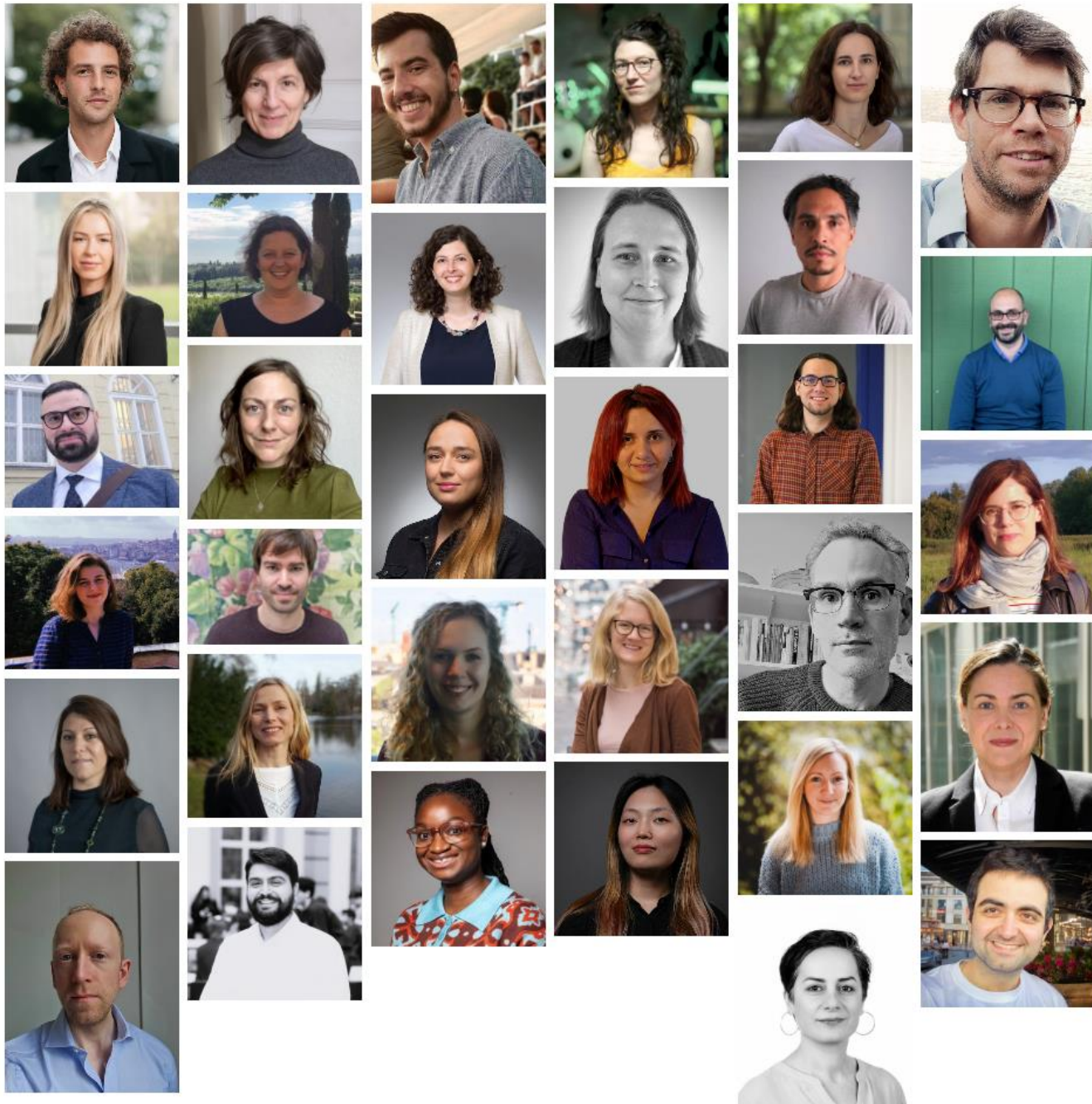


Regional differences in discrimination against Roma

Pieter-Paul Verhaeghe & Bert Leysen
Vrije Universiteit Brussels

The whole EqualStrength team

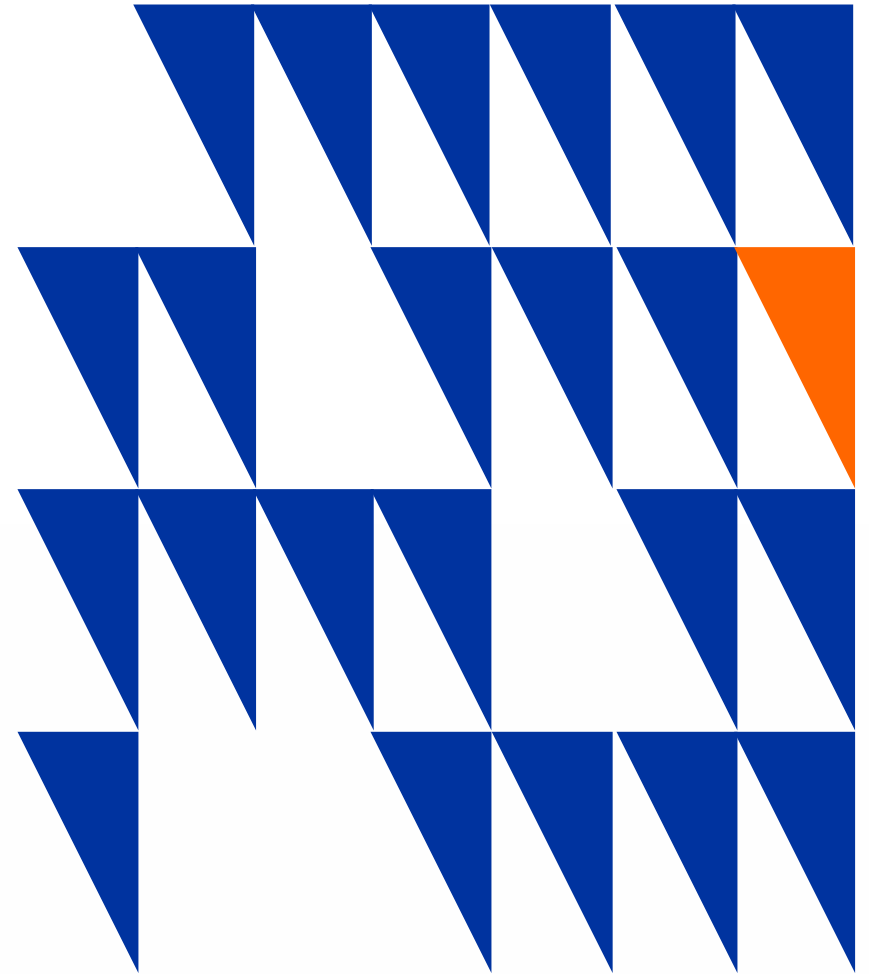




Science
is team
sport

Main research question:

How do regions differ in discrimination levels against Roma applicants in housing and labour markets?



Harmonized field experiment

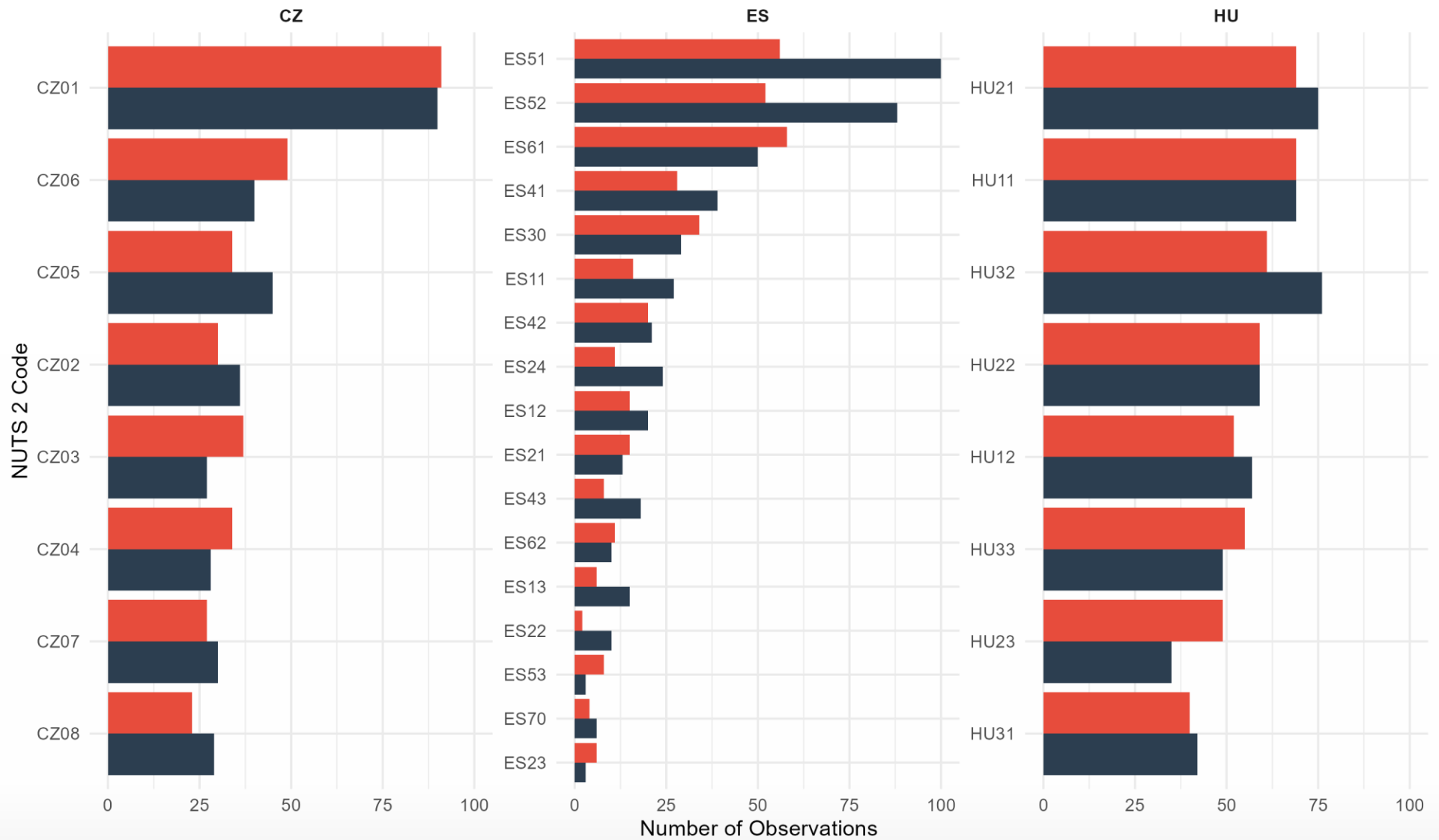
- **Roma discrimination:** Hungary, Czech Republic and Spain
- **Random assignment of Roma and majority applicant files**
 - Ethnic origin signaled by their names (and photos)
- **Labour market**
 - Nine occupations, ranging from lift truck driver to software developer
 - CZ: jobs.cz ; HU: hu.indeed.com & profession.hu; ES: es.indeed.com
- **Rental housing market**
 - Properties with at least two rooms
 - CZ: sreality.cz; HU; ingatlan.hu; ES: idealista.com

The background consists of a solid blue field on the left and a diagonal split on the right, where the top-right portion is orange and the bottom-left portion is blue.

NUMBER OF OBSERVATIONS AND EXPERIMENTAL BALANCE BY NUTS-2 REGIONS

Experimental Balance in Housing by NUTS 2 Region

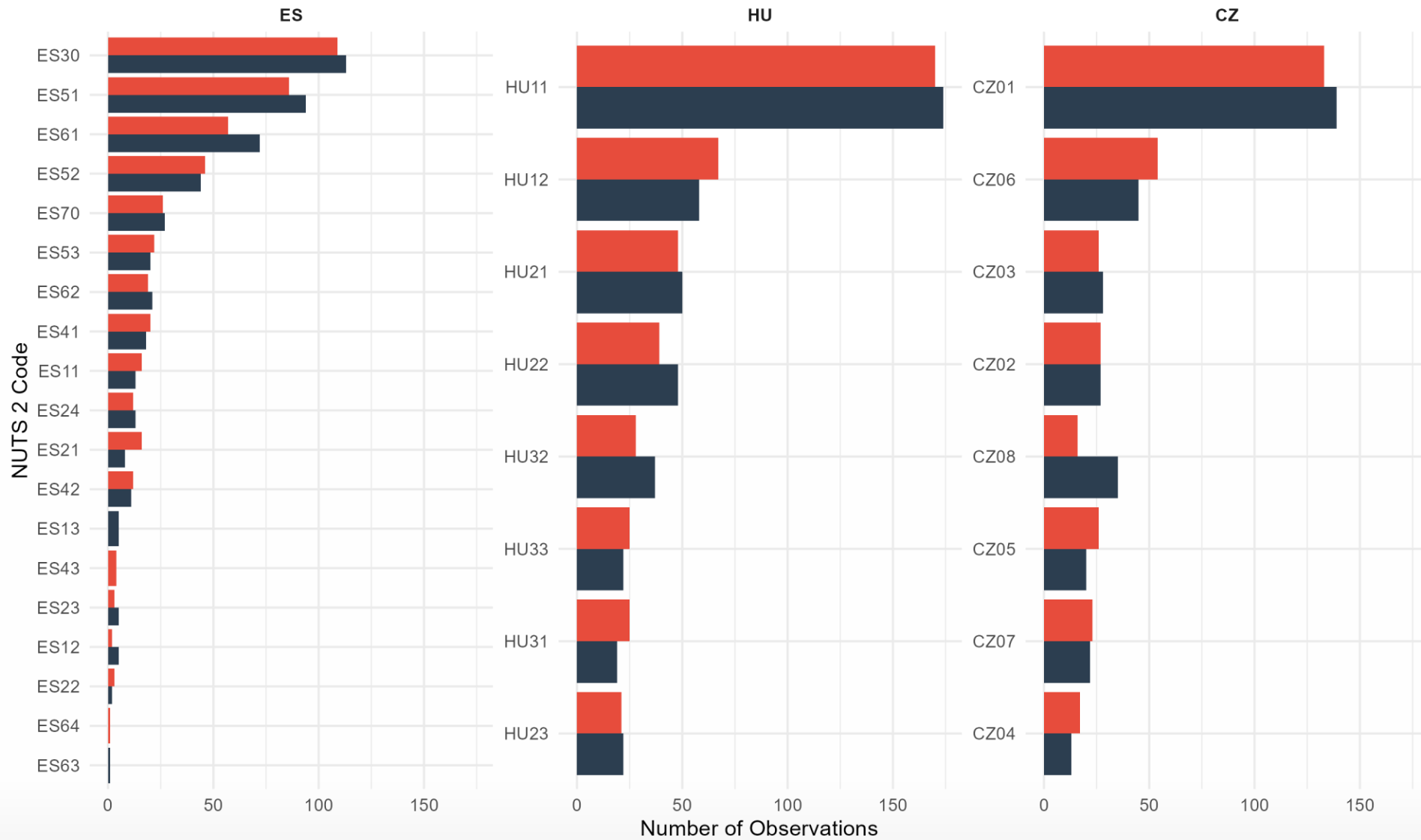
Comparison of Majority and Roma observation counts



Group Majority Roma

Experimental Balance in Labour by NUTS 2 Region

Comparison of Majority and Roma observation counts



Group ■ Majority ■ Roma

HOW DO DISCRIMINATION
LEVELS DIFFER BETWEEN
REGIONS?

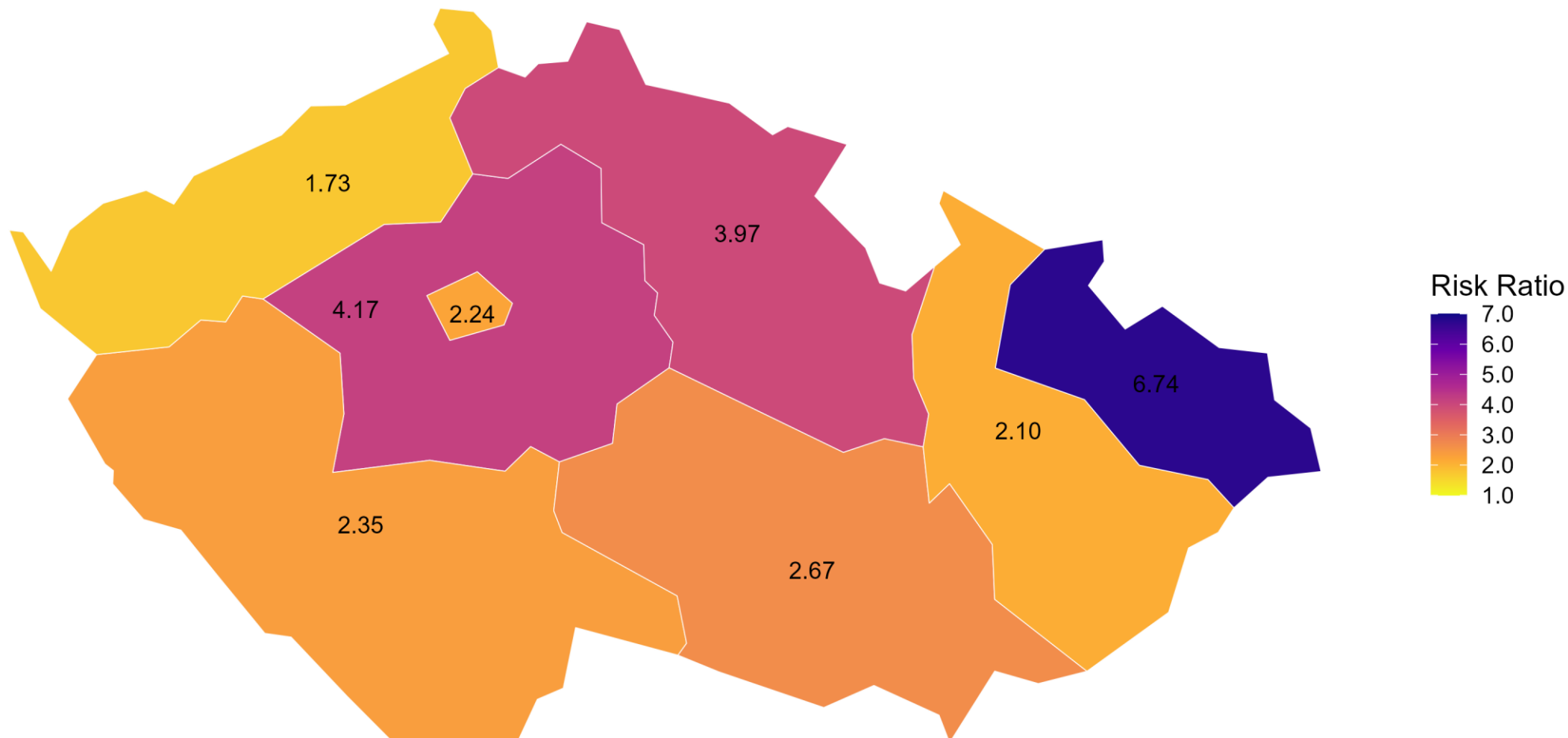
Discrimination levels

- **Main outcome:** invitation for a housing visit or job interview
 - Alternatives like 'any response', 'positive response' or 'rejection' tell the same story

- **Discrimination ratio:** $\frac{p_{majority}}{p_{Roma}}$

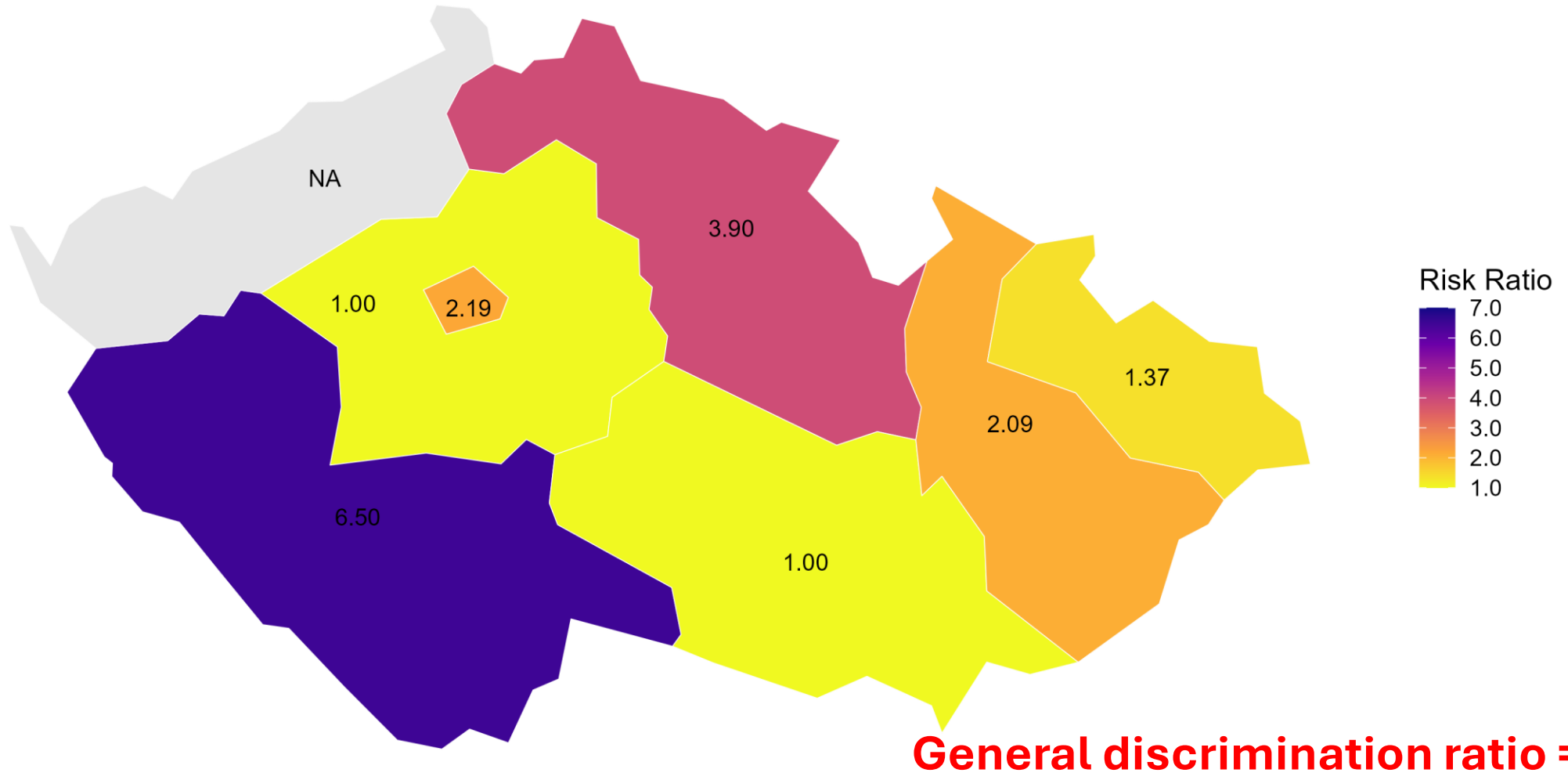
- **Example: Rental discrimination ratio for Hungary :** $\frac{p_{majority}}{p_{Roma}} = \frac{0,450}{0,236} = 1,91$

Discrimination ratio for getting an invitation in Housing per NUTS2 region in Czech Republic

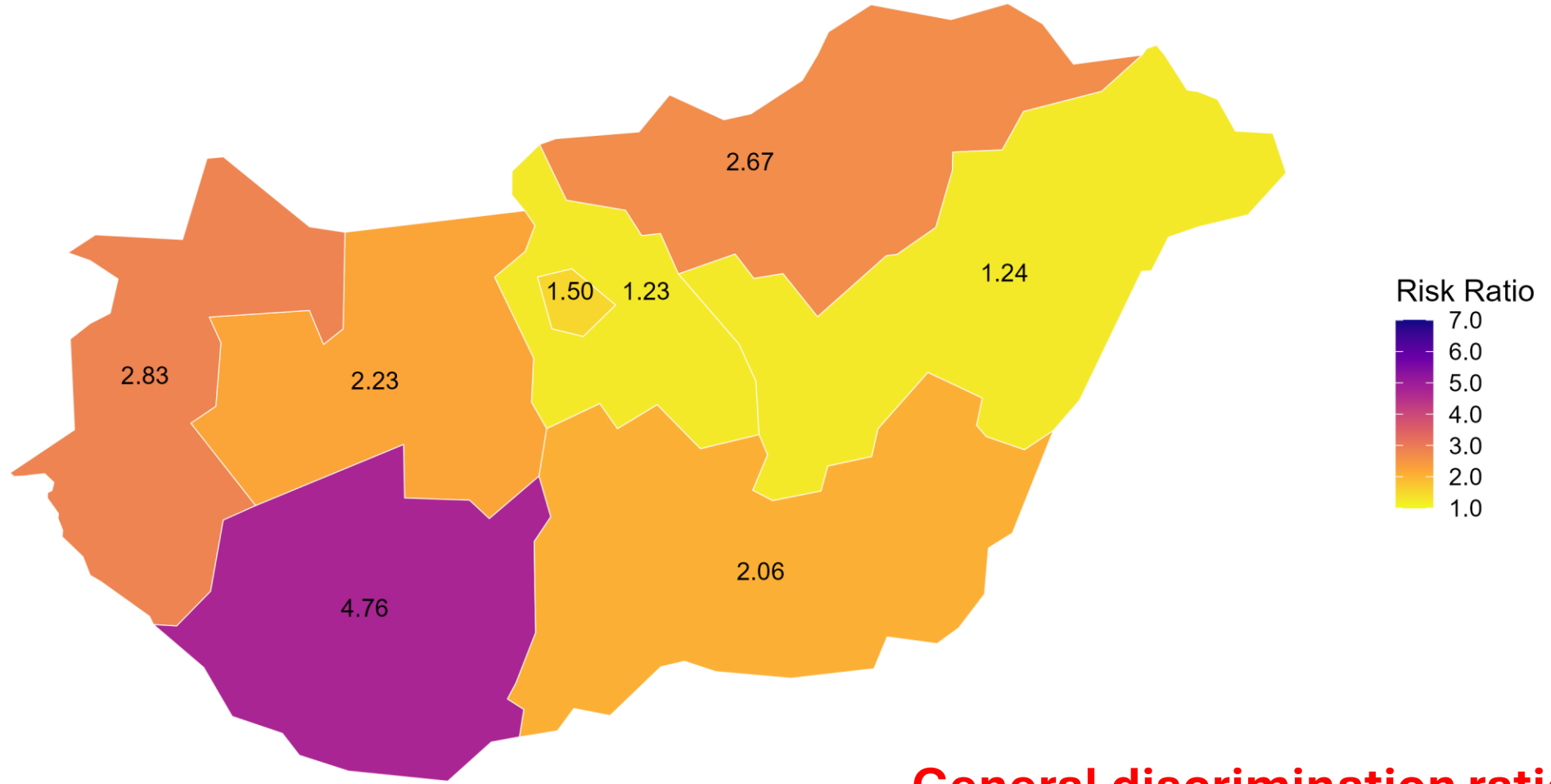


General discrimination ratio = 2,68

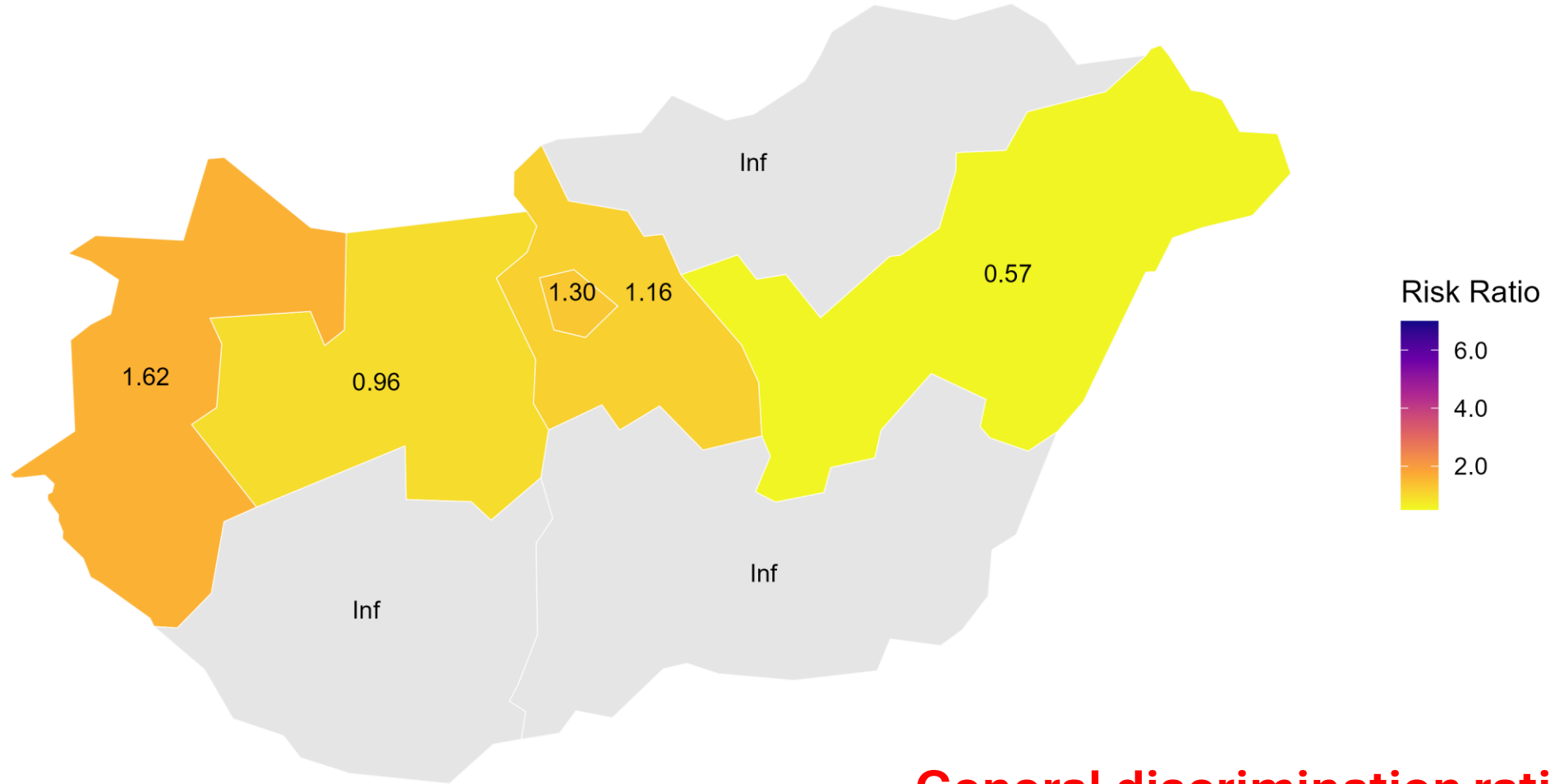
Discrimination ratio for getting an invitation in Labour per NUTS2 region in Czech Republic



Discrimination ratio for getting an invitation in Housing per NUTS2 region in Hungary

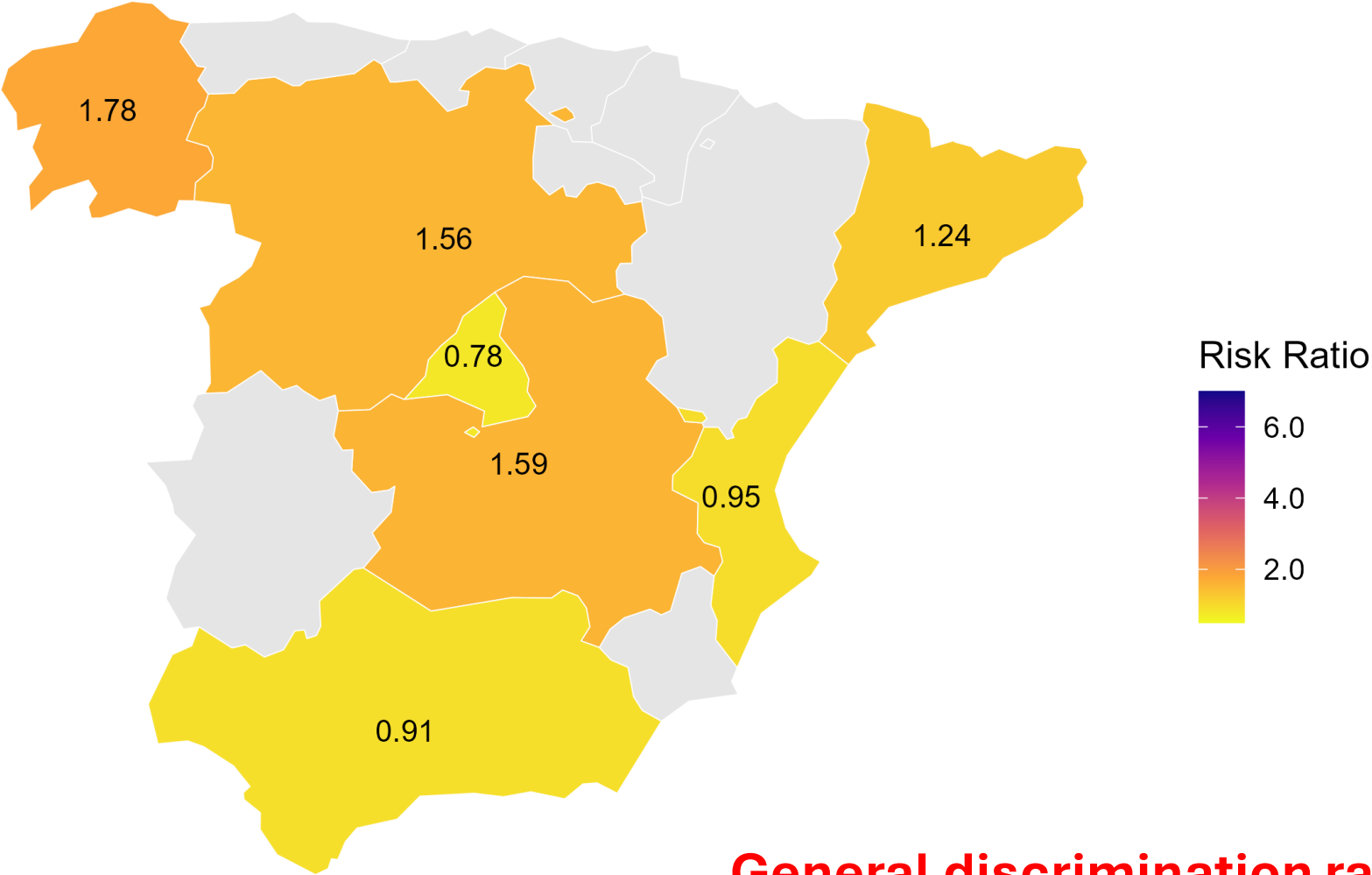


Discrimination ratio for getting an invitation in Labour per NUTS2 region in Hungary

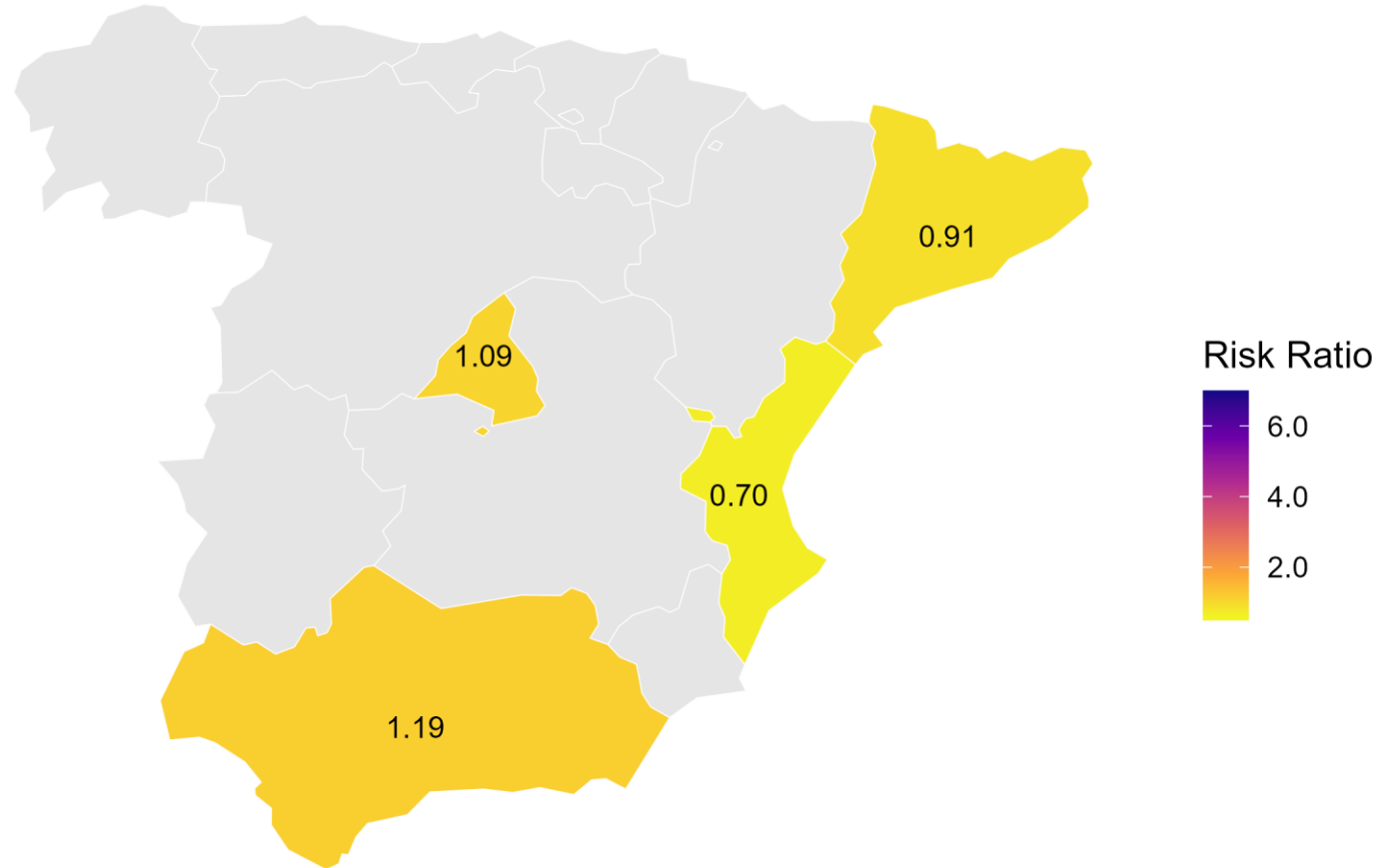


General discrimination ratio = 1,31

Discrimination ratio for getting an invitation in Housing per NUTS2 region in Spain



Discrimination ratio for getting an invitation in Labour per NUTS2 region in Spain

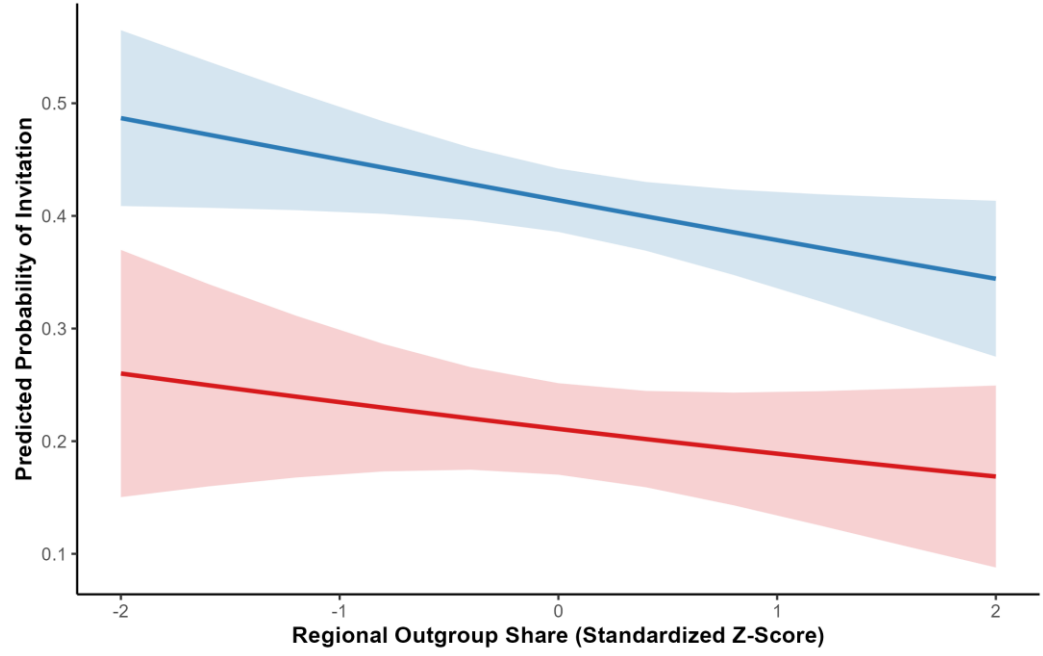


General discrimination ratio = 1,39

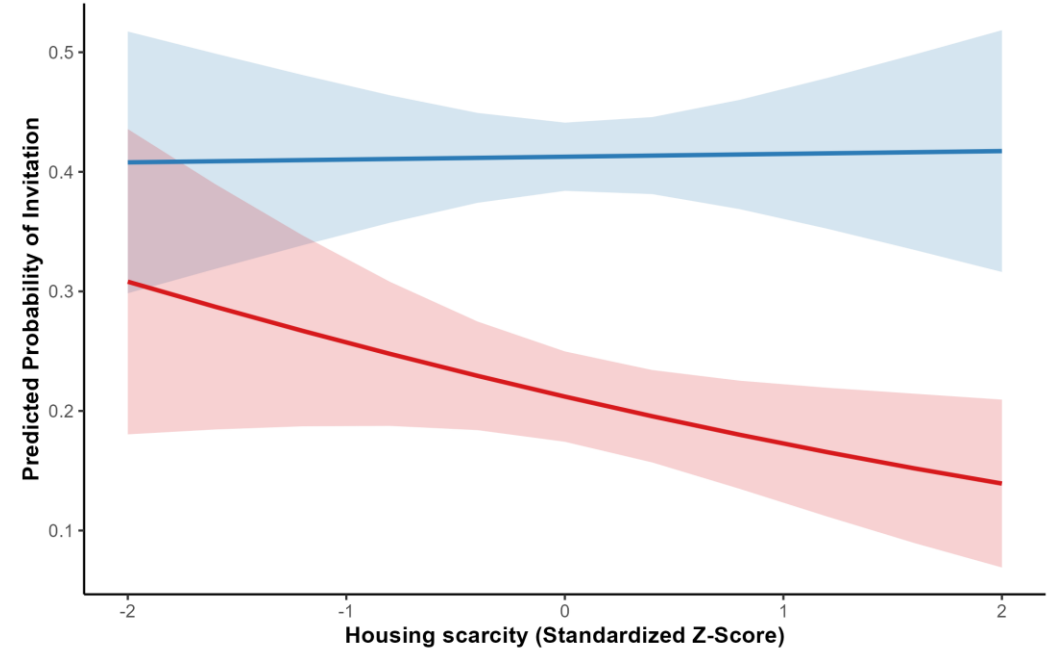
WHAT'S THE ROLE OF
REGIONAL CHARACTERISTICS?

Regional characteristics

- **Focus on housing market discrimination**
- **Outgroup share:** Share of Roma people (HU & CZ) or African/Muslim people (ES)
- **Unemployment:** Unemployment rate
- **Income:** Mean income levels - reversed
- **Housing scarcity:** Share of unoccupied dwellings - reversed
- **Multilevel logit regression models with cross-level interactions (+ fixed effects for countries)**



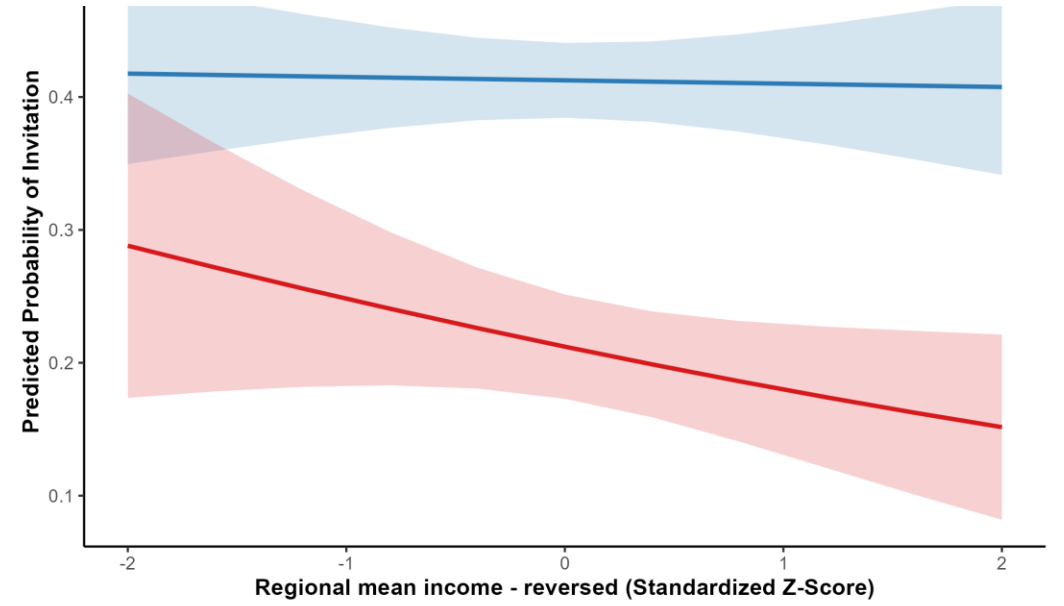
Applicant Status Majority Minority



Applicant Status Majority Minority



Applicant Status Majority Minority



Applicant Status Majority Minority

Conclusion

- Profound discrimination against Roma in housing and labour markets
 - In all countries and almost all regions
 - Higher levels of rental discrimination than hiring discrimination, especially in HU and CZ
- Substantial regional differences in discrimination levels
- More rental discrimination in regions with:
 - More housing scarcity (especially lower invitation probabilities for Roma in regions with much housing scarcity)
 - Low average income levels (especially lower invitation probabilities for Roma in low-income regions)
 - Low unemployment levels (especially lower invitation probabilities for the majority in regions with high unemployment)
- General lower invitation rates in regions with higher (visible) outgroup shares

Caveats

- **Limitations to harmonizing a cross-national experiment**
 - Different types of housing and labour markets
 - Different operationalizations of 'outgroup share'
- **Statistical limitations**
 - Only 23 NUTS2 regions with sufficient observations → NUTS3 regions?



QUESTIONS OR THOUGHTS?



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<https://pieterpaulver.wordpress.com/>

Table 1 Inclusion Criteria for Rental Properties by Country

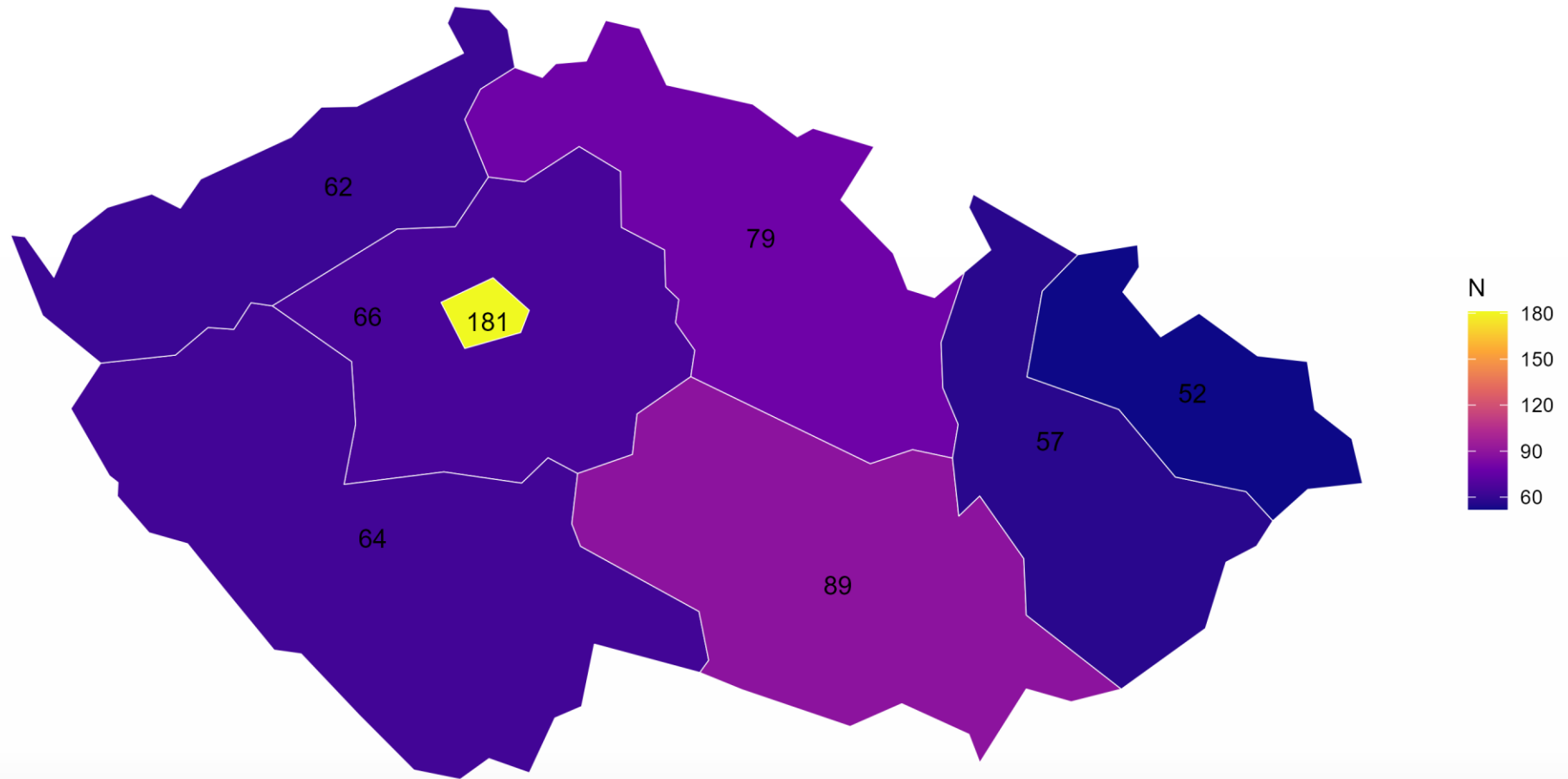
COUNTRY	RENTAL PRICE THRESHOLD APPLIED	MINIMUM SIZE REQUIREMENT
<i>BELGIUM</i>	EUR 311 – EUR 3 109	1 bedroom and 1 living space
<i>CZECHIA</i>	CZK 3 800 – CZK 38 000 (ca. EUR 157 – EUR 1 570)	2 rooms
<i>GERMANY</i>	EUR 278 – EUR 2 778	30 square meters, 2 rooms
<i>HUNGARY</i>	HUF 31 000 – HUF 304 000 (ca. EUR 82 – EUR 800)	30 square meters and 2 rooms
<i>SPAIN</i>	EUR 186 – EUR 1 800	40 square meters and 2 rooms
<i>SWITZERLAND</i>	CHF 560 – CHF 6 000 (ca. EUR 613 - EUR 6 566)	35 m2 and 2,5 rooms
<i>THE NETHERLANDS</i>	EUR 321 – EUR 3 206	30 square meters and 1 bedroom
<i>GREAT BRITAIN</i>	GBP 445- GBP 3 000 (ca. EUR 509 – EUR 3 433)	2 bedrooms

Table 1. *Occupations and their characteristics*

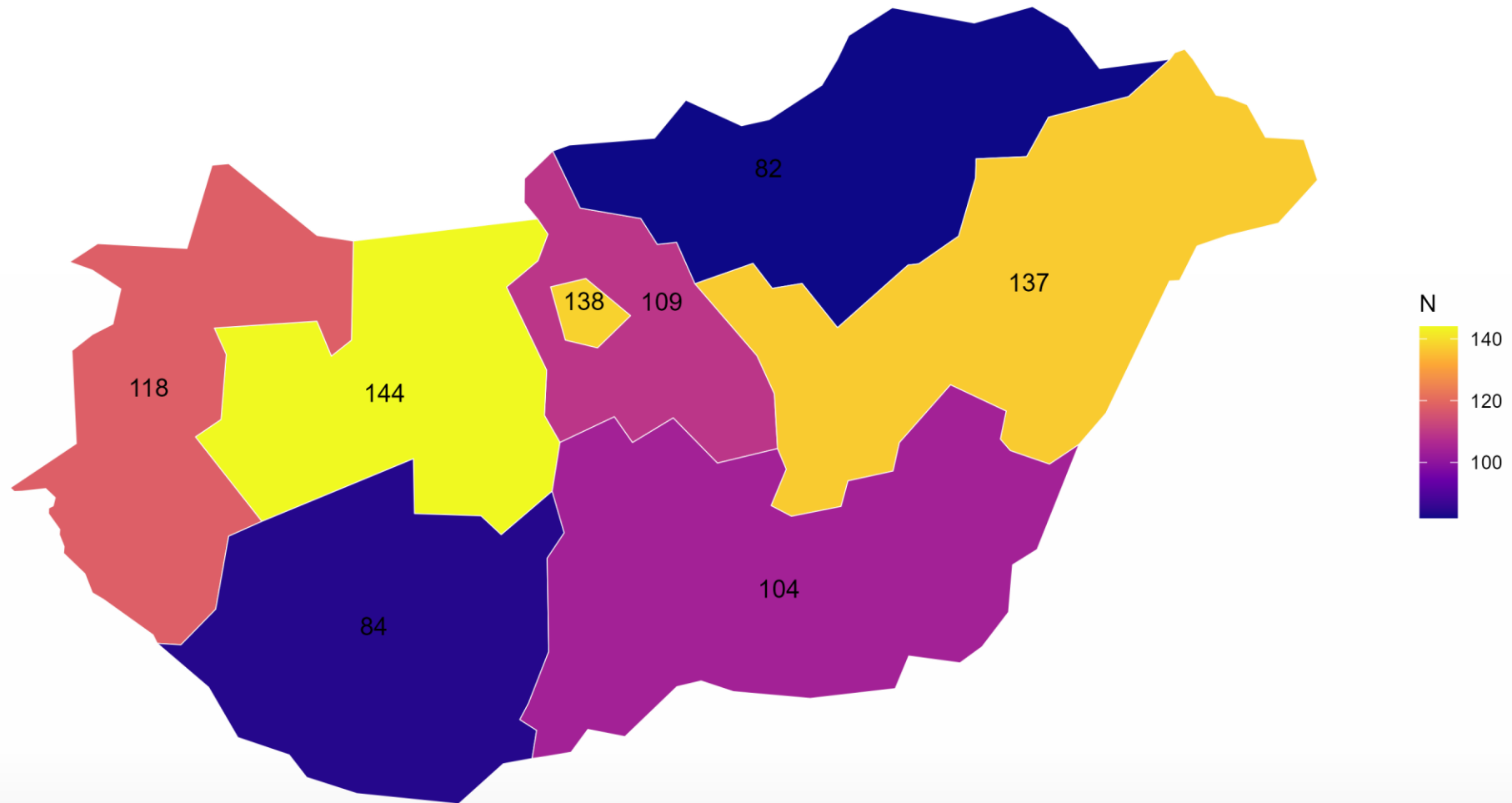
Occupation	ISCO-08	Education level	Customer contact	GEMM occupation
Cook	5120	Low	Low	Yes
Electrician	7412	Low	Low	Yes
Receptionist	4224, 4226	Medium	High	Yes
Payroll clerk	4313	Medium	Low	Yes
Store assistant	5223	Low	High	Yes
Sales representative	2431; 2433; 2434; 3322	High	High	Yes
Software developer	2512; 2514	High	Low	Yes
Communications manager	2432	High	High	No
Lift truck driver	8344	Low	Low	No

	country	ethnic_groups	n	prop
	<i><fct></i>	<i><fct></i>	<i><int></i>	<i><dbl></i>
1	CZ	Majority group	329	0.505
2	CZ	Roma	322	0.495
3	ES	Majority group	472	0.510
4	ES	Roma	454	0.490
5	HU	Majority group	430	0.504
6	HU	Roma	423	0.496

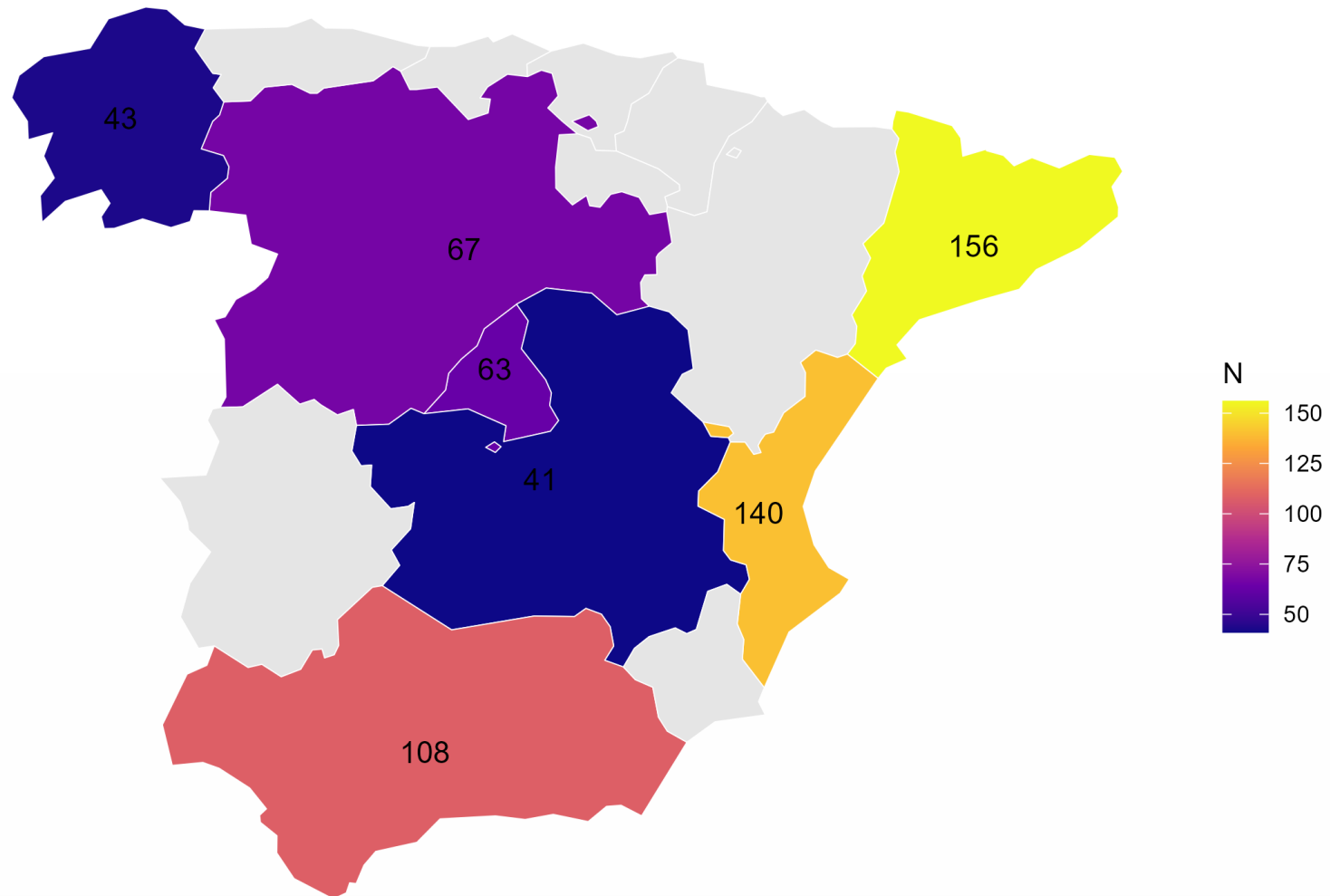
Number of observations in Housing per NUTS2 region in Czech Republic



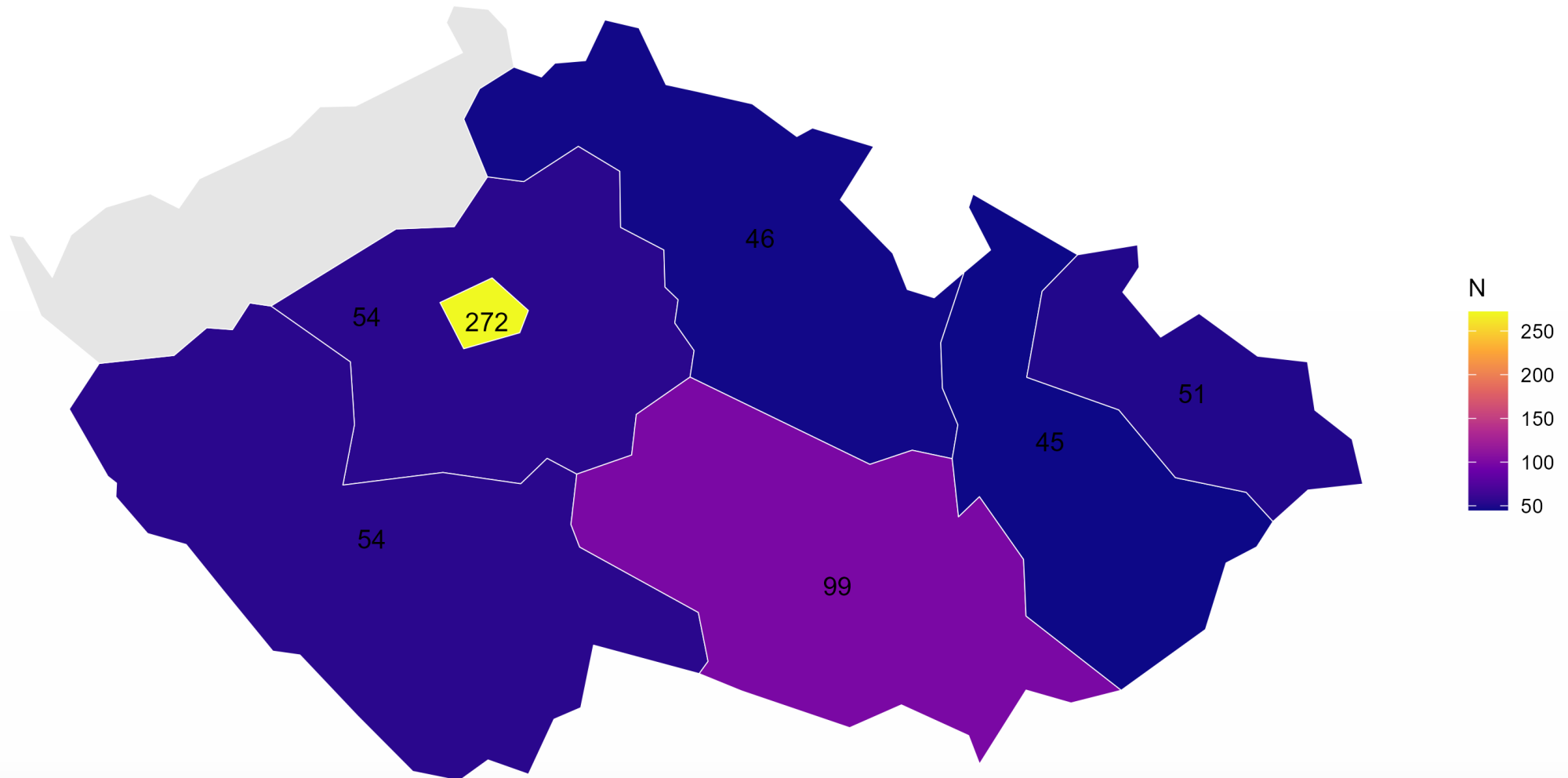
Number of observations in Housing per NUTS2 region in Hungary



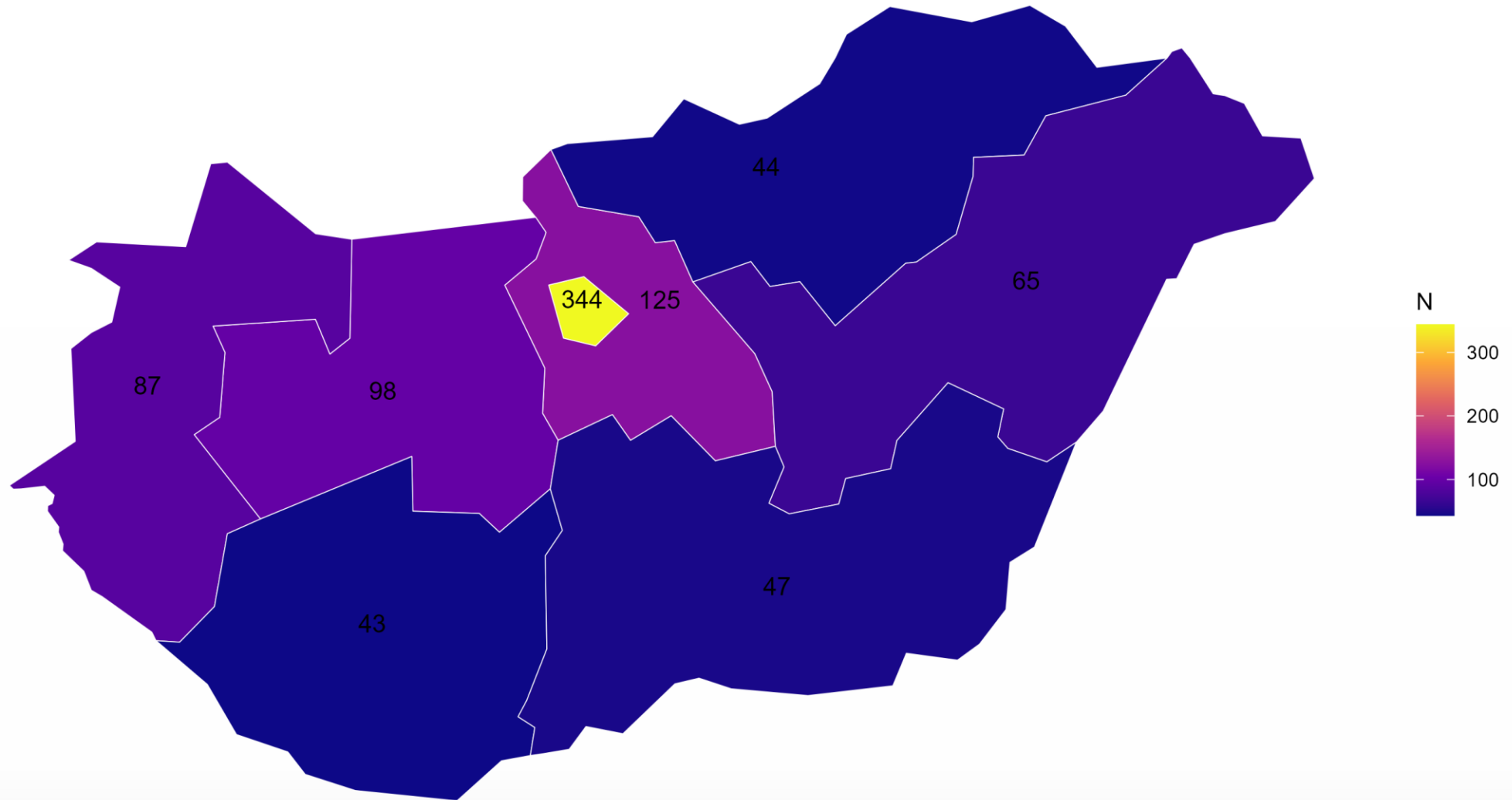
Number of observations in Housing per NUTS2 region in Spain



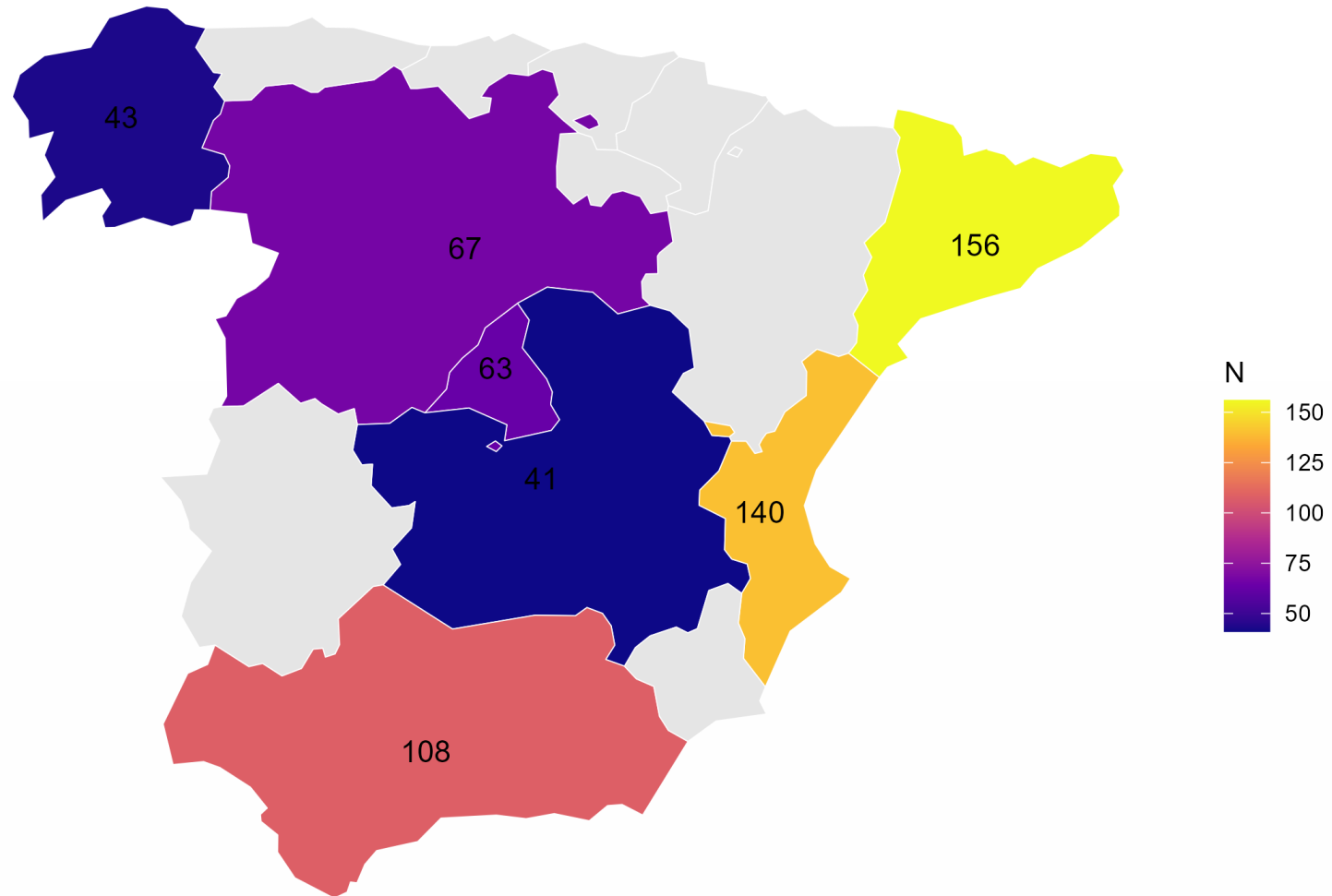
Number of observations in Labour per NUTS2 region in Czech Republic



Number of observations in Labour per NUTS2 region in Hungary



Number of observations in Housing per NUTS2 region in Spain



The associations between rental and hiring discrimination

