WEALTHSCAPES:
The spatial polarization of housing markets and divided access to housing wealth

Rowan Arundel

UNIVERSITY OF AMSTERDAM

Outline

- My research focus

- *Wealthscapes* project

- Research on Netherlands & Spain

- Conclusions

My research focus

Housing inequalities

- Housing as reflecting and amplifying other inequalities
  - Wealth inequalities
  - Inter and intra-generational inequalities
  - Labour market inequalities
  - Spatial inequalities

- Drivers of growing housing inequalities
  - Financialization / commodification
  - Welfare regimes and welfare restructuring
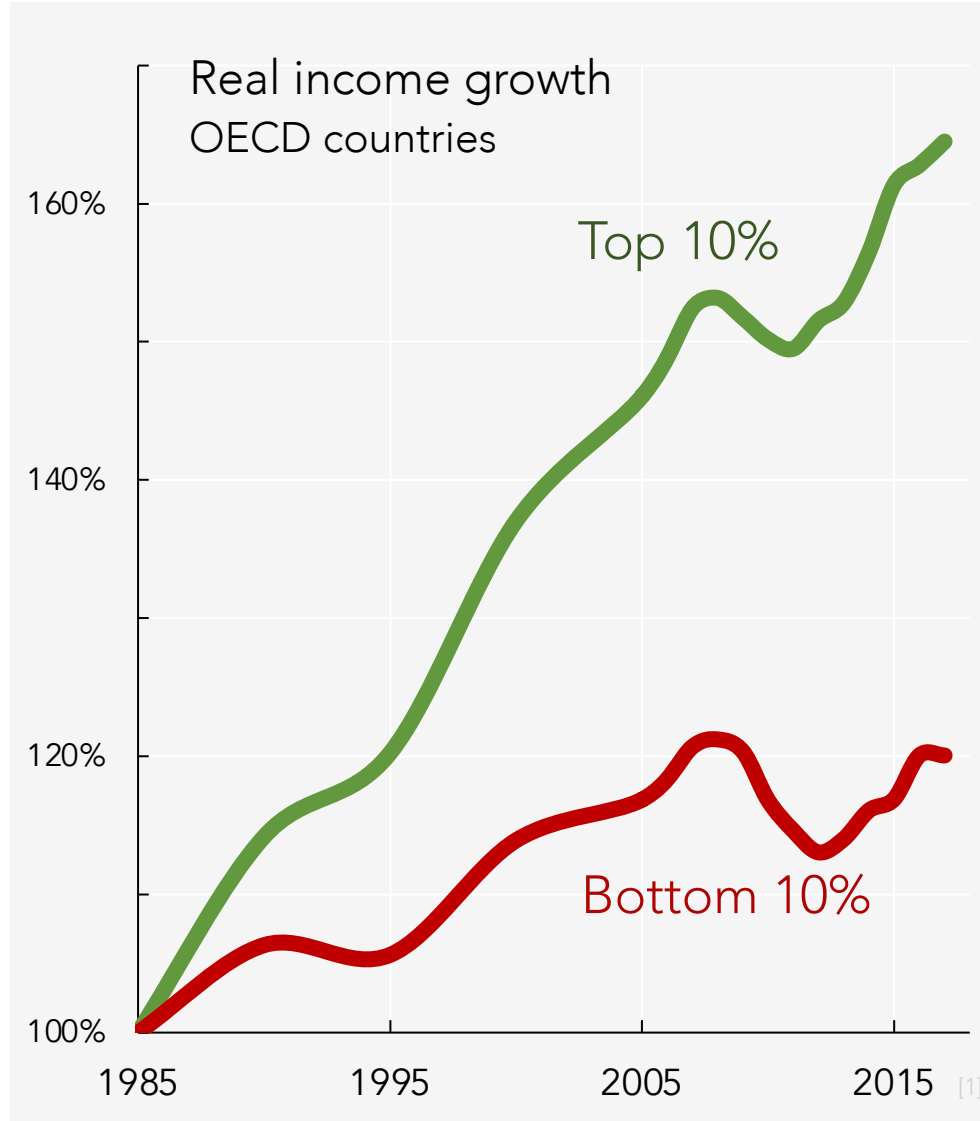
My research foci
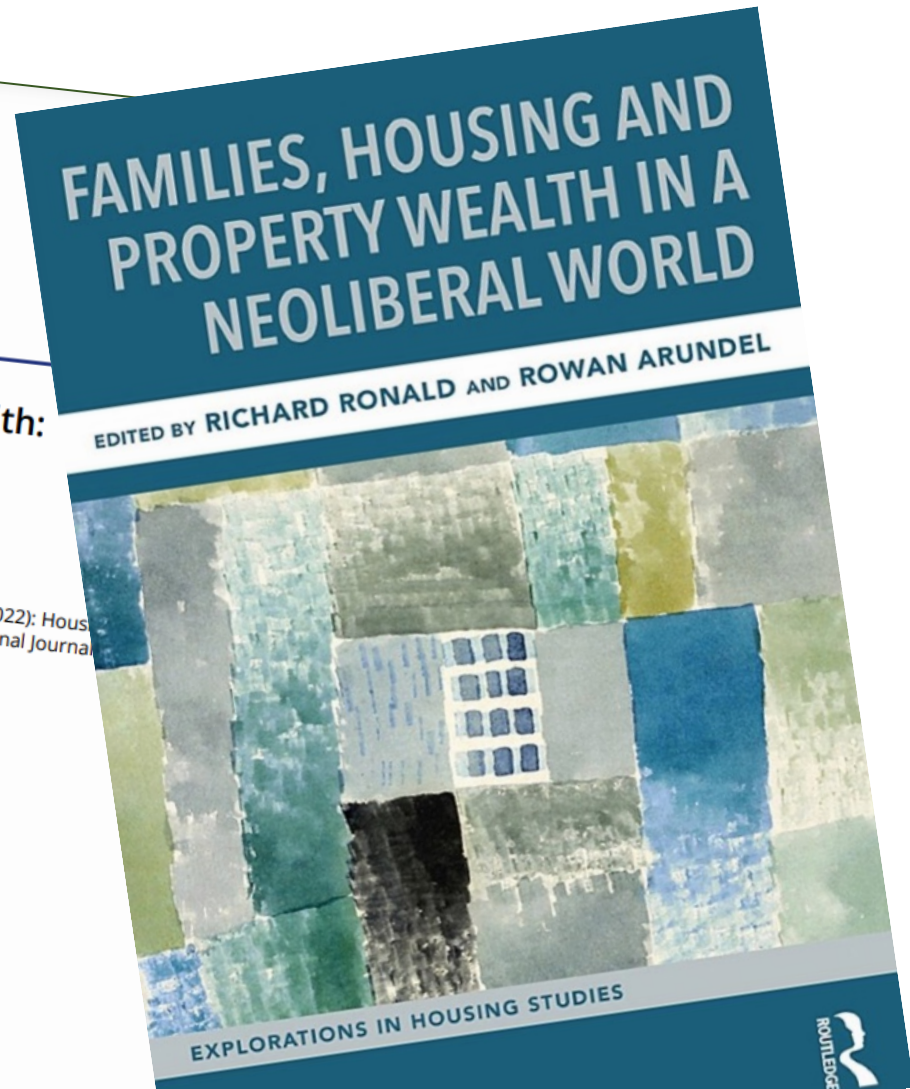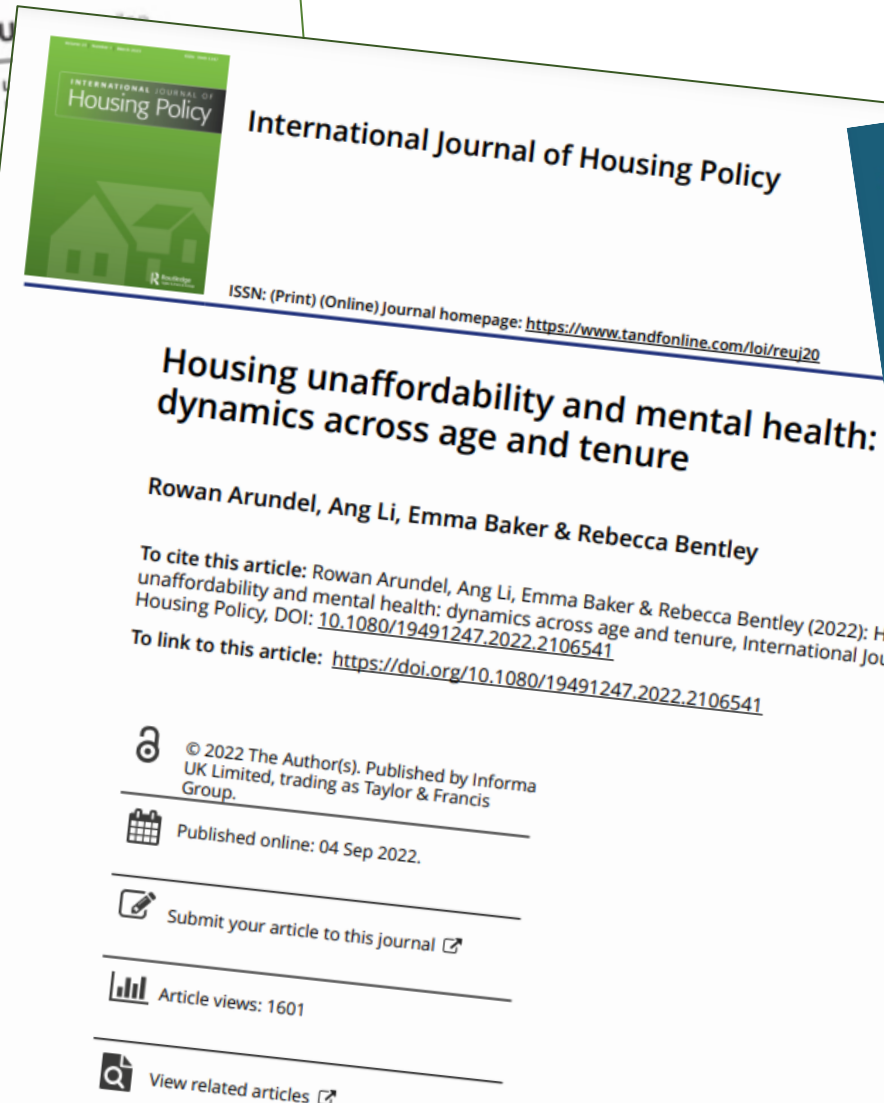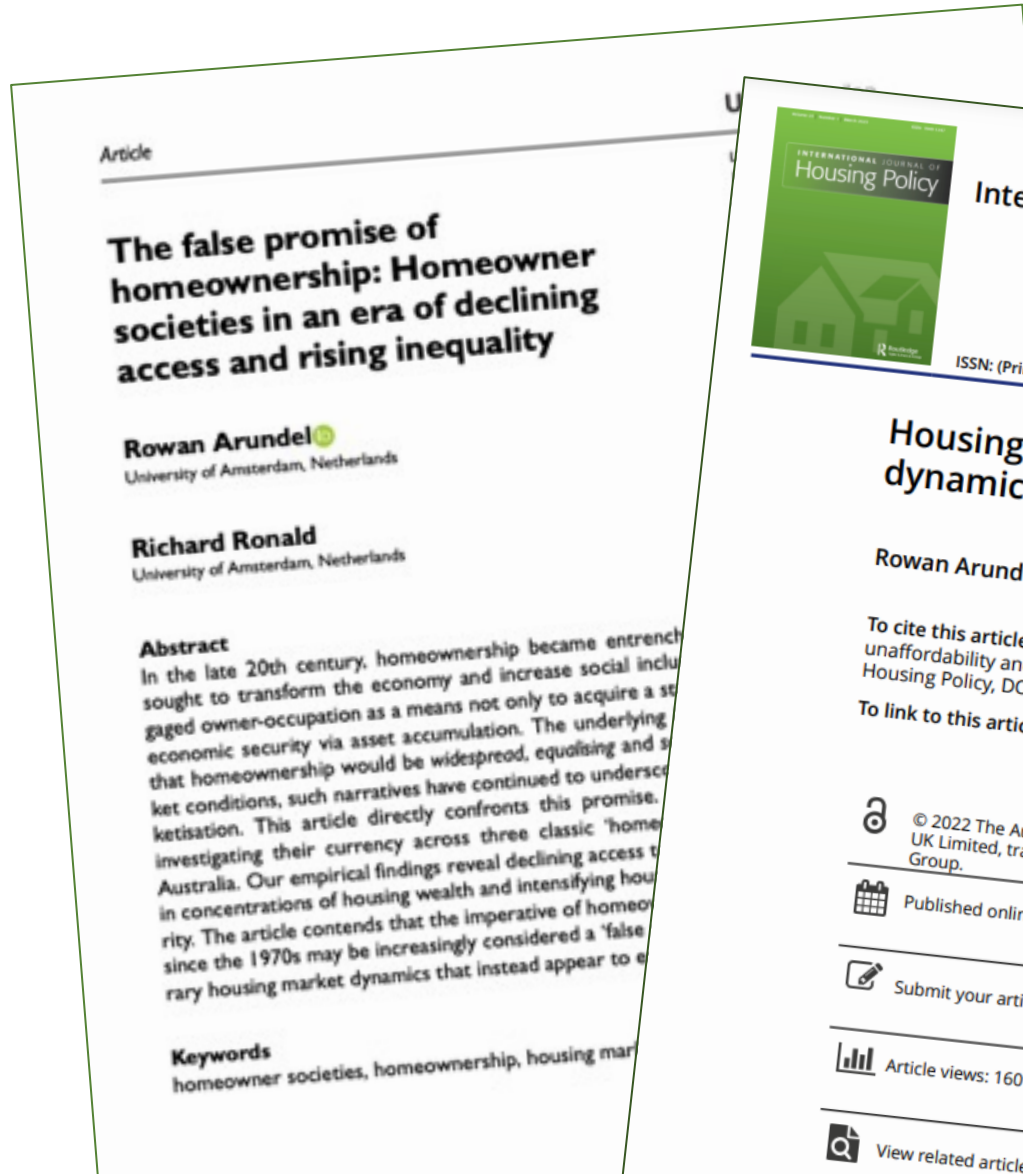
WEALTHSCAPES:
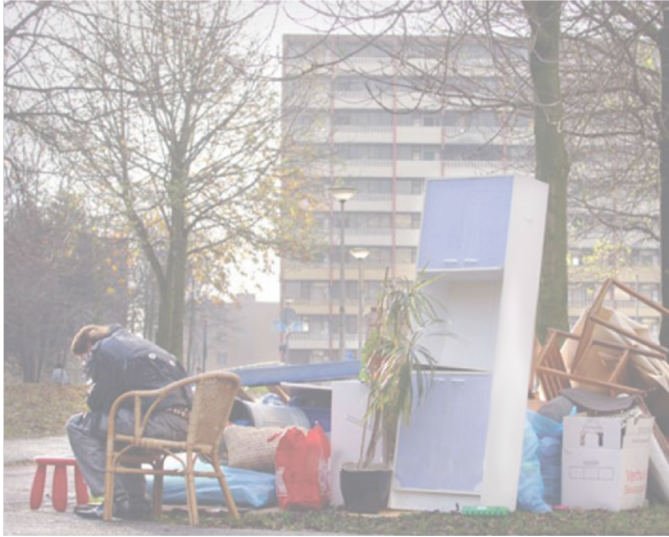# The spatial polarization of housing markets and divided access to housing wealth

Rowan Arundel

Context: a crisis of rising inequality

Real income growth
OECD countries

160%

140%

120%

100%

Top 10%

Bottom 10%

1985   1995   2005   2015   [1]

Top 10%'s share

Bottom 10%'s

From income to wealth divides

Top 10%'s
WEALTH
share
OECD countries

OECD countries [3]

Bottom 10%'s

Premise 1: Housing central to wealth & inequality

Average household assets
% of income - EU15

[3] EcoWin, Eurostat, Macrobond (2016)
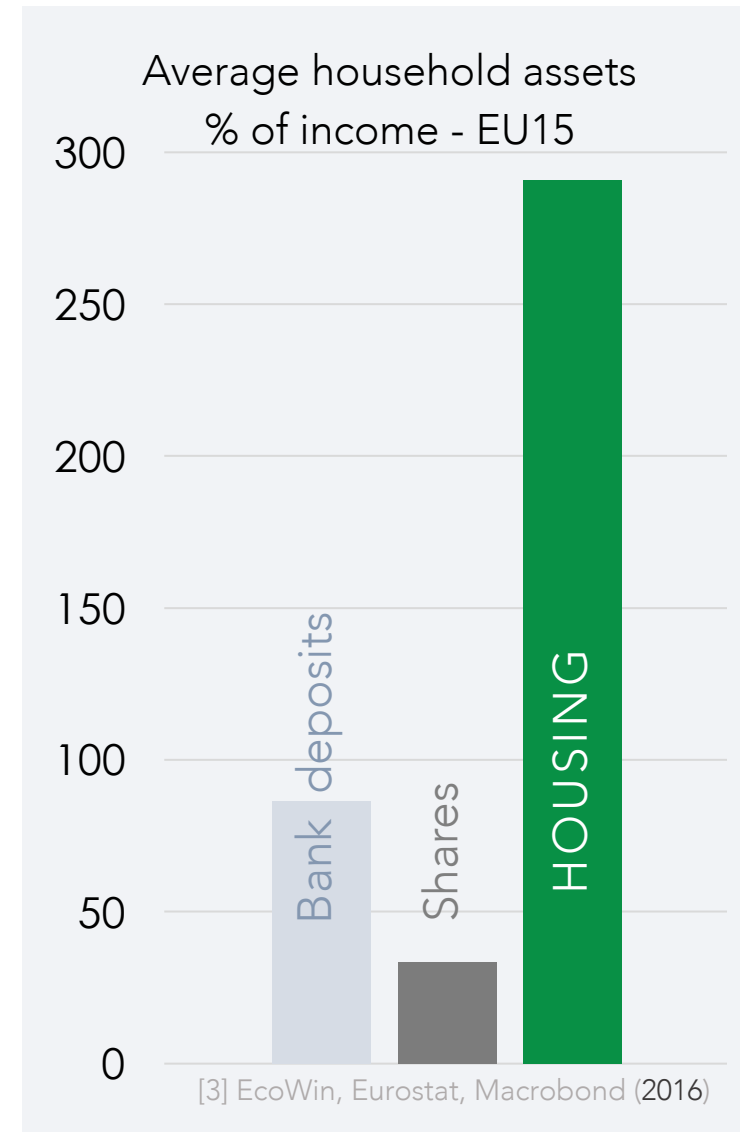
Space Matters

• Not singular market but multitude of *spatially*-distinct submarkets

• *Where* one enters housing market key for wealth accumulation
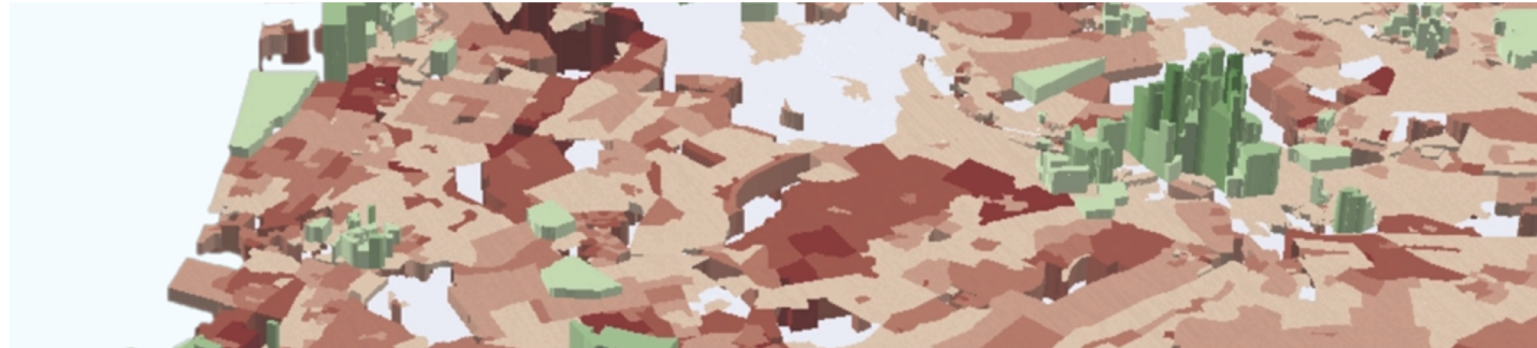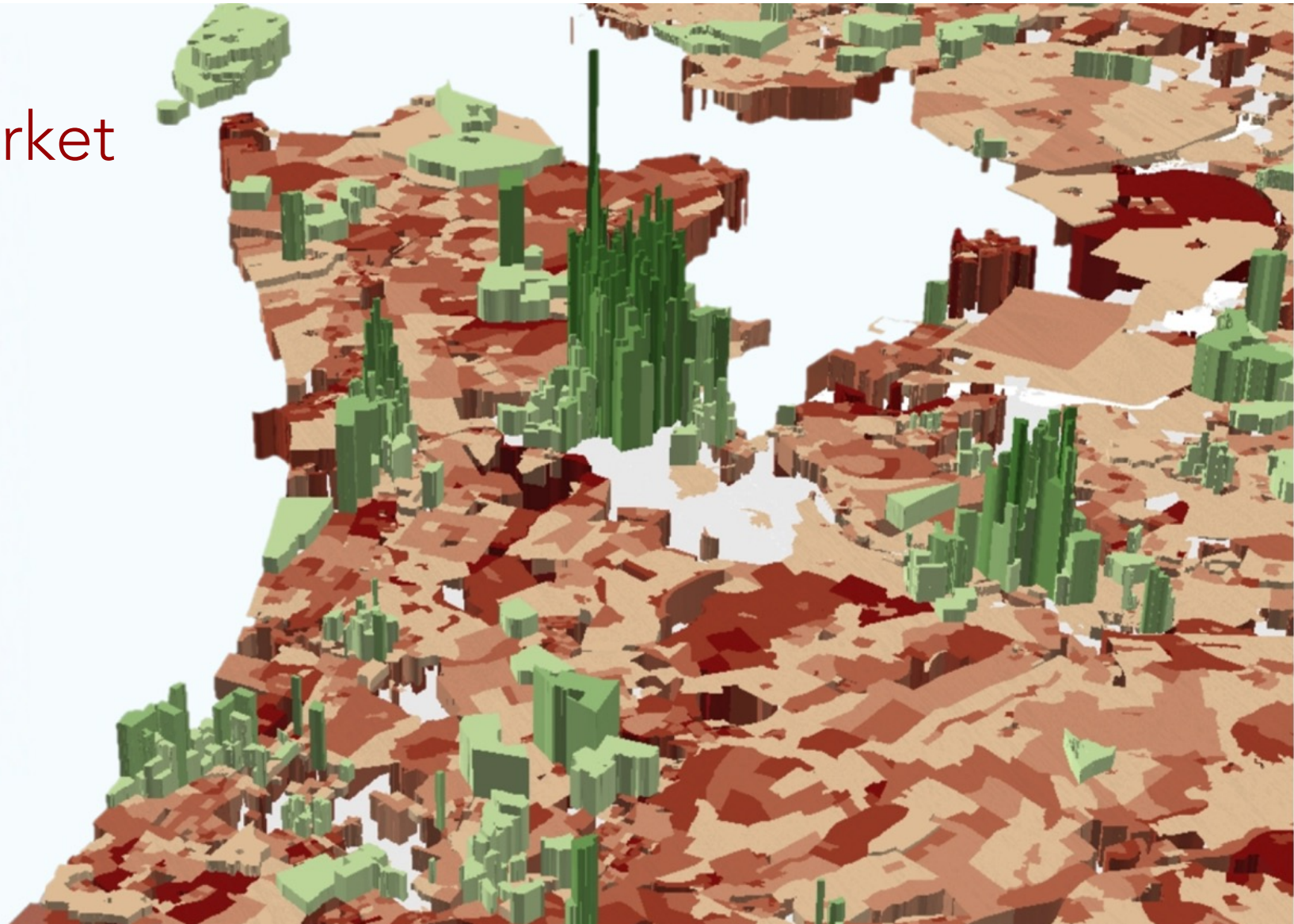
Growing housing market
spatial polarization?

Growing housing market spatial polarization?

- Financialization/commodification
  - Increased flows of capital into housing
  - But, also increasingly uneven

- Uneven development
  - Prioritizing booming centres

- Segregation/gentrification (in cities)
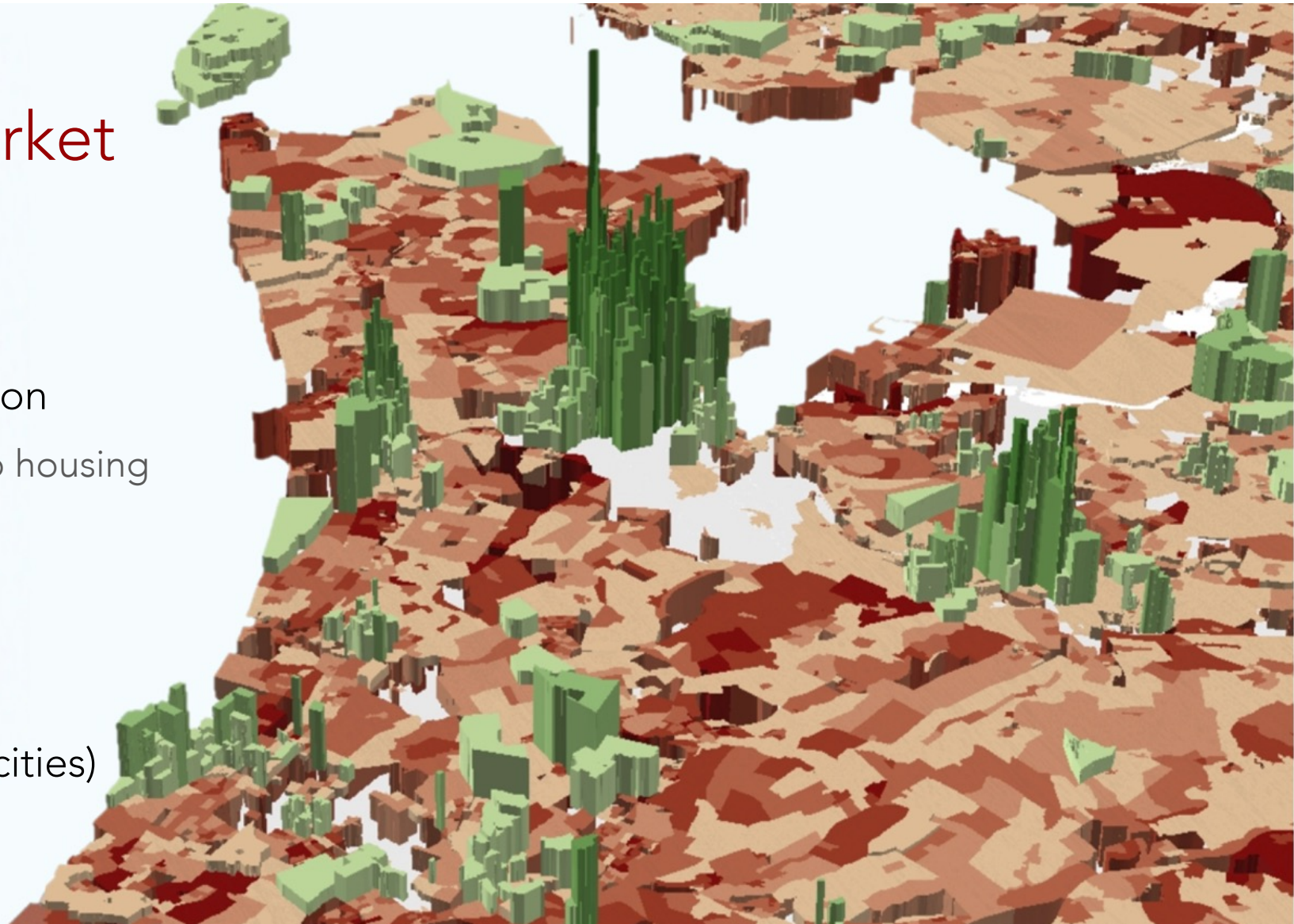
Premise 3: Divided access to housing markets

- Rising **labour market inequality**

- Rising *Inter & Intra-generational inequalities*

  ➢ Labour market position & parental wealth *increasingly* central to structuring access to housing market

WEALTHSCAPES PROJECT

Housing wealth

Spatial Polarization
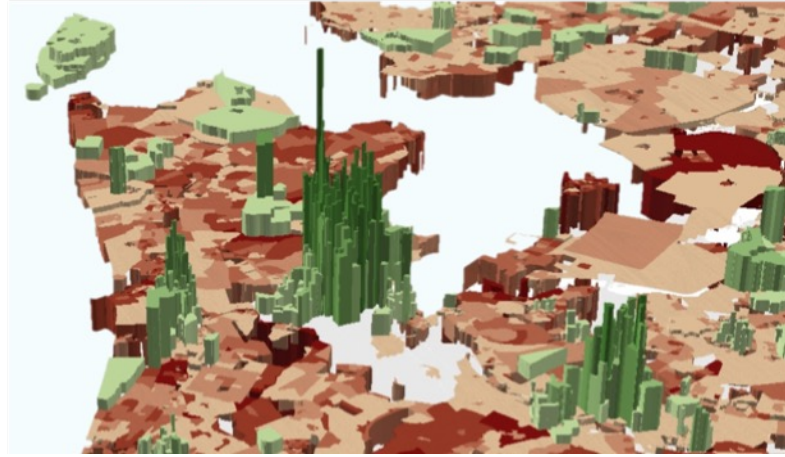
Divided Access

» How does the spatial polarization of housing markets interact with divided housing access in driving growing wealth inequalities?

WEALTHSCAPES PROJECT

Cross-country comparative research

Measuring spatial polarization

What are the contemporary dynamics of housing market spatial polarization?

WP1

WP2

WP3
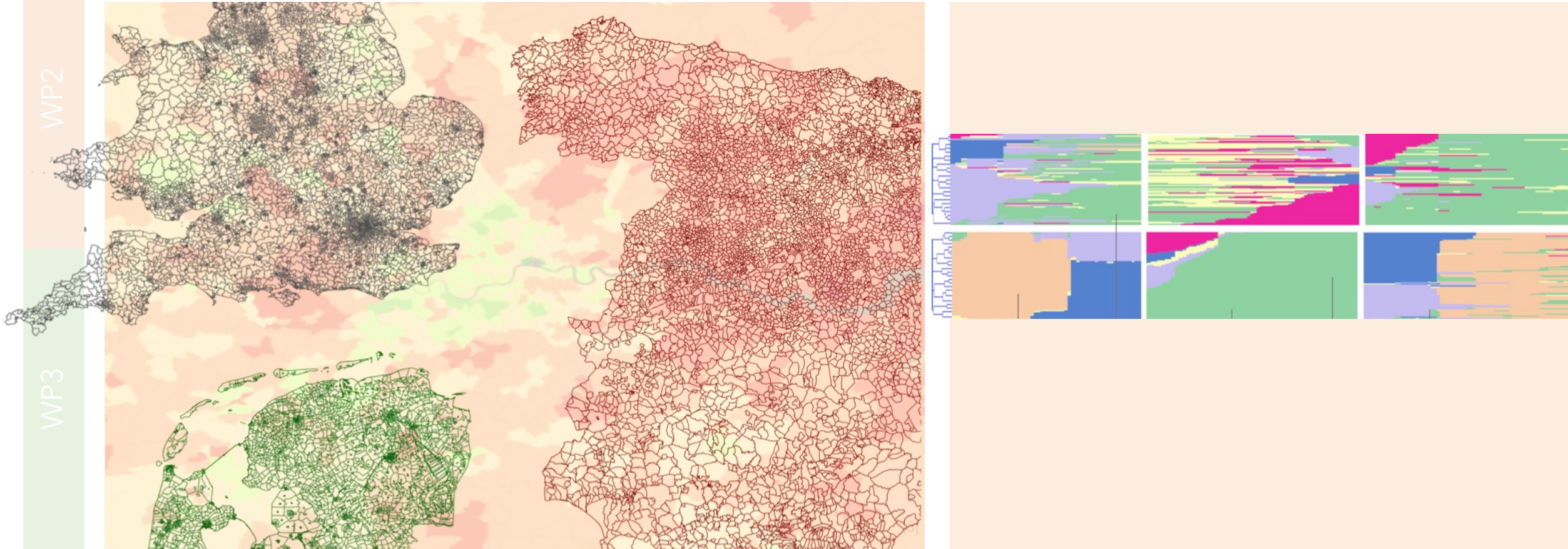
2) Explaining spatial inequality

How is housing market spatial polarization explained by macro- and micro-level explanatory factors?
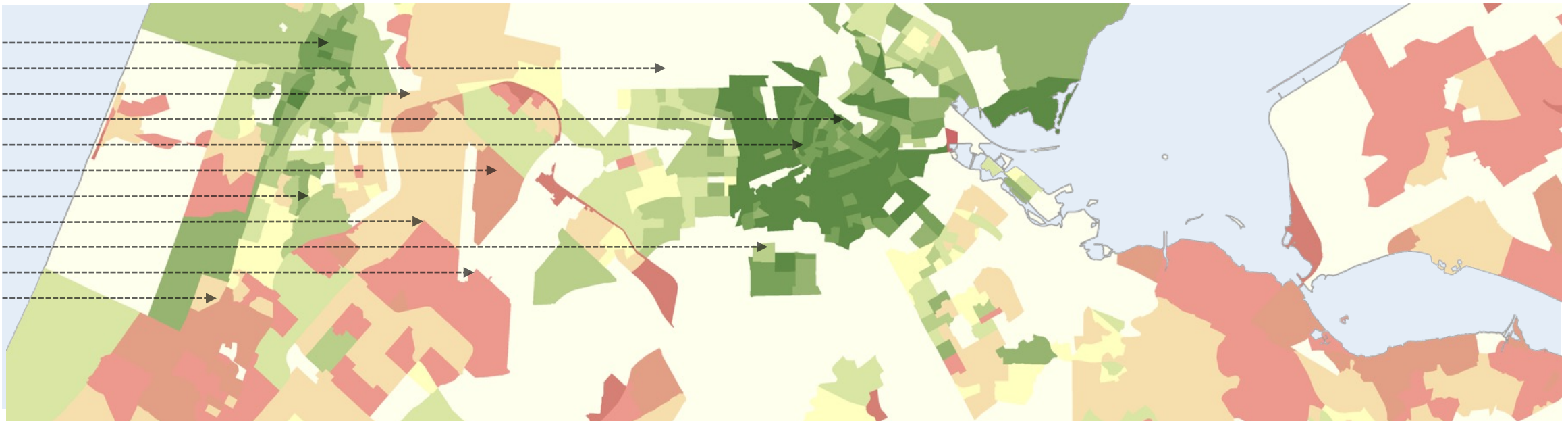
3) Modelling divided access

How is **access** to spatially-differentiated housing submarkets structured by household and parental socio-economic position?
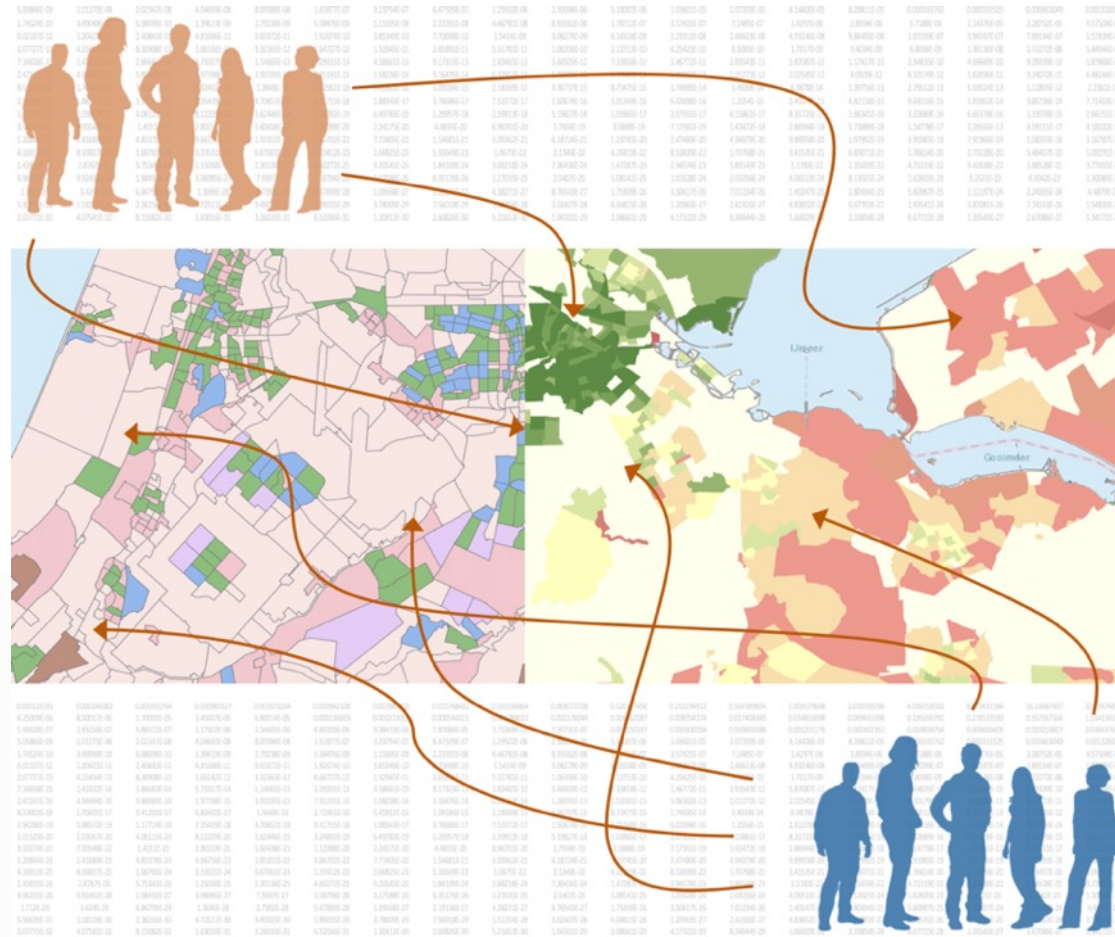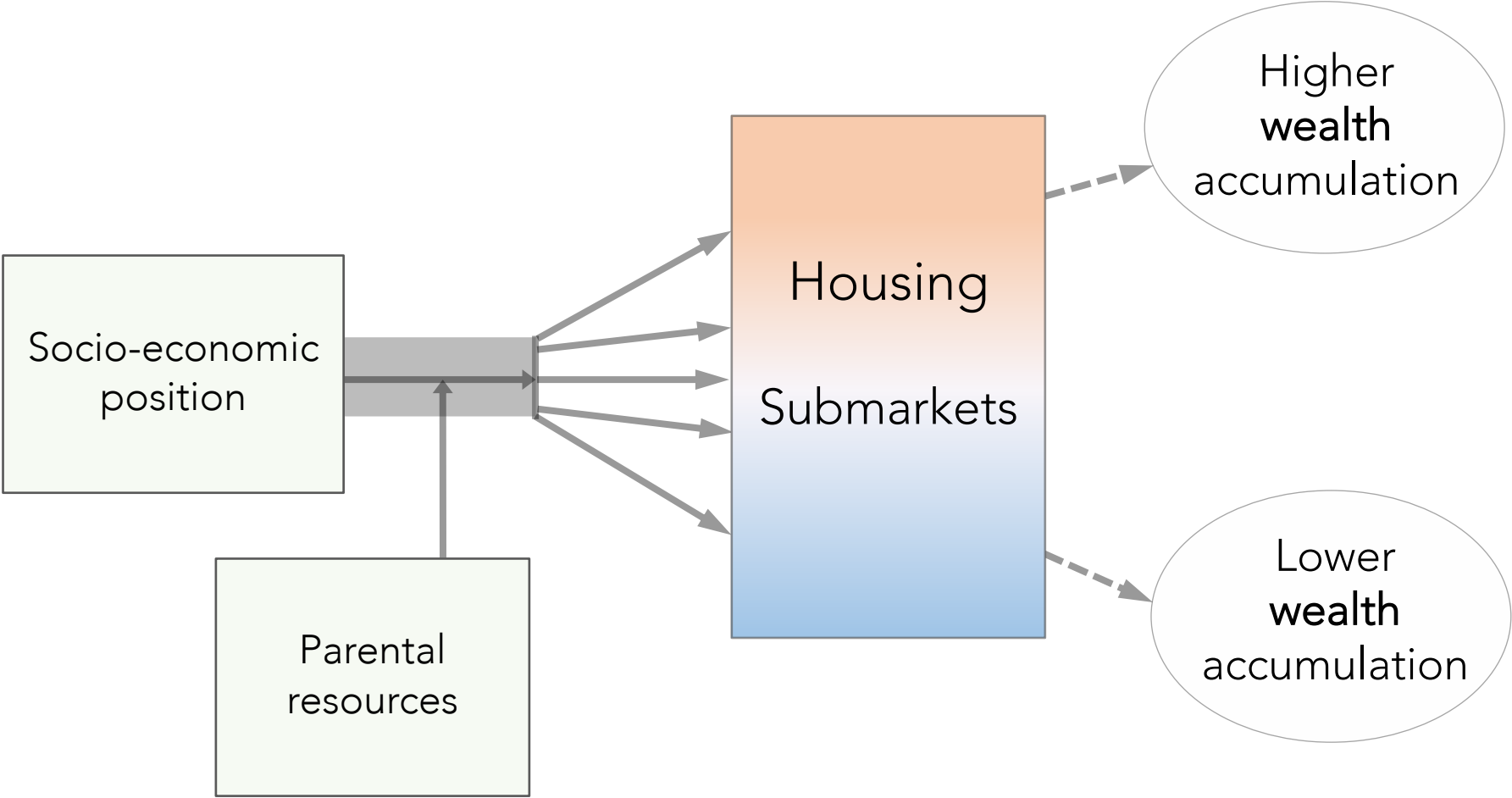
1.

First study for the Netherlands

Arundel & Hochstenbach (2020)

Hochstenbach & Arundel (2020)

Urban Geography

ISSN: (Print) (Online) Journal homepage: https://www.tandfonline.com/loi/rurb20

Divided access and the spatial polarization of housing wealth

Rowan Arundel & Cody Hochstenbach

To cite this article: Rowan Arundel & Cody Hochstenbach (2020) Divided access and the spatial polarization of housing wealth, Urban Geography, 41:4, 497-523, DOI: 10.1080/02723638.2019.1681722

To link to this article: https://doi.org/10.1080/02723638.2019.1681722

© 2019 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group.

Published online: 31 Oct 2019.

The Netherlands case

- Rising homeownership rate over recent decades

  - 1994: 47% → 2016: 58% → → : +/- 60%

- Rapid growth in house prices over longer-term (excl. GFC dip)

- Highly financialized housing market

- Policies that privilege private property

- Gradual decline of social housing / alternatives to homeownership

- *& providing detailed register data on housing and households*

Netherlands: spatial polarization and divided access

Data:

- Full-population Register data (SSD)
  - All individuals and all dwellings
  - Longitudinal
  - Geo-located at fine scale

- ➥ Inflation-adjusted rates of housing wealth accumulation per neighbourhood 2006-2018
  - Using values of <u>all stable</u> housing stock
  - N: 11,145 neighbourhoods holding 5.9 million dwellings

Netherlands: spatial polarization and divided access
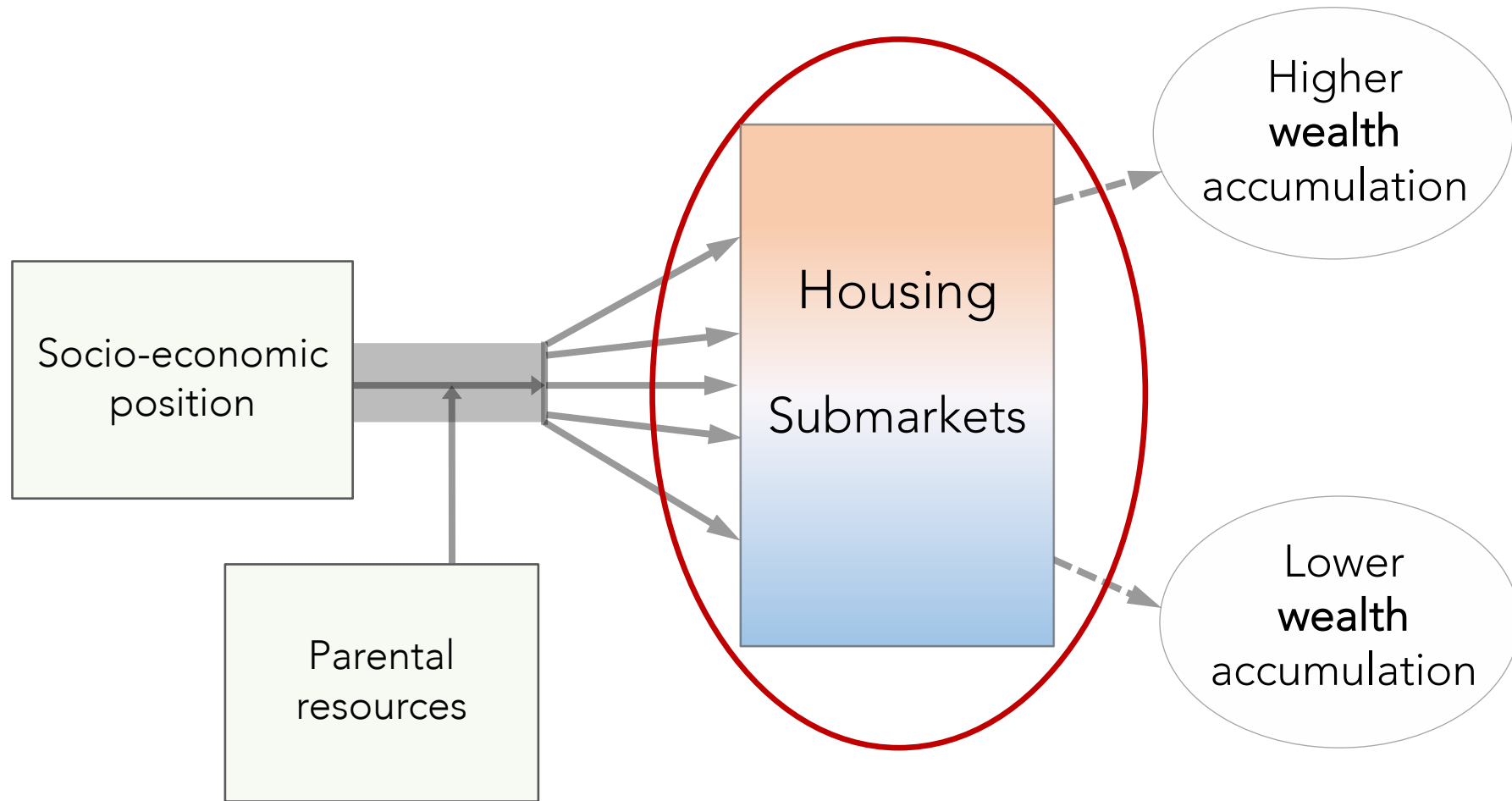
Change in inflation-adjusted house values per neighbourhood 2006-2018

Cartogram adjusted proportional to number of dwellings

Legend:
- > 40%
- 30% to 40%
- 20% to 30%
- 10% to 20%
- 2% to 10%
- -2% to 2%
- -10% to -2%
- -20% to -10%
- -30% to -20%
- -40% to -30%
- < -40%
- Excluded (<10 dwellings)

Eight largest municipalities

Source: Arundel & Hochstenbach (2020)
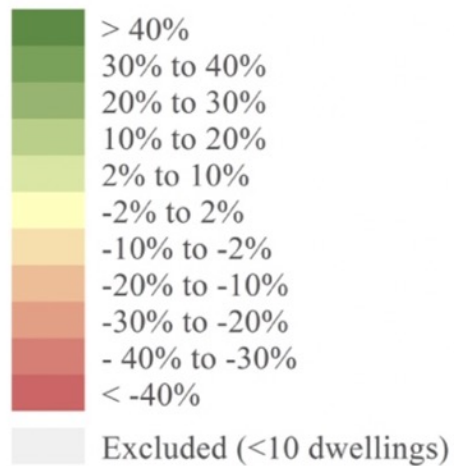
Change in inflation-adjusted house values per neighbourhood 2015-2018

Cartogram adjusted proportional to number of dwellings

> 40%
30% to 40%
20% to 30%
10% to 20%
2% to 10%
-2% to 2%
-10% to -2%
-20% to -10%
-30% to -20%
- 40% to -30%
< -40%
Excluded (<10 dwellings)

Eight largest municipalities

Groningen
Amsterdam
Almere
The Hague
Utrecht
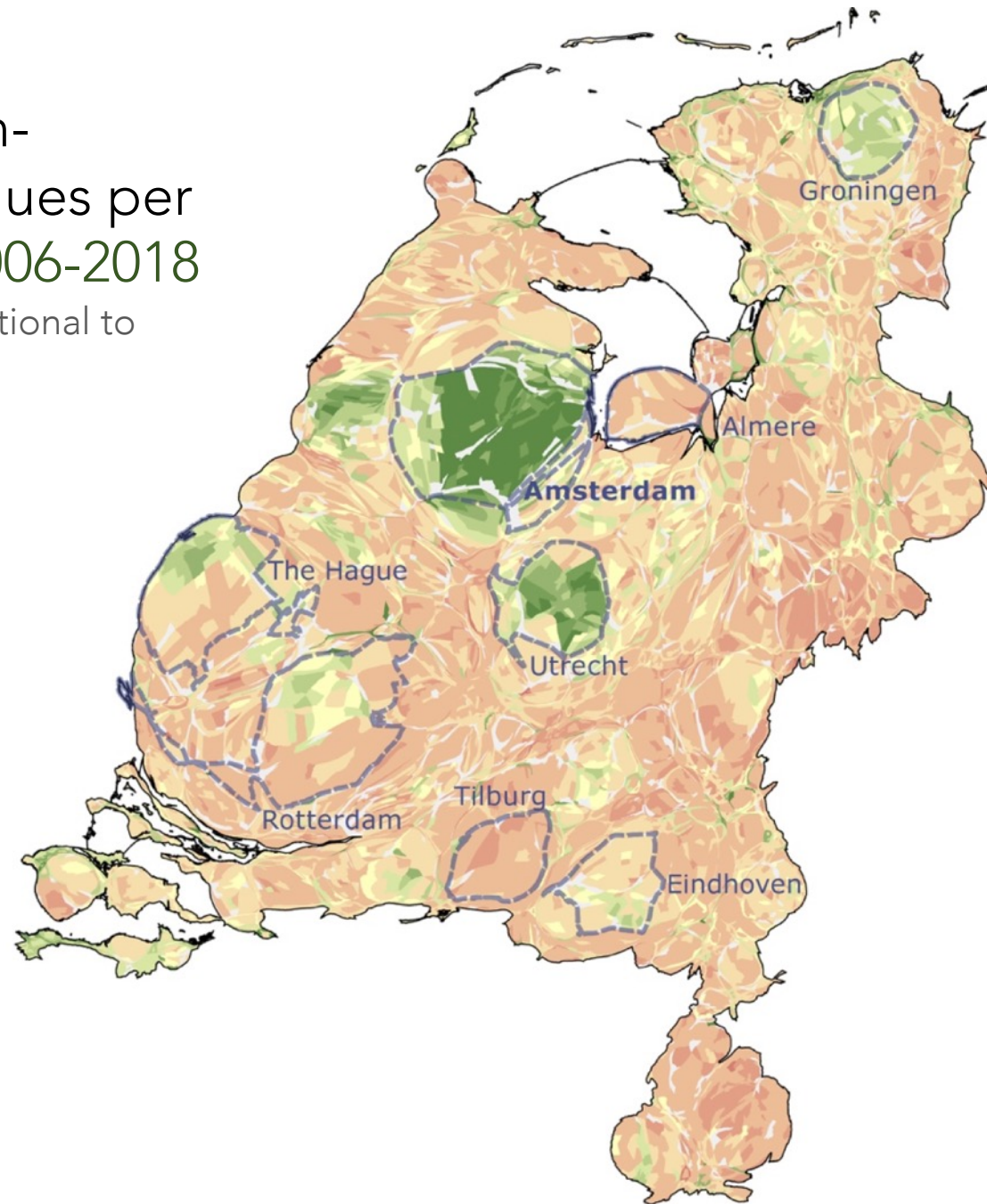Rotterdam
Tilburg
Eindhoven

0   50 km

Source: Arundel & Hochstenbach (2020)
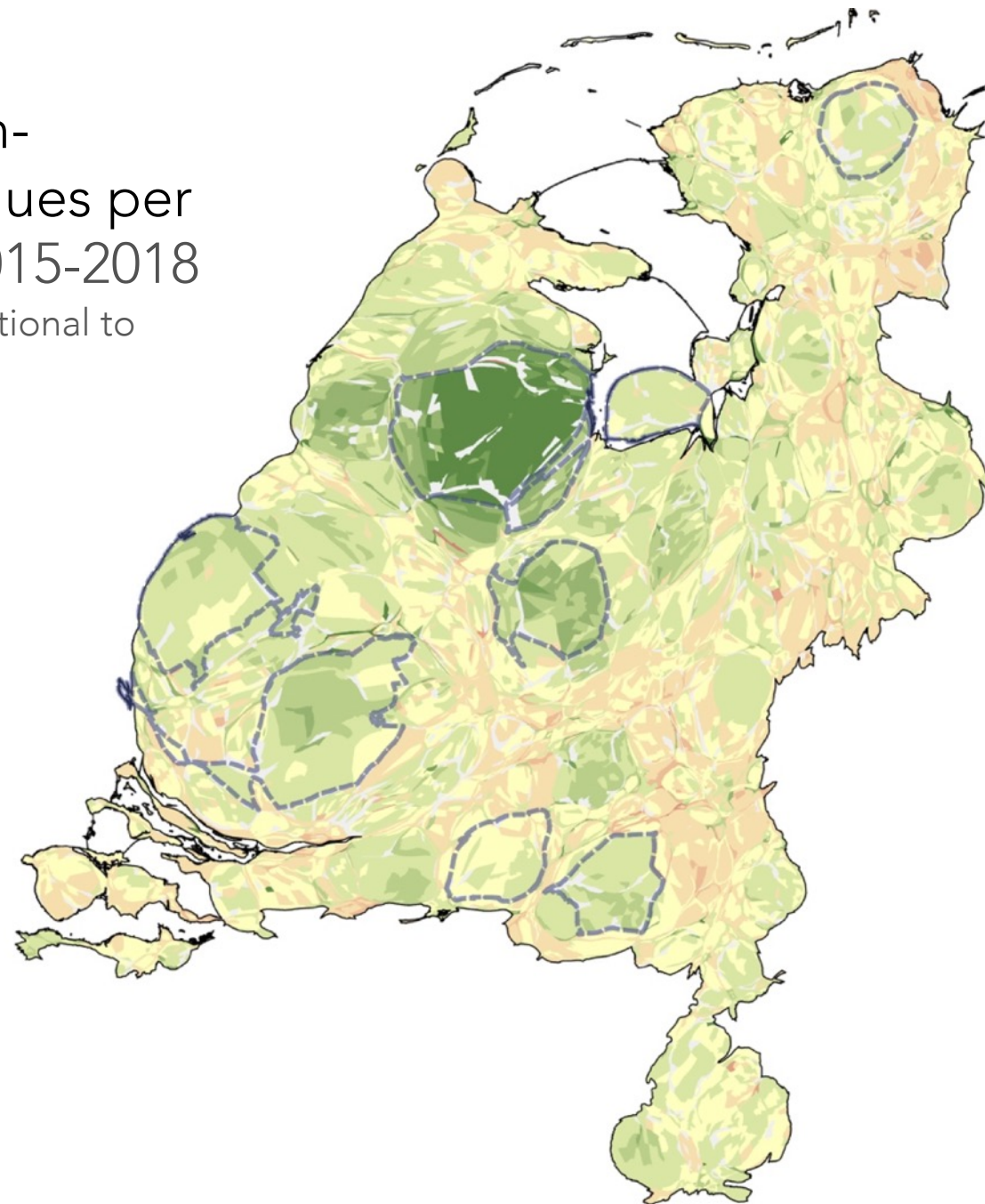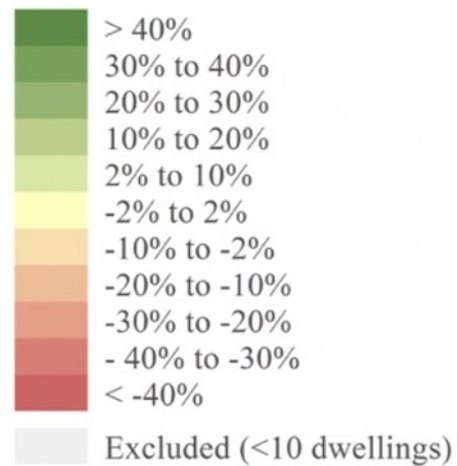
Netherlands: spatial polarization and divided access

Neighbourhood-level
Housing market inequality
NL (2006=100)

—— House values

—— **Gini** of housing values

—— 90:10 ratio

----- 95:5 ratio
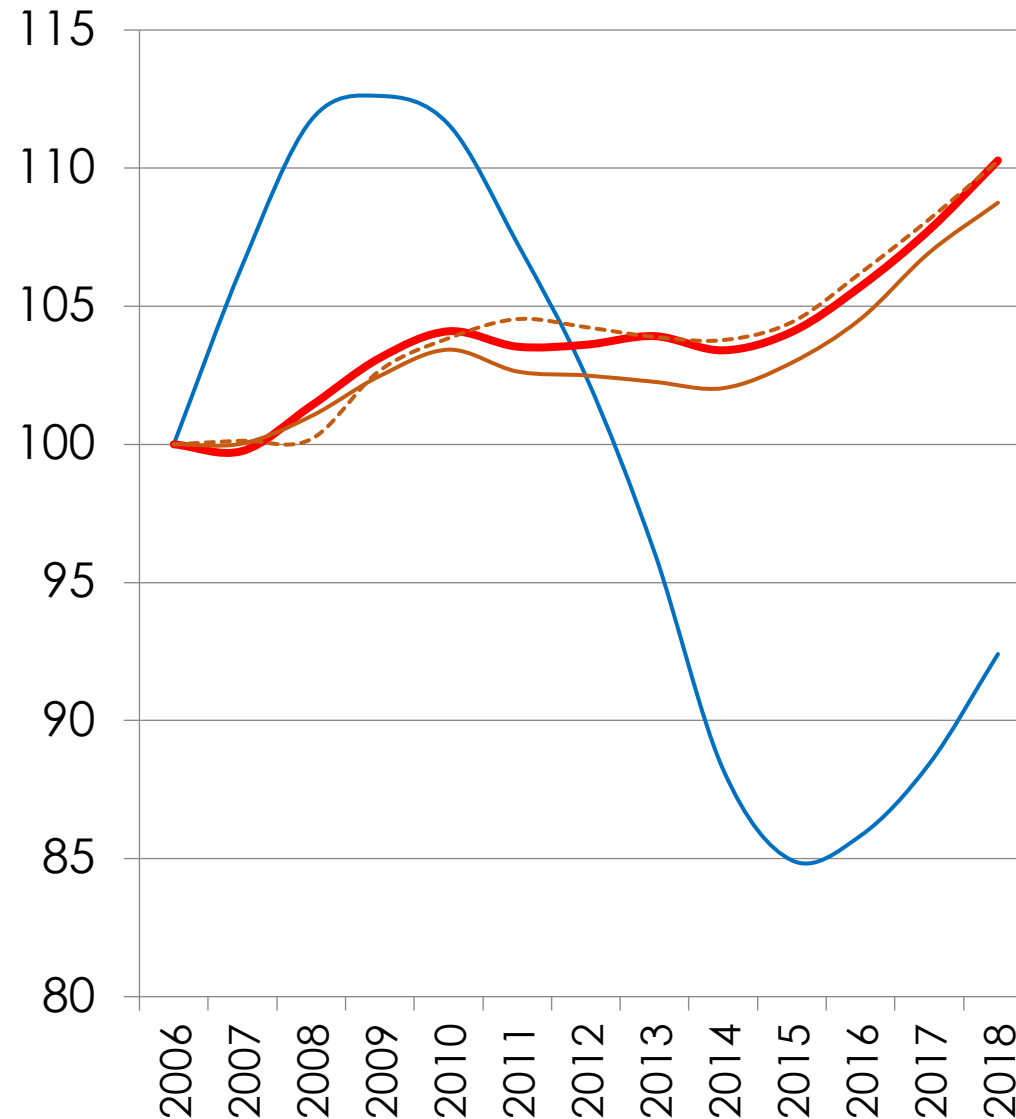
Divided access to different housing submarkets
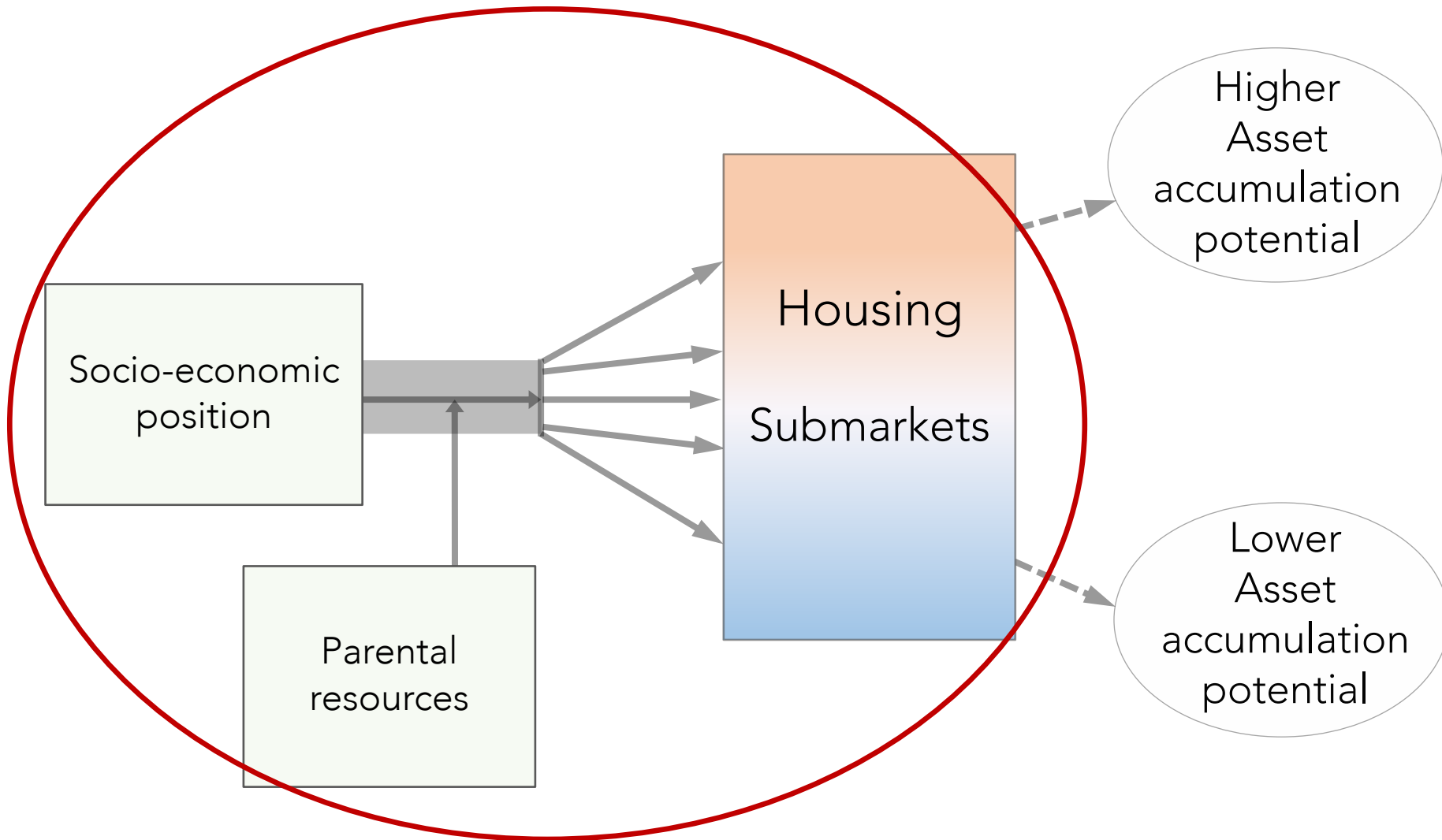
ML regression of *where* young starters' enter housing market

→ Outcome: subsequent local rate of house value change

- Household economic resources
  - income, employment contract type (temporary/fulltime)
- Parental wealth
  - housing, non-housing
- Controls
  - education, ethnicity, marital status, children, number of siblings, etc…
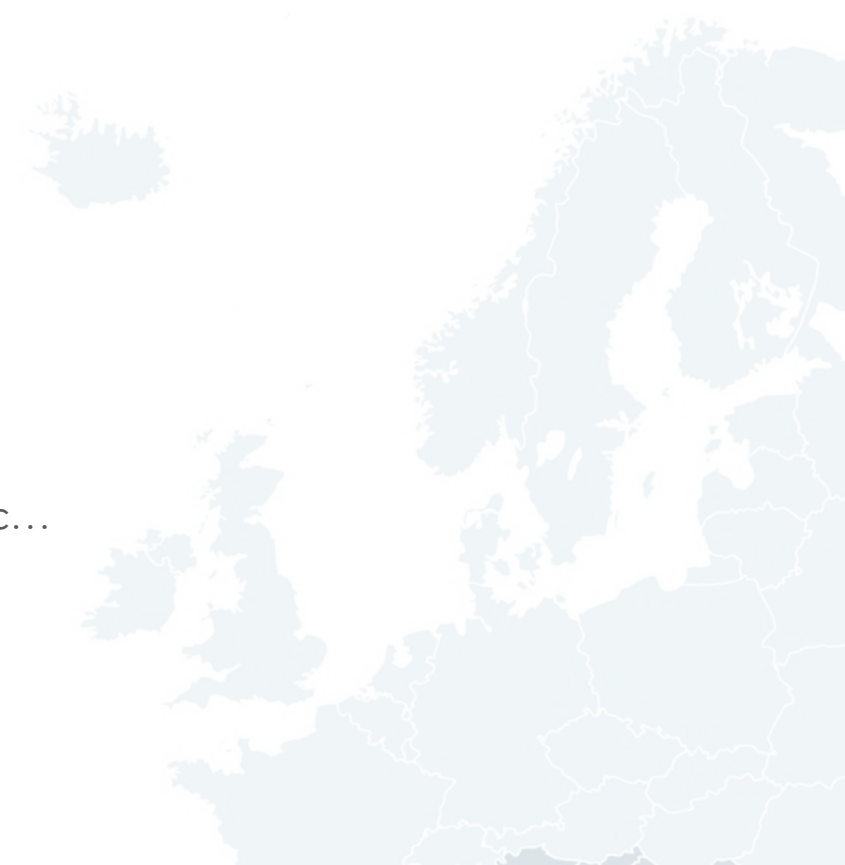
Dependent variable: percentage change in house values 2014-2018 of the destination neighbourhood.

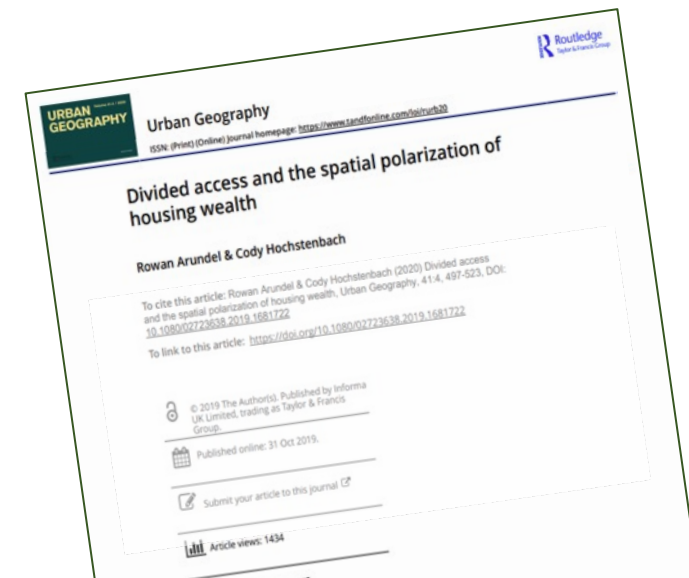|	Model 1		Model 2		Model 3	
	Coef.	*p*	Coef.	*p*	Coef.	*p*
Gross household income (1000's euros)	0.015 ***	0.000	0.014 ***	0.000	0.014 ***	0.000
Source of income (main earner)						
Employment - permanent contract	(ref)		(ref)		(ref)	
Employment - temporary contract	0.875 ***	0.000	0.831 ***	0.000	0.708 ***	0.000
Employment - unknown/not applicable contract	1.650 ***	0.000	1.381 ***	0.000	2.060 ***	0.000
Self employment	0.814 ***	0.000	0.728 ***	0.000	0.642 ***	0.001
Benefits	0.430	0.142	0.346	0.237	0.296	0.335
Student bursary	3.681 ***	0.000	3.469 ***	0.000	2.966 ***	0.000
Age (oldest member)	0.118 ***	0.000	0.105 ***	0.000	0.103 ***	0.000
Household type						
Single person	(ref)		(ref)		(ref)	
Couple without children	-1.887 ***	0.000	-1.827 ***	0.000	-1.826 ***	0.000
Couple with children	-2.696 ***	0.000	-2.595 ***	0.000	-2.590 ***	0.000
Single parent	-2.024 ***	0.000	-1.945 ***	0.000	-1.950 ***	0.000
Other	1.926 ***	0.000	2.150 ***	0.000	2.061 ***	0.000
Ethnicity (main earner)						
Native Dutch	(ref)		(ref)		(ref)	
Non-western non-native	1.675 ***	0.000	1.933 ***	0.000	1.975 ***	0.000
Western non-native	2.196 ***	0.000	2.112 ***	0.000	2.121 ***	0.000
Gender (main earner)						
Female	(ref)		(ref)		(ref)	
Male	-1.048 ***	0.000	-1.012 ***	0.000	-1.009 ***	0.000
Highest followed education level (main earner)						
Unknown	-0.417 *	0.011	-0.408 *	0.012	-0.420 *	0.026
Low	0.007	0.978	0.013	0.960	0.000	1.000
Mid	(ref)		(ref)		(ref)	
High	3.444 ***	0.000	3.337 ***	0.000	3.322 ***	0.000
Parental housing wealth (10000's euros)			0.015 ***	0.000	0.015 ***	0.000
Parental other wealth (10000's euros)			0.007 ***	0.000	0.004 ***	0.000
Number of siblings			-0.176 ***	0.000	-0.174 ***	0.000
Parents together			-0.704 ***	0.000	-0.707 ***	0.000
Average neighborhood house value in 2014 (10000's euros)	-0.023 ***	0.000	-0.032 ***	0.000	-0.030 ***	0.000
Source of income (main earner) * Parental non-housing wealth						
Employment-permanent contract * Parental non-housing wealth					(ref)	
Employment-temporary contract * Parental non-housing wealth					0.006 ***	0.001
Employment-unknown/na contract * Parental non-housing wealth					-0.009 ***	0.006
Self employment * Parental non-housing wealth					0.003	0.158
Benefits * Parental non-housing wealth					0.003	0.666
Student bursary * Parental non-housing wealth					0.022 ***	0.000
Constant	-0.935	0.513	0.185	0.896	0.242	0.865
Number of cases - Level 1 (individual)	53,633		53,633		53,633	
Number of groups - Level 2 (province)	12		12		12	
Log likelihood	-194935		-194790		-194748	
Wald chi^2	4034.9		4347.2		4437.9	
Snijders/Bosker R^2 - Level 1 (individual)	0.081		0.088		0.0895	
Snijders/Bosker R^2 - Level 2 (province)	0.119		0.133		0.1341	

*p <0.05   **p <0.01   ***p <0.001

Source: SSD, Statistics Netherlands, own calculations

URBAN GEOGRAPHY

Urban Geography
ISSN: (Print) (Online) Journal homepage: https://www.tandfonline.com/loi/rurb20

Divided access and the spatial polarization of housing wealth

Rowan Arundel & Cody Hochstenbach

To cite this article: Rowan Arundel & Cody Hochstenbach (2020) Divided access and the spatial polarization of housing wealth, Urban Geography, 41:4, 497-523, DOI: 10.1080/02723638.2019.1681722

To link to this article: https://doi.org/10.1080/02723638.2019.1681722

© 2019 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group

Published online: 31 Oct 2019.

Submit your article to this journal

Article views: 1434

Significant correlation between   and buying into

- Higher income
- Higher education level

→ higher-gain neighbourhoods

Significant correlation between

- Higher income
- Higher education level
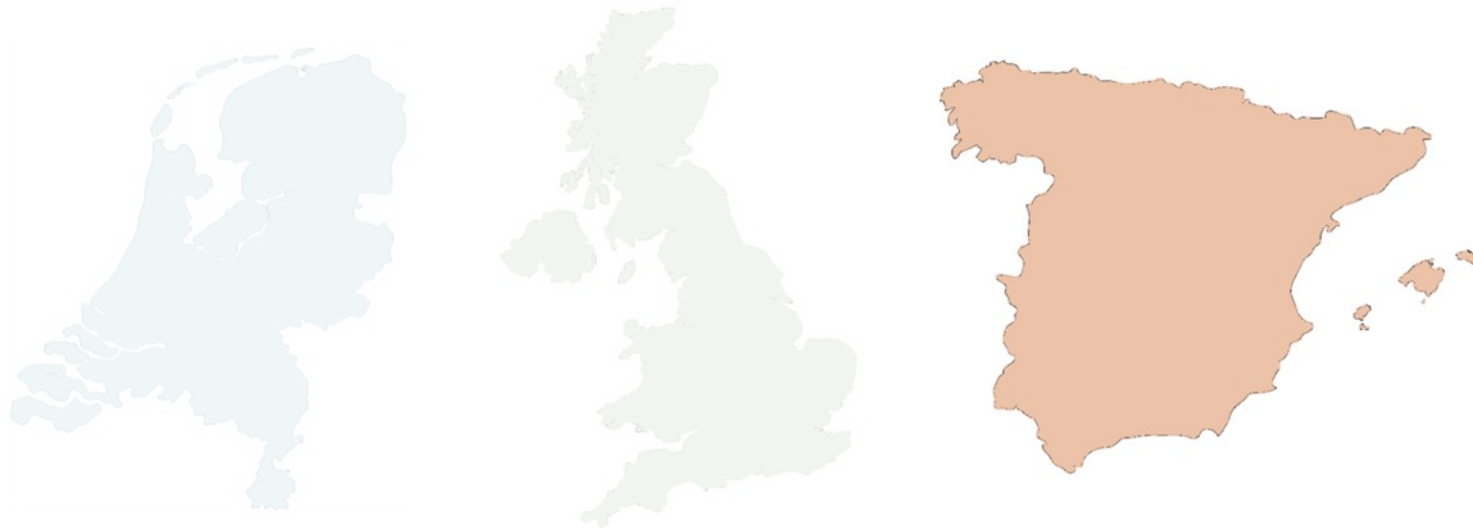- greater parental wealth

➡

and buying into

higher-gain neighbourhoods

2.

Housing Market Polarization in Spain

Spain: housing market spatial polarization

Spanish context

- **Very high homeownership rates**, slight recent decline
  - many decades +/- 80% → 2020: 76%
- Family supported housing, higher down-payment
- But rapid financialization processes 1990s →
- High housing price volatility (GFC crash, recovery, covid)
- Relatively higher income inequality (within EU)
- *& access to detailed housing price dataset*

Spain: housing market spatial polarization

Data:

- *Idealista* dataset across Spain: 2012 to 2022

  - Average value/m2 based on listing prices

- Census Tract level *(secciones censales)*

  - N: approx. 36,000 CTs

  - 93-97% territorial coverage

➡ Inflation-adjusted *rates* of housing wealth accumulation per CT

Spain: housing market spatial polarization
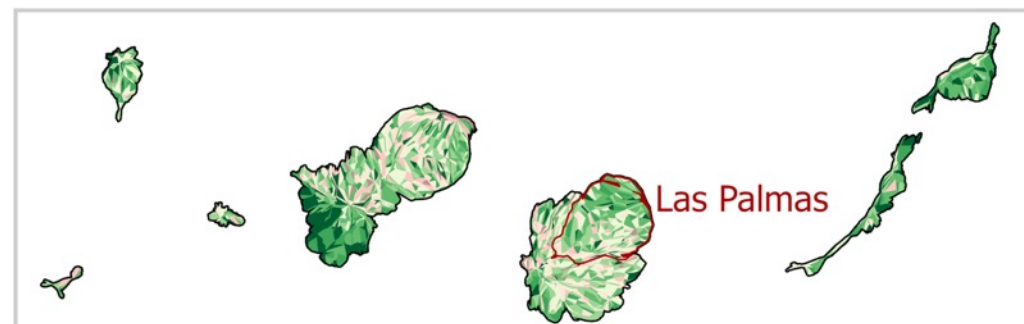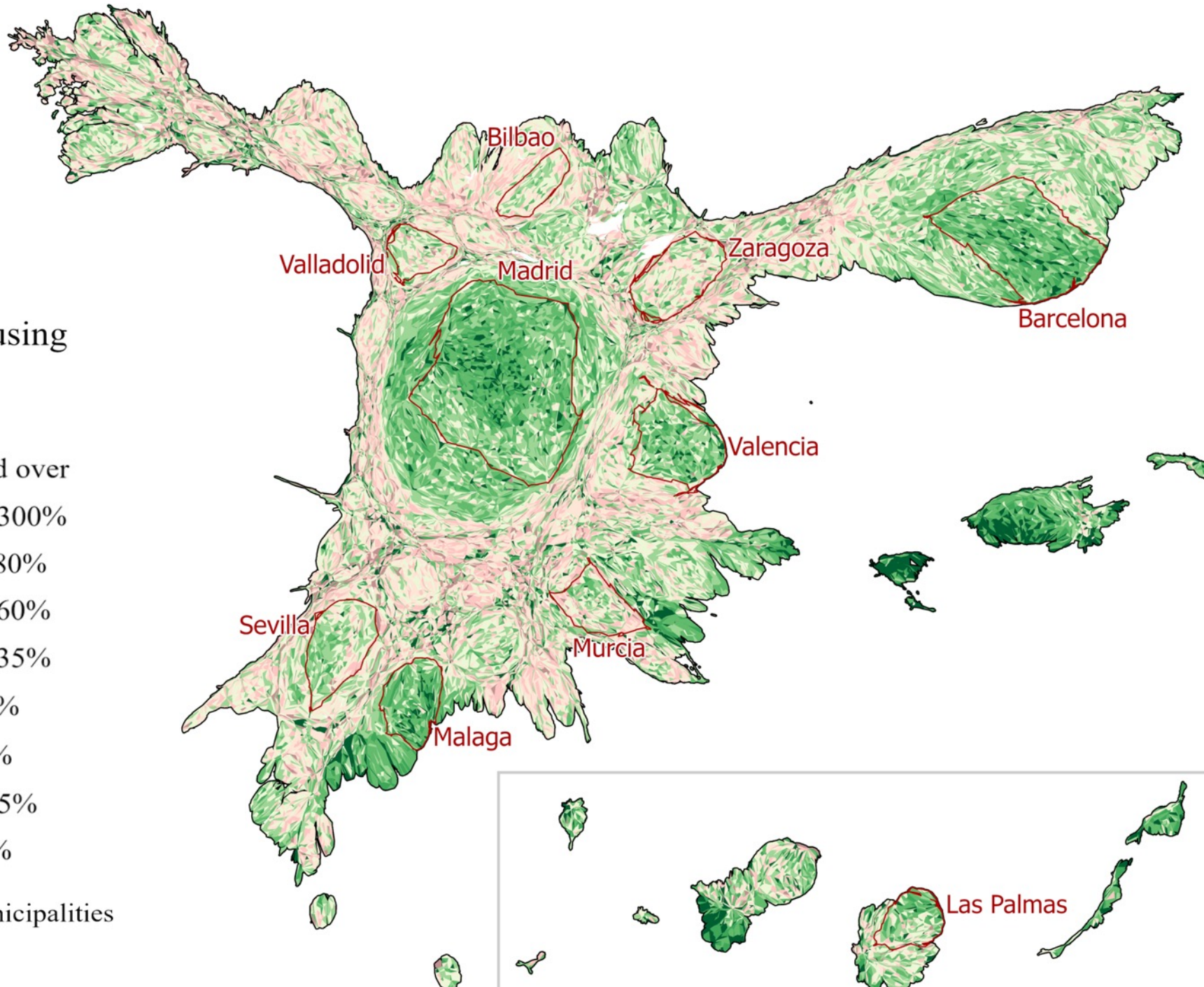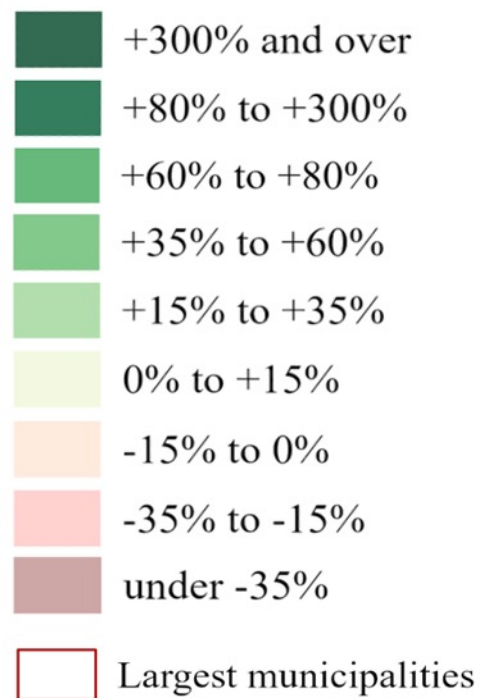
Approach:

- Measures of spatial inequality:
    - (population-weighted) GINI
    - Percentile ratios 90:10, 95:5

- Multi-scalar:
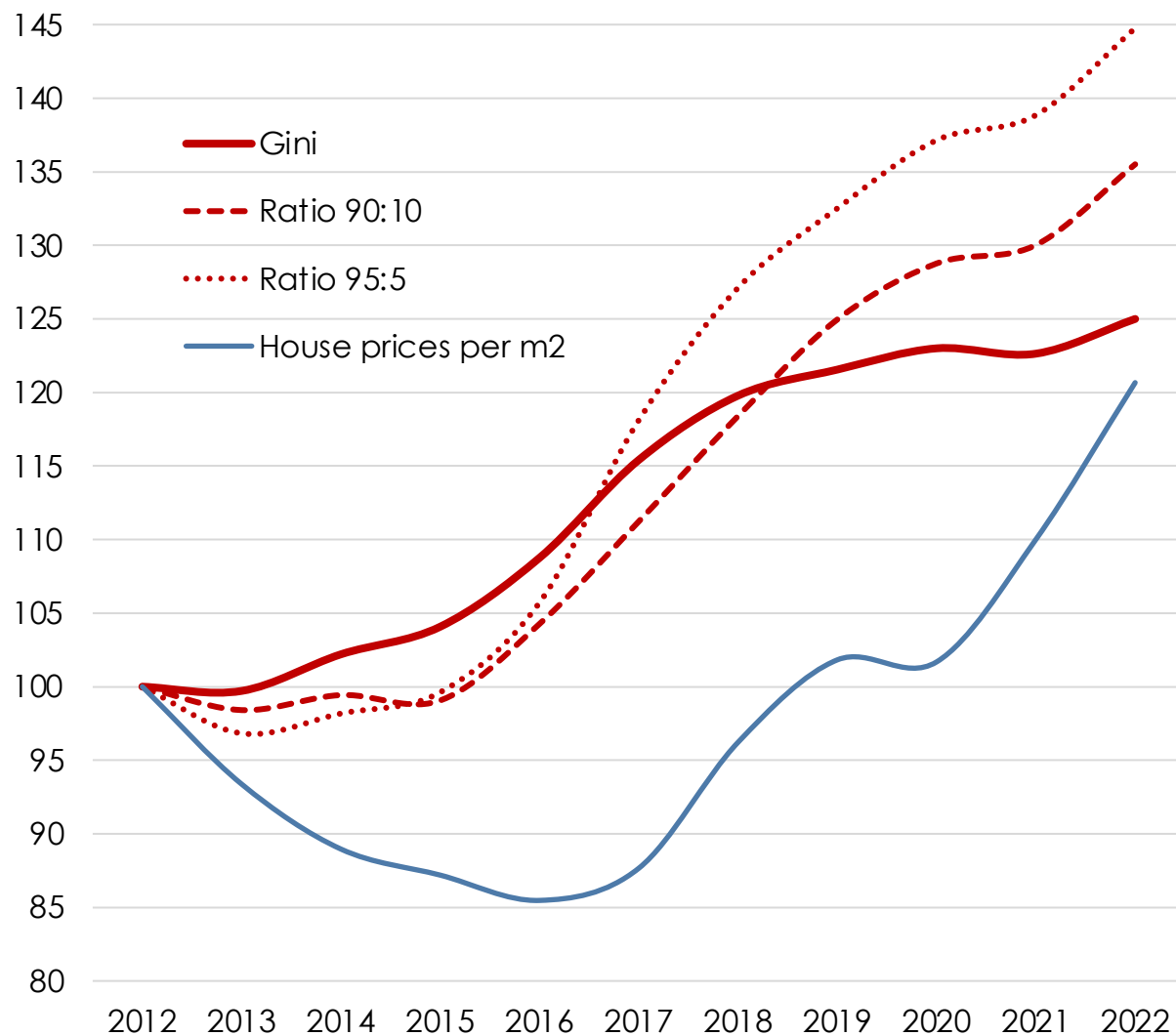   census tract + municipal level + within 'core' municipalities

Change in housing
values per m2
2012-2022

- +300% and over
- +80% to +300%
- +60% to +80%
- +35% to +60%
- +15% to +35%
- 0% to +15%
- -15% to 0%
- -35% to -15%
- under -35%

Largest municipalities

Bilbao
Valladolid
Madrid
Zaragoza
Barcelona
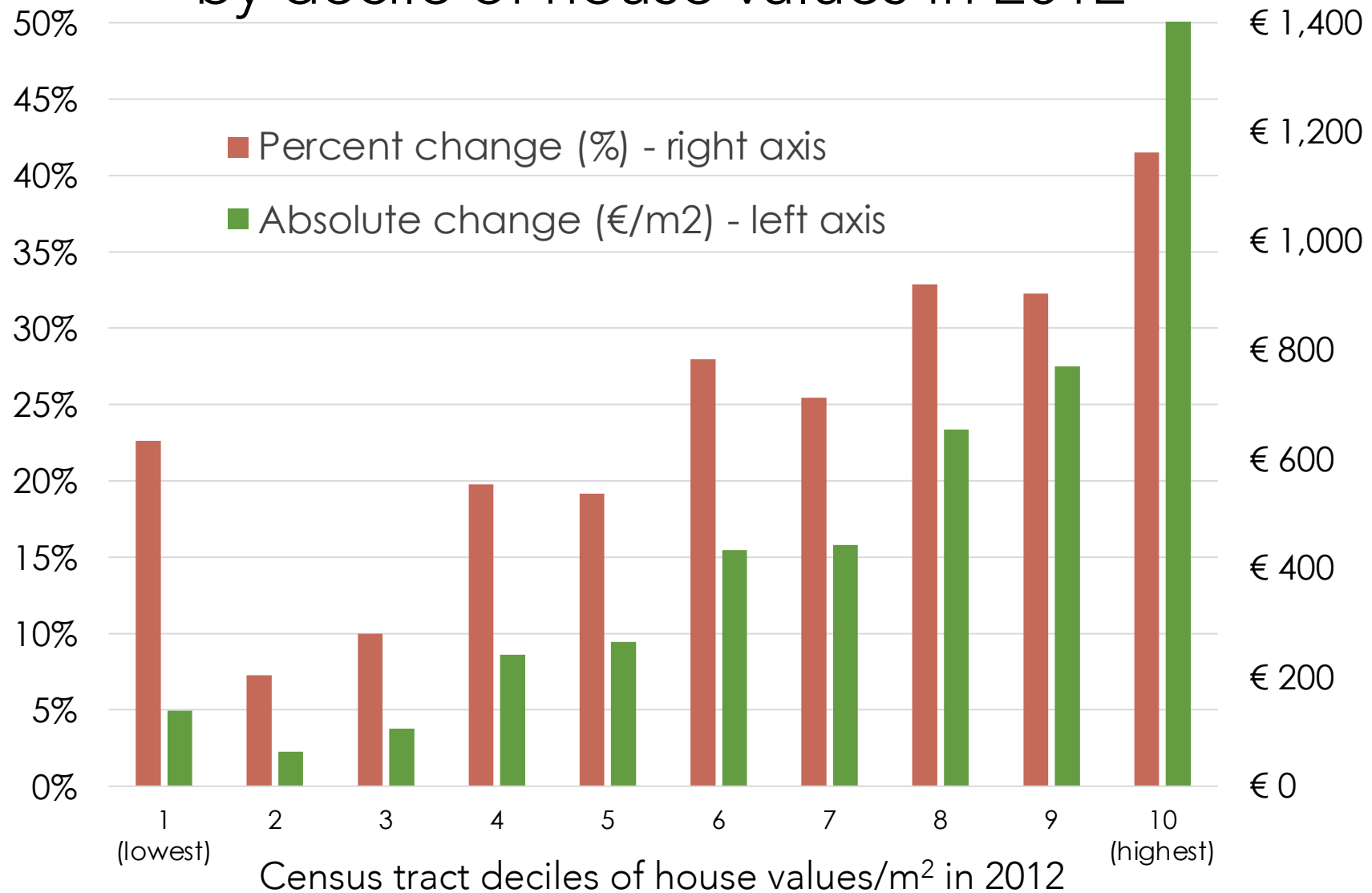Valencia
Sevilla
Murcia
Malaga
Las Palmas

Spain: housing market spatial polarization

Data source: Idealista dataset (2012-2022). Housing values inflation-adjusted, in 2021 euro values.

Change in inflation-adjusted house values 2012-2022, by decile of house values in 2012

Legend:
- Percent change (%) - right axis
- Absolute change (€/m2) - left axis

X-axis: Census tract deciles of house values/m² in 2012 (1 lowest to 10 highest)

Conclusions

Conclusions

- Housing wealth accumulation becoming *more spatially uneven*
    - Concentrating in specific areas of prime accumulation, versus stagnation
    - Trends are structural and 'crisis' resistant, robust across scales

Conclusions

- Housing wealth accumulation becoming *more spatially uneven*

  - Concentrating in specific areas of prime accumulation, versus stagnation

  - Trends are structural and 'crisis' resistant, robust across scales

- *Space matters* as an *active driver* of housing wealth inequality

  - Housing special asset given its *spatial fixity* and *barriers to access*

  - Spatial inequality in accumulation combine with unequal access

    - NL: clearly structured by household and parental SES

    - ES: accumulation rates higher in higher value submarkets

Conclusions

- Housing wealth accumulation becoming *more spatially uneven*

  - Concentrating in specific areas of prime accumulation, versus stagnation

  - Trends are structural and 'crisis' resistant, robust across scales

- *Space matters* as an *active driver* of housing wealth inequality

  - Housing special asset given its *spatial fixity* and *barriers to access*

  - Spatial inequality in accumulation combine with unequal access

    - NL: clearly structured by household and parental SES

    - ES: accumulation rates higher in higher value submarkets

- Beyond dichotomy of homeowners versus non-owners, divides among homeowners crucial to wealth inequality

*Wealth inequalities are not only mapped onto space, but space itself figures prominently in reproducing and **amplifying** such inequalities.*
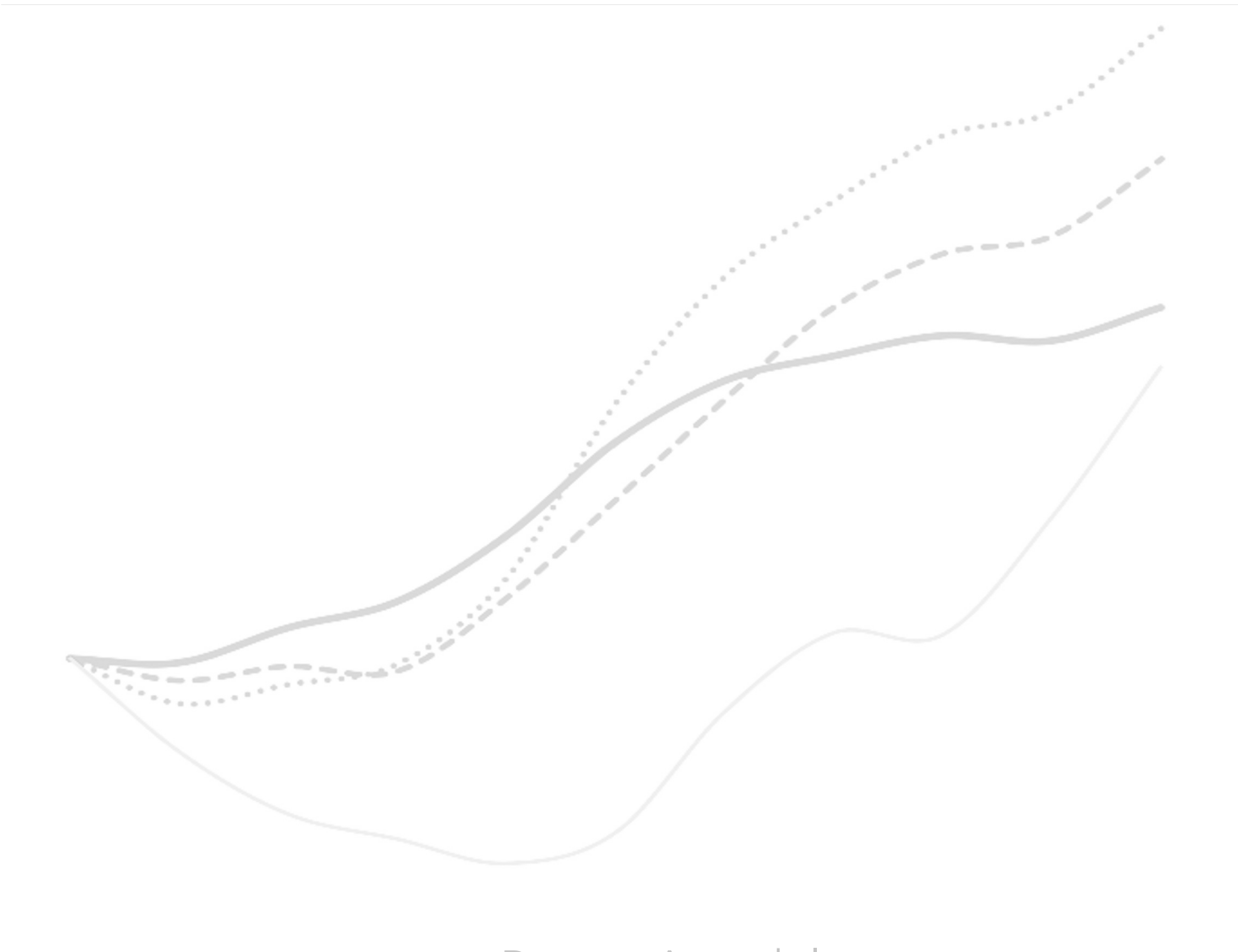
Rowan Arundel
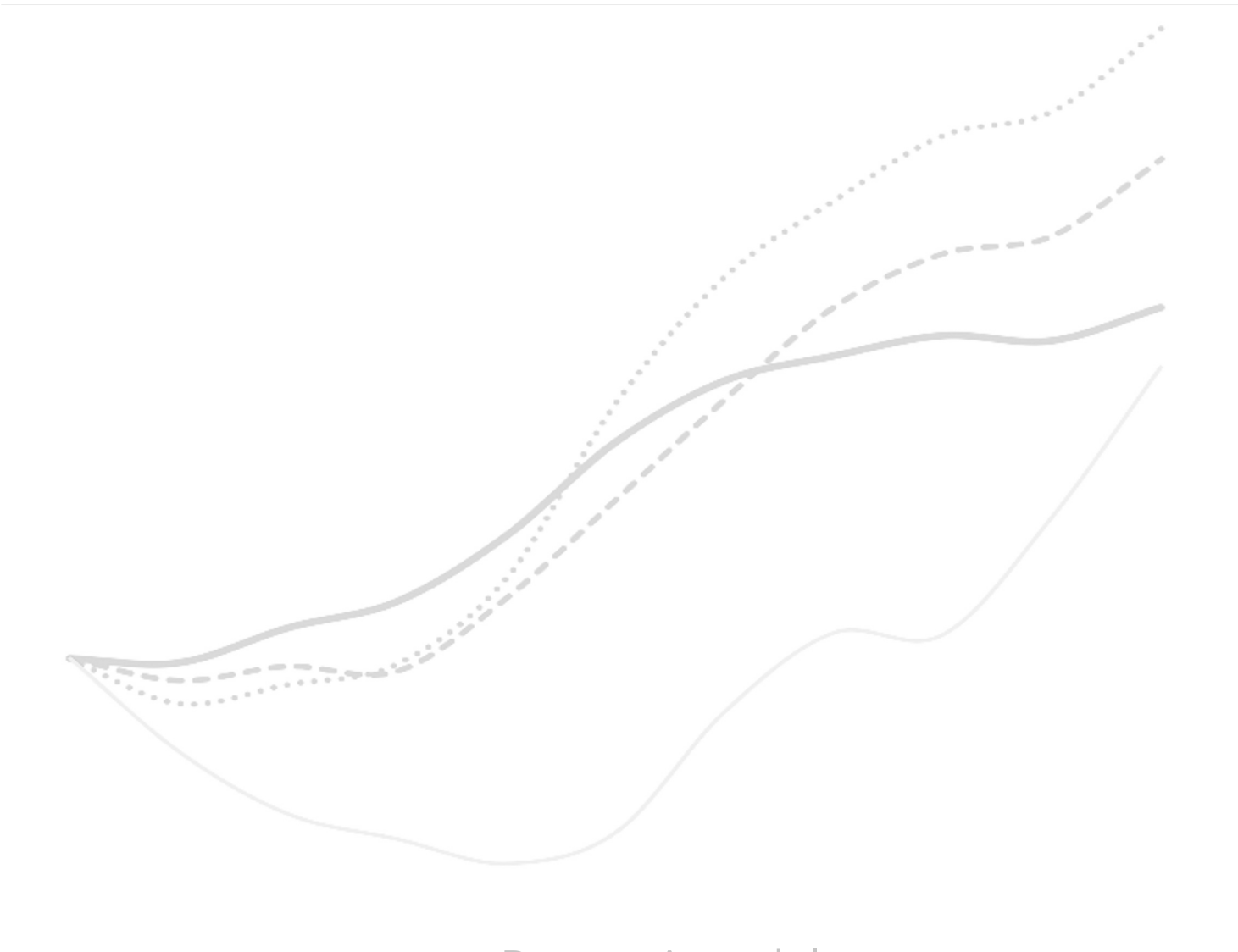
Rowan Arundel

Ongoing *Wealthscapes* research

Current Veni project

- Modeling population sorting across housing market in Spain

- Explaining drivers of spatial polarization (WP2)

- Spatial polarization and divided access in UK

- Examining NL data for recent (covid) years

- *Australian* **study for South Australia** (with Emma Baker, Kira Page)

Other interests

- Larger sample of countries (data challenge)

- Longer time scale (data challenge)

- Better integrating non-homeowners into combined model