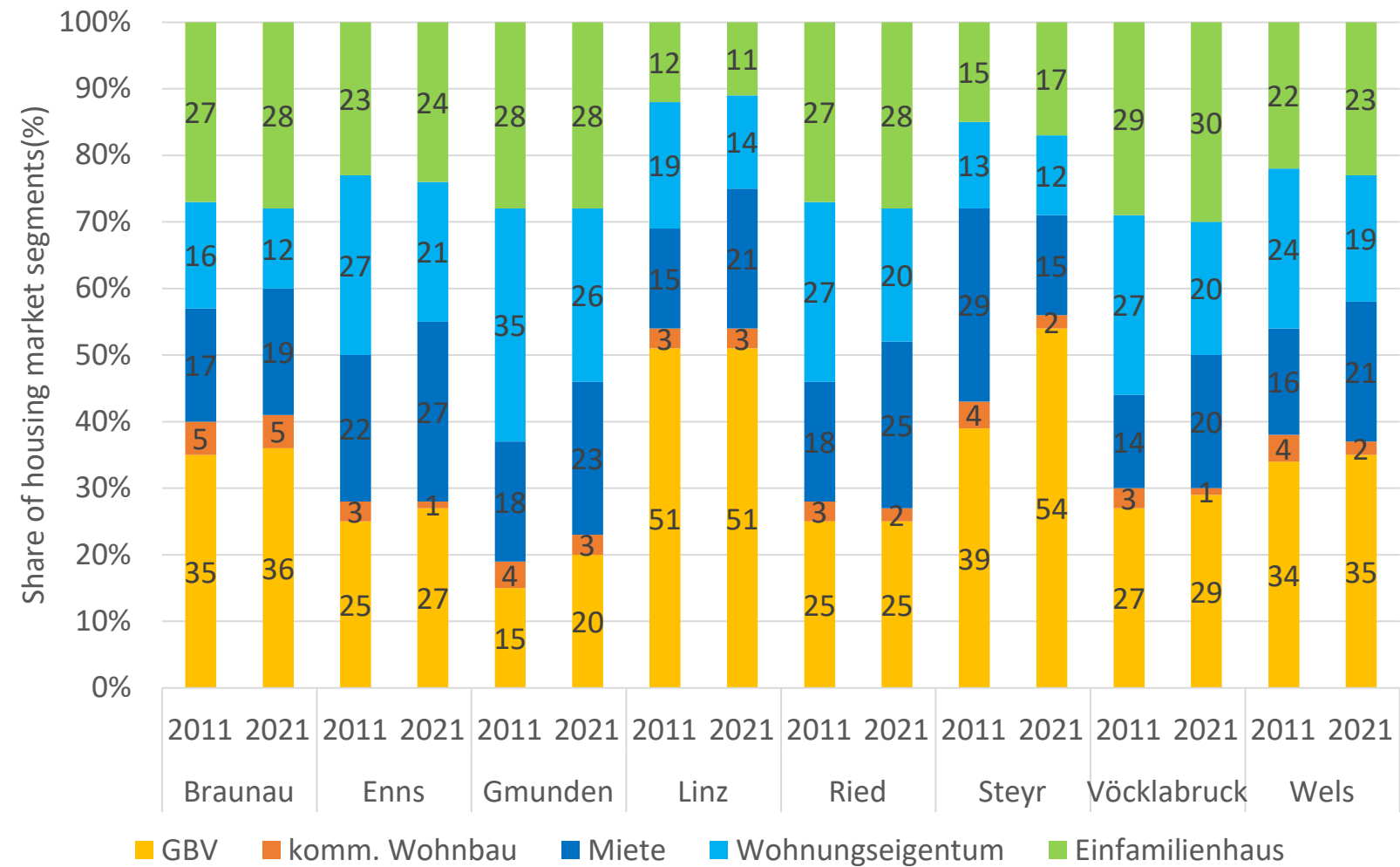
#### Socioeconomic Profile of the Upper Austrian urban regions (core zones)

	resident population		population		share of population born in Austria	
			change 2011-21			
	2011	2021	absolut	in %	2011	2021
Braunau	16.197	17.498	1.301	8	79,6	69
Enns	11.361	12.016	655	5,8	79,7	73
Gmunden	40.599	42.417	1.818	4,5	84,8	80,1
Linz	270.648	295.709	25.061	9,3	80,2	72,7
Ried	18.756	20.509	1.753	9,3	83,7	76,1
Steyr	47.860	47.834	-26	-0,1	83,5	78,1
Vöcklabruck	47.933	50.426	2.493	5,2	82,9	78,5
Wels	82.143	89.597	7.454	9,1	77,2	69,6
total	535.497	576.006	40.509	7,6	80,5	73,5

City profiles

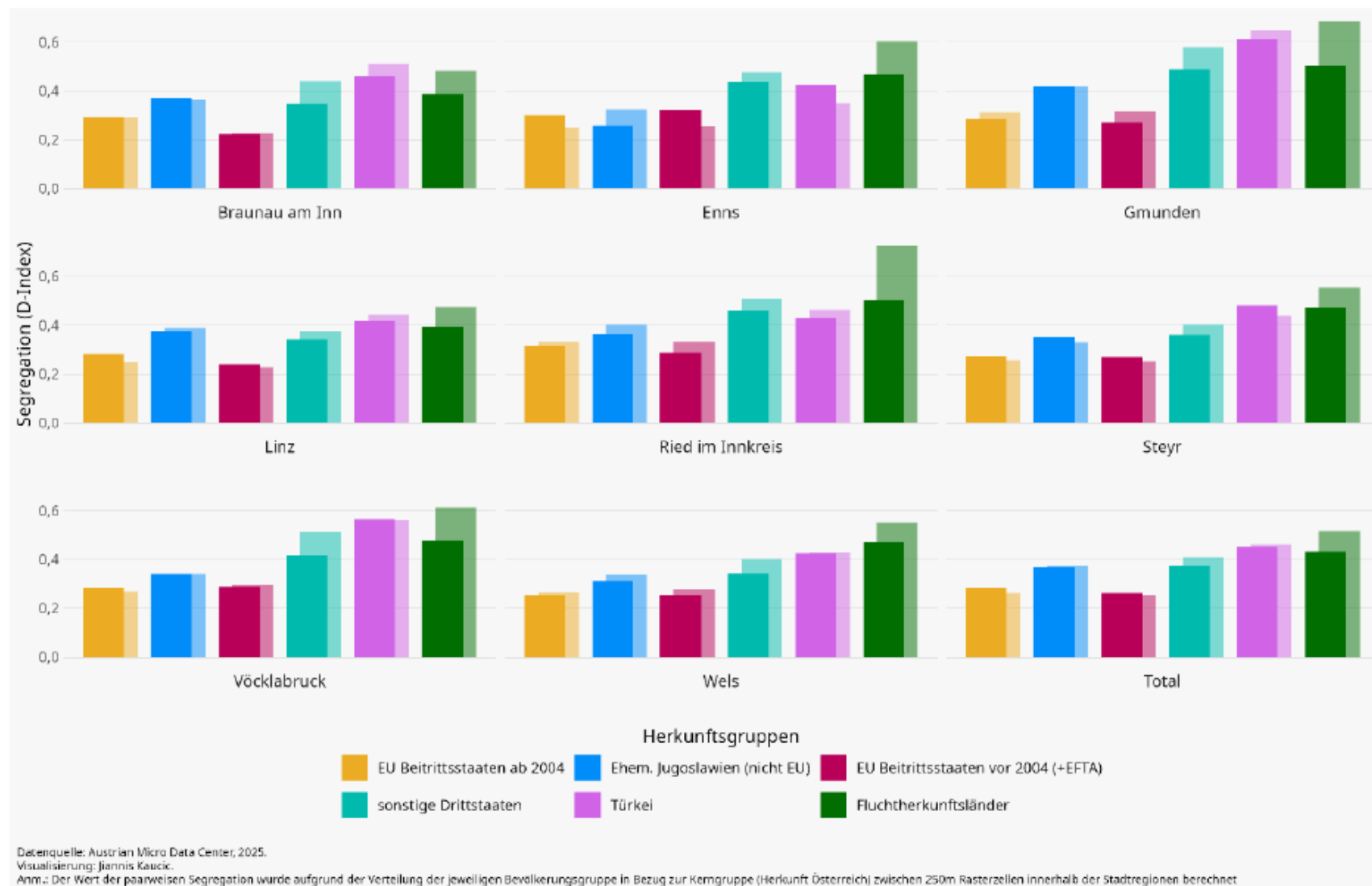
### 3. Method and Research Area

#### Housing market Segmentation



## 4. Results

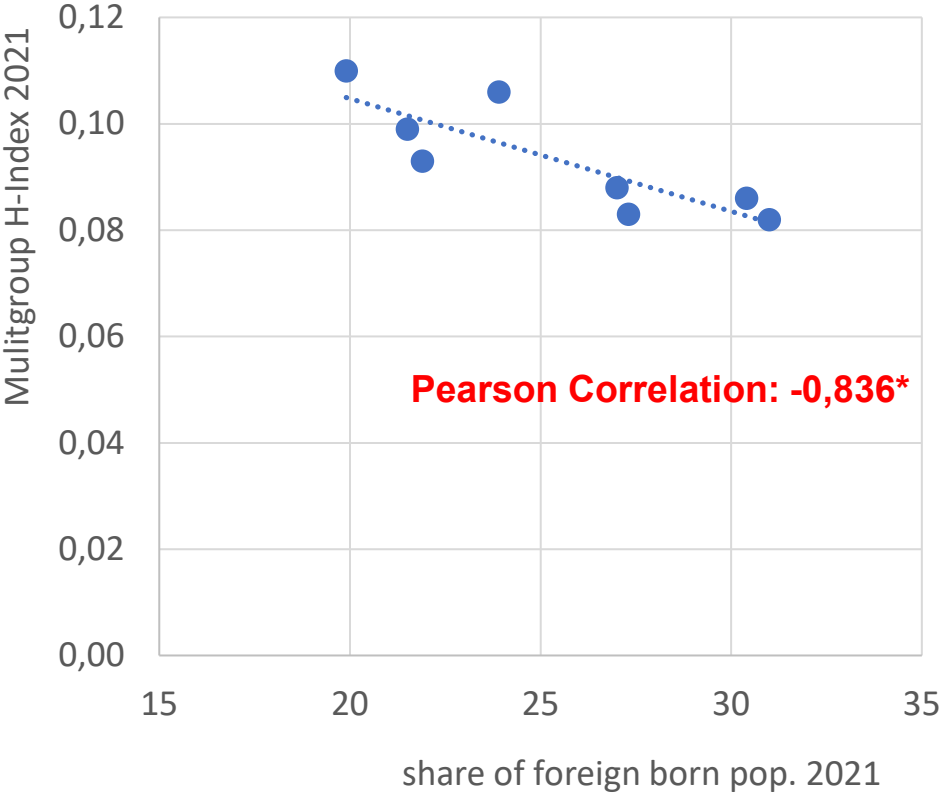
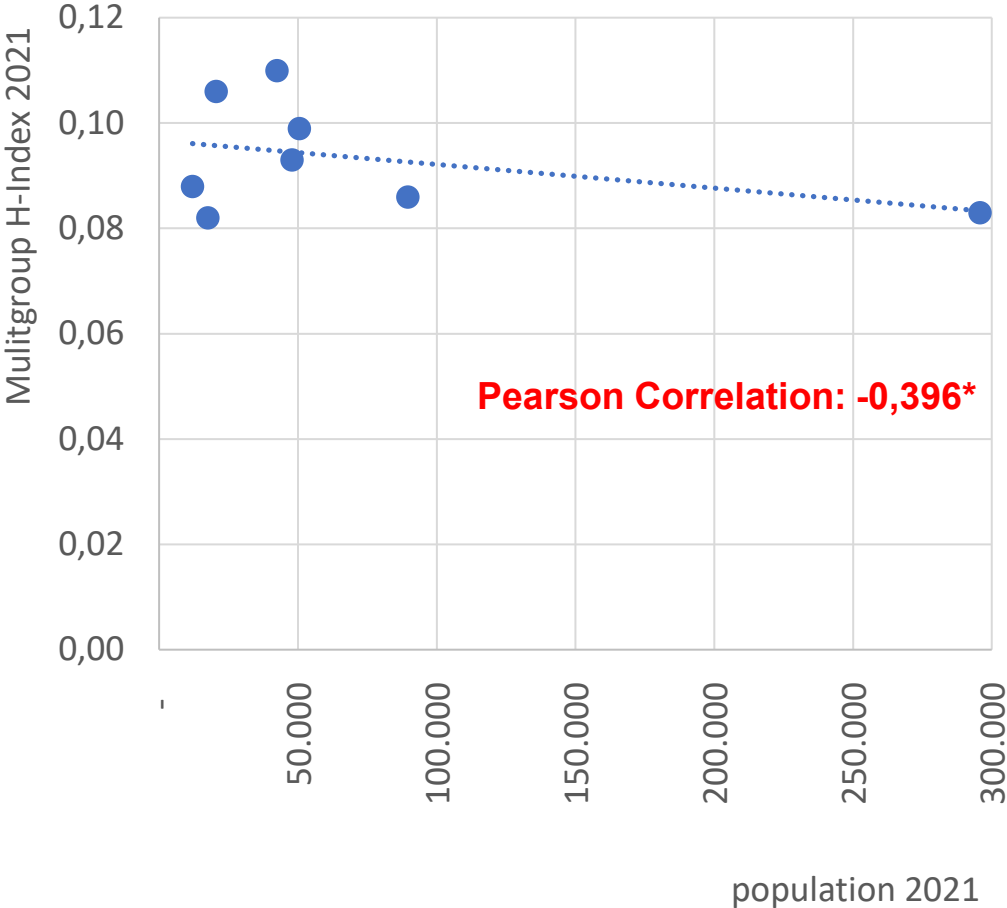
### I. Global Segregation





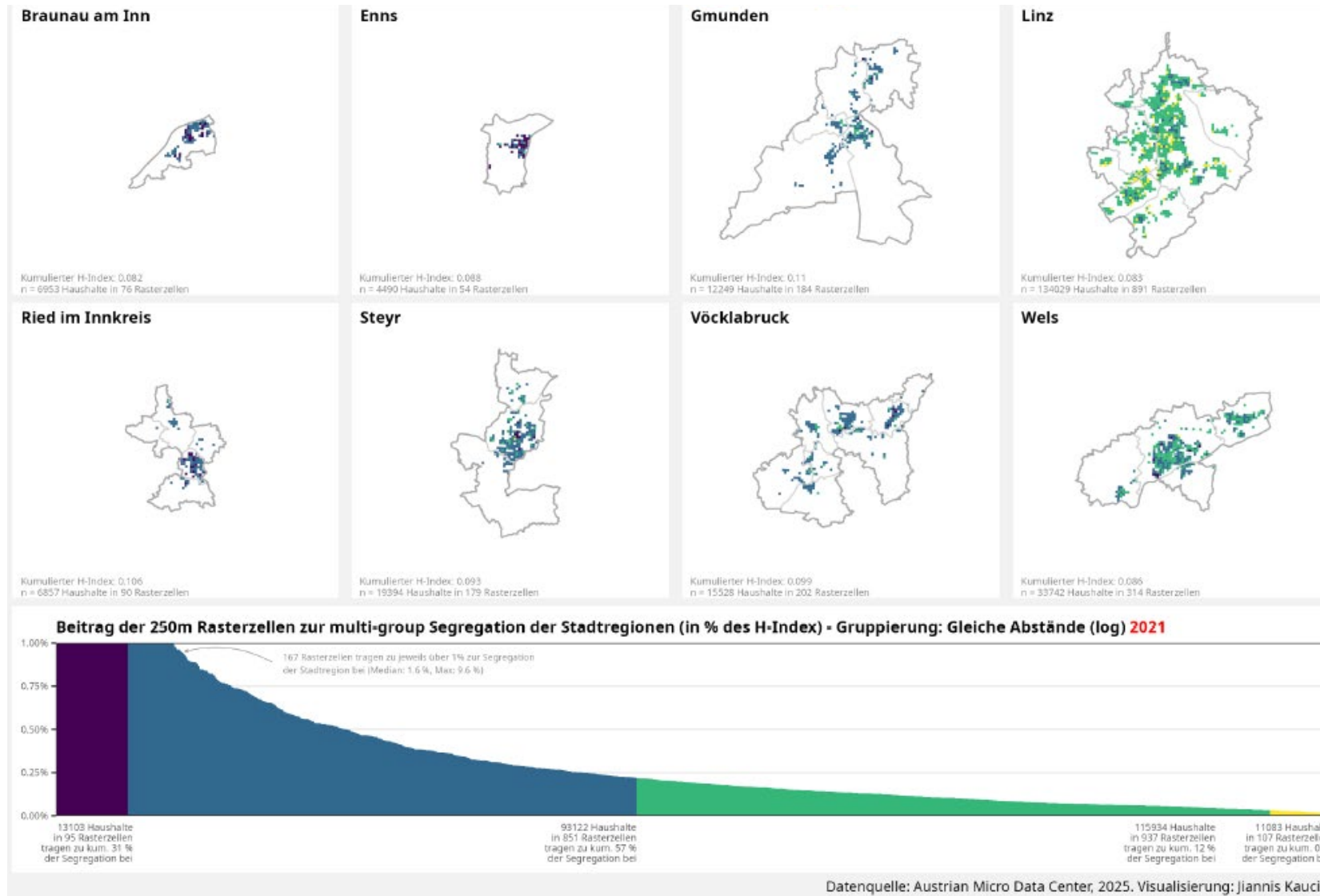
# 4. Results

## I. Global Segregation



## 4. Results

### II. Patterns of local Segregation



- Heterogenous, small-scale patterns in all eight cities
- Little number of grid cells with strong local segregation-indices (95 of 1.990)

Contribution of grid cells to ethnic segregation within the city region, 2021

## 4. Results

### III. Drivers of spatial distribution of ethnic groups

#### **Model 1** (all city regions)

- Housing market segments have a strong impact (e.g. LPHAs on Austrians, rental market on migrants from Turkey/Ex-Yu)
- High income and low pop. density has a strong impact on Austrian, negative on migrants

#### **Model 2** (individual city regions)

- Housing market segments have an impact in some cities (Linz, Steyr), but not in Braunau, Enns, Ried
- In general, impact of population density, income and educational level in all cities

## 5. Discussion and further Implications

(1) **Considerable ethnic segregation** in Upper Austrian city regions, no correlation with city size, decline of segregation & increase of diversity

(2) **Small-scale patterns** of ethnic segregation, **little number of grid cells are „drivers“ of segregation**

(3) Impact of **housing market segments on ethnic groups**, but strong variation between the city regions; population density has a stronger impact (single family house vs. multi-storeys)