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

Rowan Arundel

University of Amsterdam

February 2024 | University of Sydney
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

The false promise of homeownership: Homeowner societies in an era of declining access and rising inequality

Rowan Arundel
University of Amsterdam, Netherlands

Richard Ronald
University of Amsterdam, Netherlands

Abstract
In the late 20th century, homeownership became entrenched as a means to transfer the economy and increase social status. The underlying economic security via asset accumulation. The underlying assumption was that homeownership would be widespread, equality, and is it possible that such narratives have continued to understate the conditions of homeownership? This paper directly confronts this promise.

Keywords
homeowner societies, homeownership, housing market dynamics

Housing unaffordability and mental health: dynamics across age and tenure

Rowan Arundel, Ang Li, Emma Baker & Rebecca Bentley

To cite this article: Rowan Arundel, Ang Li, Emma Baker & Rebecca Bentley (2022) Housing unaffordability and mental health: dynamics across age and tenure. International Journal of Housing Policy. 2022; 10.1080/14912477.2022.2106541

To link to this article: https://doi.org/10.1080/14912477.2022.2106541

International Journal of Housing Policy

FAMILIES, HOUSING AND PROPERTY WEALTH IN A NEOLIBERAL WORLD

EDITED BY RICHARD RONALD AND ROWAN ARUNDEL

EXPLORATIONS IN HOUSING STUDIES

© 2022 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group

Published online: 04 Sep 2022

Submit your article to a Taylor & Francis journal

Article views: 107

View related articles

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

Rowan Arundel
Context: a crisis of rising inequality
From income to wealth divides

Top 10%’s WEALTH share
OECD countries

Bottom 10%’s
Premise 1: Housing central to wealth & inequality
Premise 2: Housing markets inherently spatial

Space Matters

• Not singular market but multitude of spatially-distinct submarkets

• Where one enters housing market key for wealth accumulation
Premise 2: Housing markets inherently spatial

Growing housing market spatial polarization?
Premise 2: Housing markets inherently spatial

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
How does the spatial polarization of housing markets interact with divided housing access in driving growing wealth inequalities?
Cross-country comparative research

WEALTHSCAPES PROJECT
Measuring spatial polarization

What are the contemporary dynamics of housing market spatial polarization?
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?
RESEARCH

Housing Submarkets

Socio-economic position

Parental resources

Higher wealth accumulation

Lower wealth accumulation
First study for the Netherlands
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
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 all stable housing stock
• N: 11,145 neighbourhoods holding 5.9 million dwellings
Netherlands: spatial polarization and divided access

Socio-economic position

Parental resources

Housing

Submarkets

Higher wealth accumulation

Lower wealth accumulation
Change in inflation-adjusted house values per neighbourhood 2006-2018
Cartogram adjusted proportional to number of dwellings

Source: Arundel & Hochstenbach (2020)
Change in inflation-adjusted house values per neighbourhood 2015-2018
Cartogram adjusted proportional to number of dwellings

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

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

Divided access to different housing submarkets
Netherlands: spatial polarization and divided access
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…
Table 4. Multilevel random-effects regression models.
Dependent variable: percentage change in house values 2014-2018 of the destination neighborhood.

<table>
<thead>
<tr>
<th>Source of income (main earner)</th>
<th>Coef.</th>
<th>p</th>
<th>Coef.</th>
<th>p</th>
<th>Coef.</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employment - permanent contract</td>
<td>0.015</td>
<td>***</td>
<td>0.014</td>
<td>***</td>
<td>0.014</td>
<td>***</td>
</tr>
<tr>
<td>Employment - temporary contract</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employment - unknown/not applicable contract</td>
<td>1.850</td>
<td>**</td>
<td>1.381</td>
<td>**</td>
<td>2.666</td>
<td>**</td>
</tr>
<tr>
<td>Self-employment</td>
<td>0.146</td>
<td></td>
<td>0.728</td>
<td></td>
<td>0.642</td>
<td></td>
</tr>
<tr>
<td>Benefits</td>
<td>0.430</td>
<td></td>
<td>0.346</td>
<td></td>
<td>0.296</td>
<td></td>
</tr>
<tr>
<td>Student bursary</td>
<td>-0.681</td>
<td></td>
<td>-3.469</td>
<td></td>
<td>2.866</td>
<td></td>
</tr>
<tr>
<td>Age (oldest member)</td>
<td>-0.118</td>
<td></td>
<td>-0.105</td>
<td></td>
<td>-0.103</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Household type</th>
<th>Coef.</th>
<th>p</th>
<th>Coef.</th>
<th>p</th>
<th>Coef.</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single person</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Couple with children</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Couple with children</td>
<td>-1.887</td>
<td>***</td>
<td>-1.827</td>
<td>***</td>
<td>-1.826</td>
<td>***</td>
</tr>
<tr>
<td>Single parent</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ethnicity (main earner)</th>
<th>Coef.</th>
<th>p</th>
<th>Coef.</th>
<th>p</th>
<th>Coef.</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Native Dutch</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-western non-native</td>
<td>1.675</td>
<td>***</td>
<td>1.933</td>
<td>***</td>
<td>1.975</td>
<td>***</td>
</tr>
<tr>
<td>Western non-native</td>
<td>2.196</td>
<td>***</td>
<td>2.112</td>
<td>***</td>
<td>2.121</td>
<td>***</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Gender (main earner)</th>
<th>Coef.</th>
<th>p</th>
<th>Coef.</th>
<th>p</th>
<th>Coef.</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>-0.440</td>
<td>*</td>
<td>-0.102</td>
<td>*</td>
<td>-0.109</td>
<td>*</td>
</tr>
<tr>
<td>Male</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Highest followed education level (main earner)</th>
<th>Coef.</th>
<th>p</th>
<th>Coef.</th>
<th>p</th>
<th>Coef.</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unknown</td>
<td>-0.417</td>
<td>*</td>
<td>-0.408</td>
<td>*</td>
<td>-0.428</td>
<td>*</td>
</tr>
<tr>
<td>Low</td>
<td>0.007</td>
<td></td>
<td>0.013</td>
<td></td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td>Mid</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High</td>
<td>0.446</td>
<td>***</td>
<td>3.537</td>
<td>***</td>
<td>3.322</td>
<td>***</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Parental housing wealth (1000's currency)</th>
<th>Coef.</th>
<th>p</th>
<th>Coef.</th>
<th>p</th>
<th>Coef.</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parental other wealth (1000's currency)</td>
<td>0.007</td>
<td></td>
<td>0.004</td>
<td></td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td>Number of siblings</td>
<td>-0.176</td>
<td></td>
<td>-0.174</td>
<td></td>
<td>-0.174</td>
<td></td>
</tr>
<tr>
<td>Parents together</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Average neighborhood house value in 2014 (1000's currency)</th>
<th>Coef.</th>
<th>p</th>
<th>Coef.</th>
<th>p</th>
<th>Coef.</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employment-permanent contract * Parental non-housing wealth</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employment-temporary contract * Parental non-housing wealth</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employment-unusual tax contract * Parental non-housing wealth</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-employment * Parental non-housing wealth</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Benefits * Parental non-housing wealth</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Student bursary * Parental non-housing wealth</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>-0.935</td>
<td></td>
<td>0.185</td>
<td></td>
<td>0.242</td>
<td></td>
</tr>
</tbody>
</table>

| 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 chi²                                                      | 4054.9 |     | 4347.2 |     | 4437.9 |     |
| Log likelihood of latent variable                               | -0.681 |     | 0.088  |     | 0.089  |     |

Source: SSD, Statistics Netherlands, own calculations

Model 1
Model 2
Model 3

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

Link to related article (Arundel & Hochstenbach, 2020):
Netherlands: spatial polarization and divided access

Significant correlation between

• Higher income
• Higher education level

and buying into

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
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
Spain: housing market spatial polarization

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

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

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.
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