

A Comparative Study of Socio-Economic Segregation in European Capitals: From Segregation to Desegregation?

Keynote lecture

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Research professor of Estonian Academy of Sciences

Charles University
17 April 2025



Chair of Human Geography



Research

Centre for Migration and Urban Studies

Mobility Lab

Teaching

Geoinformatics for Urbanized Societies



UNIVERSITY OF TARTU
Department of Geography

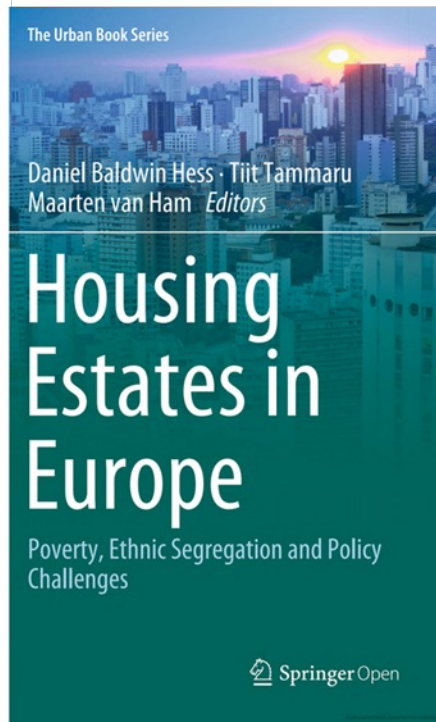
POINTS OF DEPARTURE



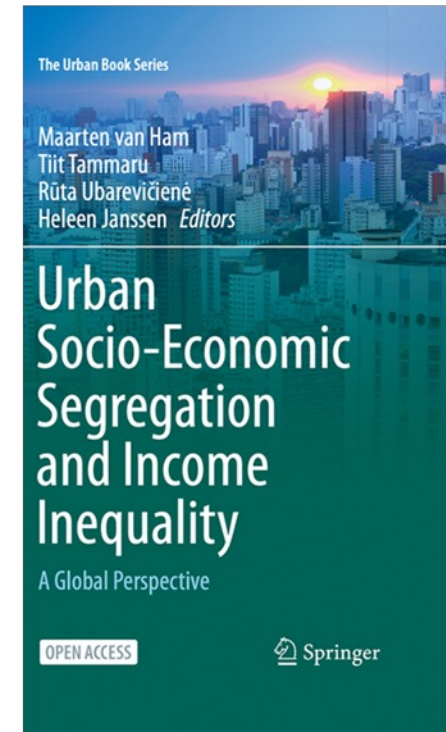
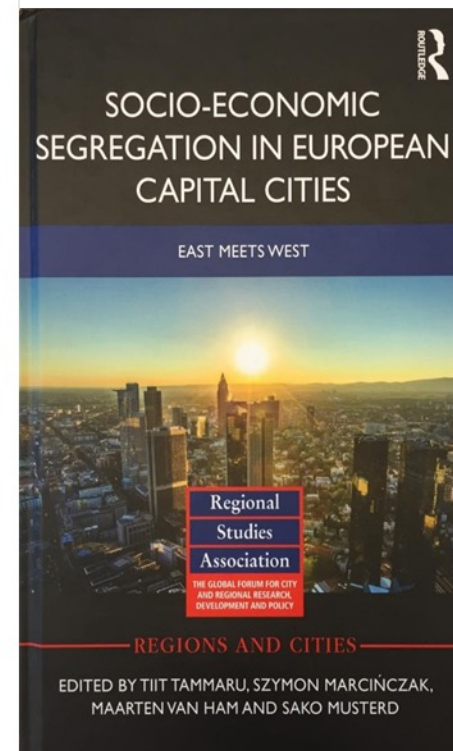
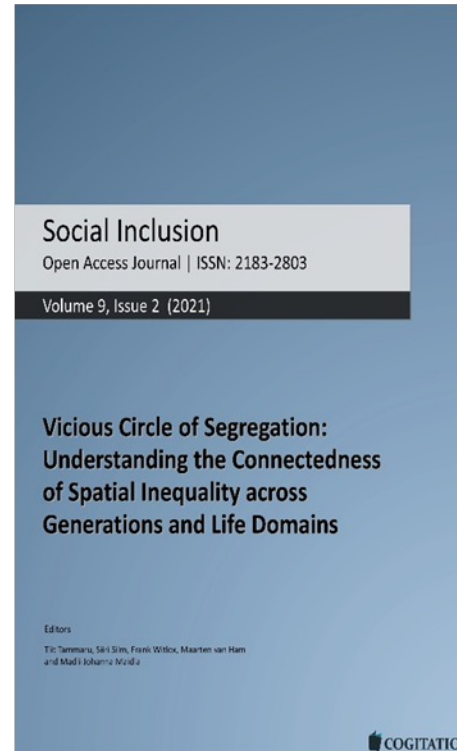
Recurring question:

Is it relevant to study where people live to understand urban inequalities?

- Make cities to talk each other
- Elitist understanding of urban inequalities
- Access to opportunities
- 15-minute city
- Vicious circles of segregation



www.segregationcircles.eu



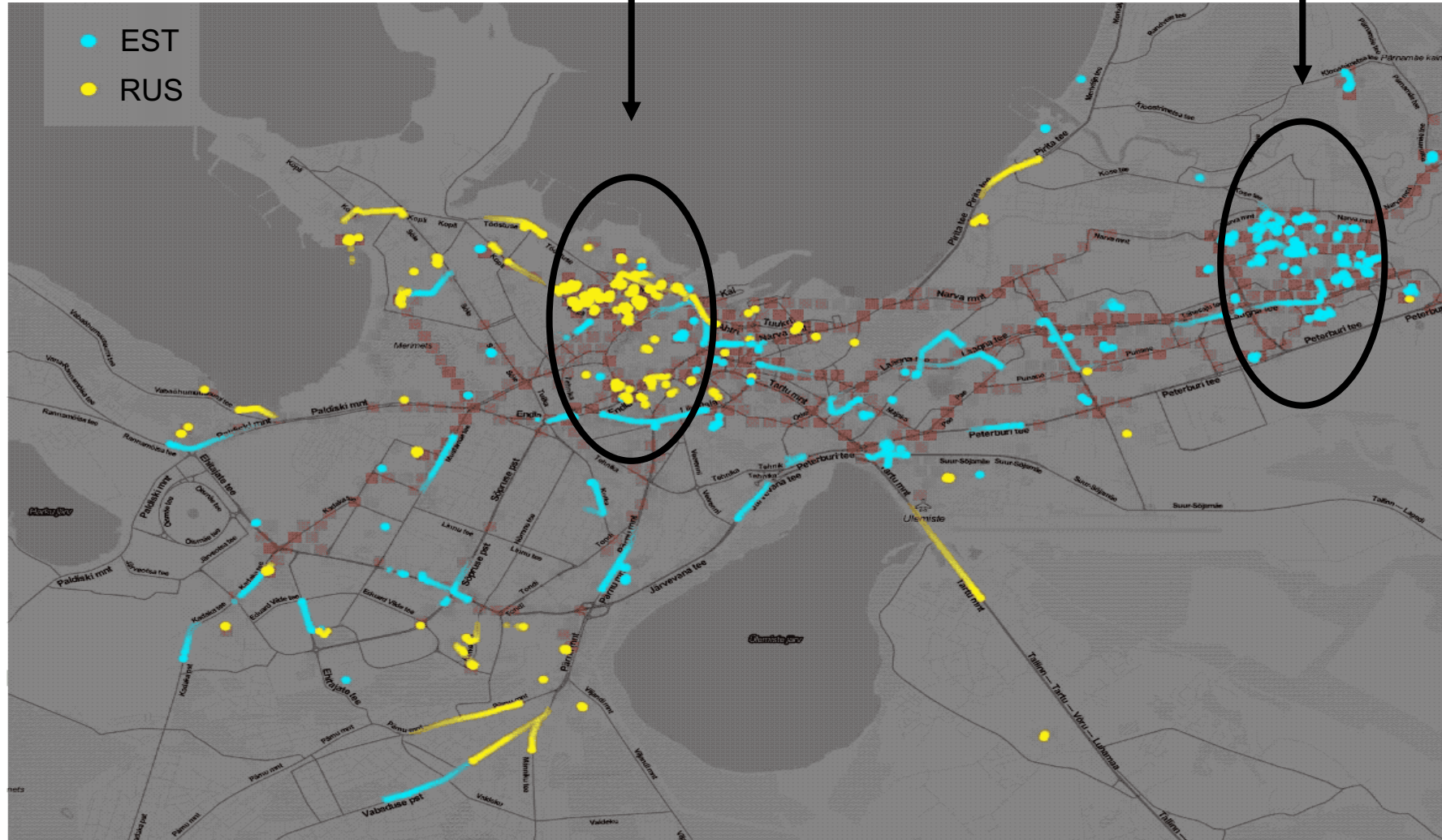
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Neighbourhood
A

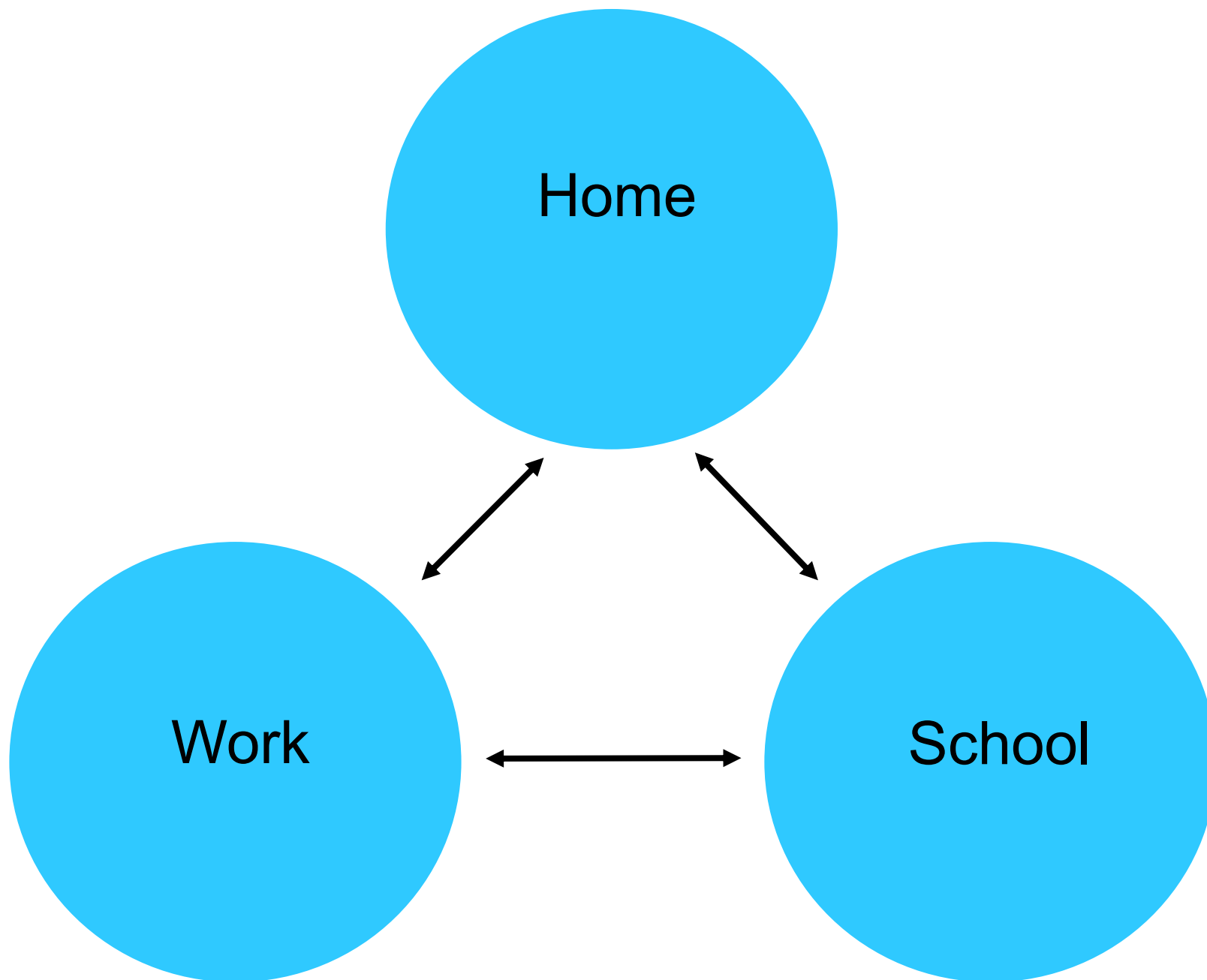
Neighbourhood
B



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Social Inclusion

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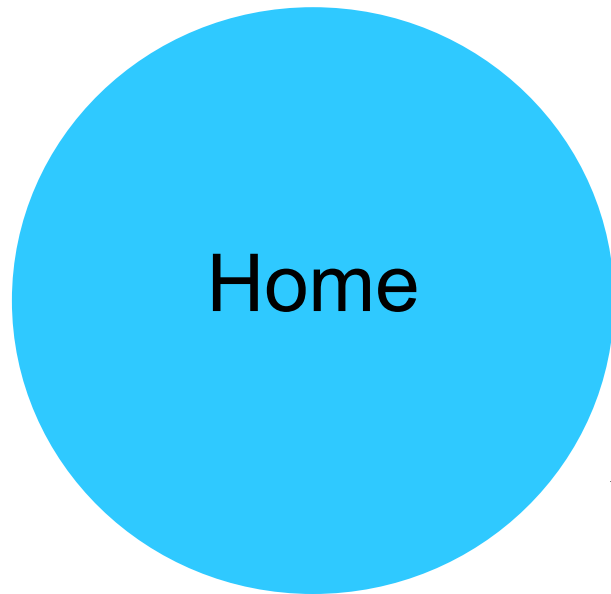
Volume 9, Issue 2 (2021)

Vicious Circle of Segregation: Understanding the Connectedness of Spatial Inequality across Generations and Life Domains

Editors

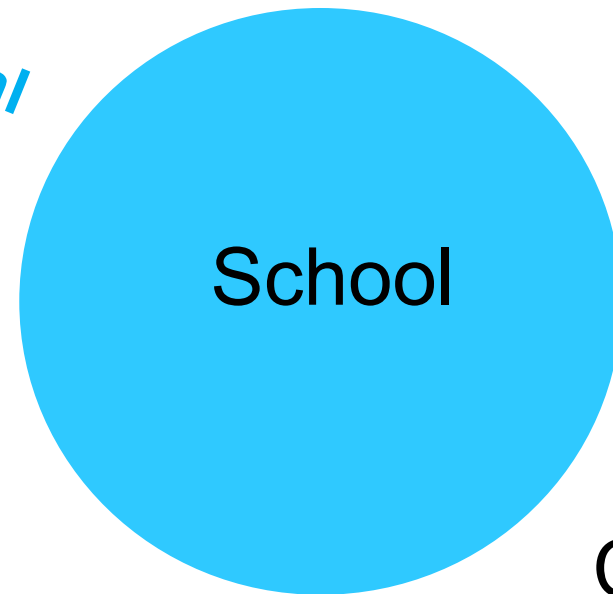
Titi Tammaru, Siiri Silm, Frank Witlox, Maarten van Ham
and Madli Johanna Maidla

Parents



Home

*Intergenerational
transmissions*



School

Children

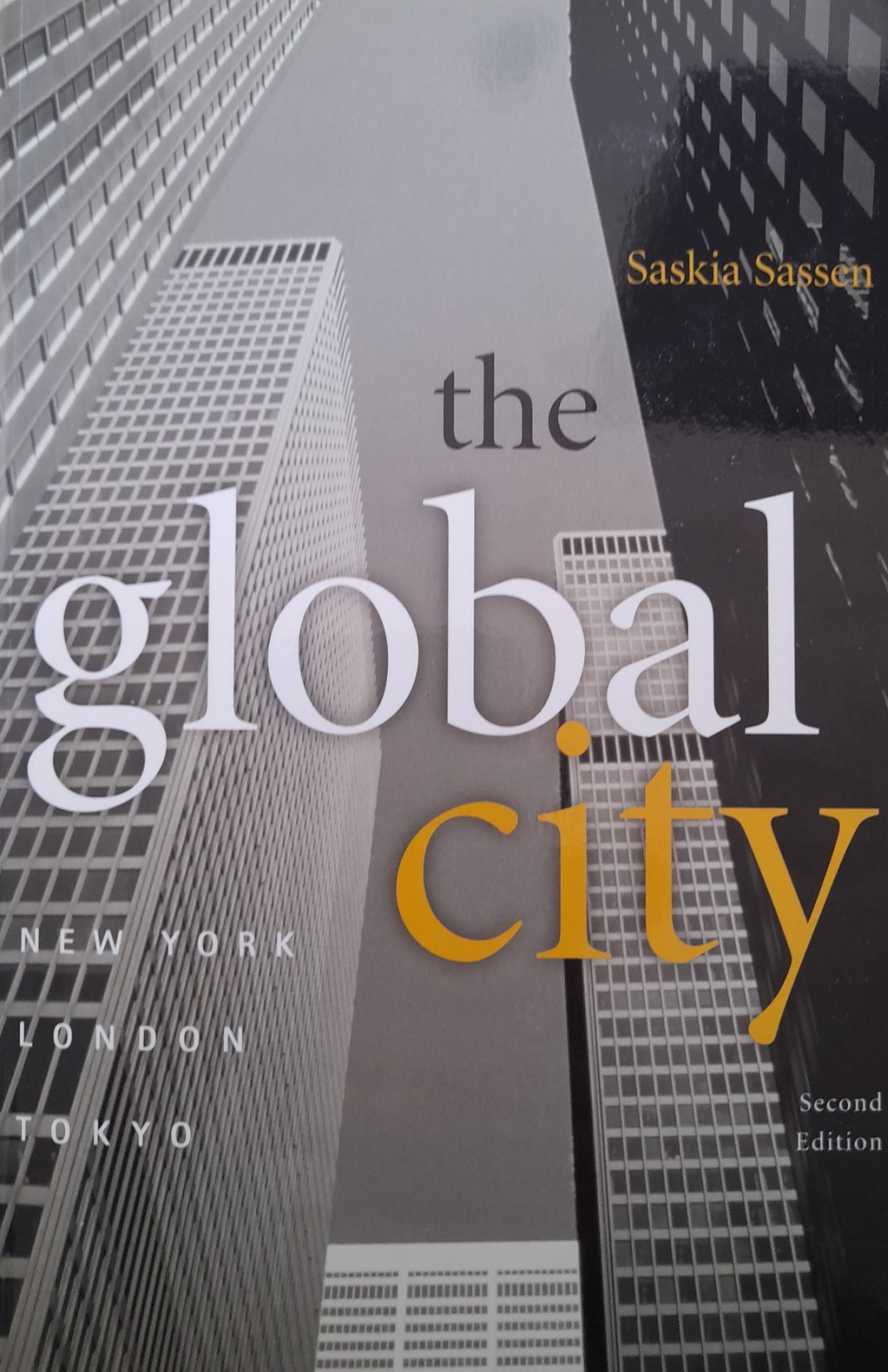
Recurring question:

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FRAMEWORK OF THE STUDY

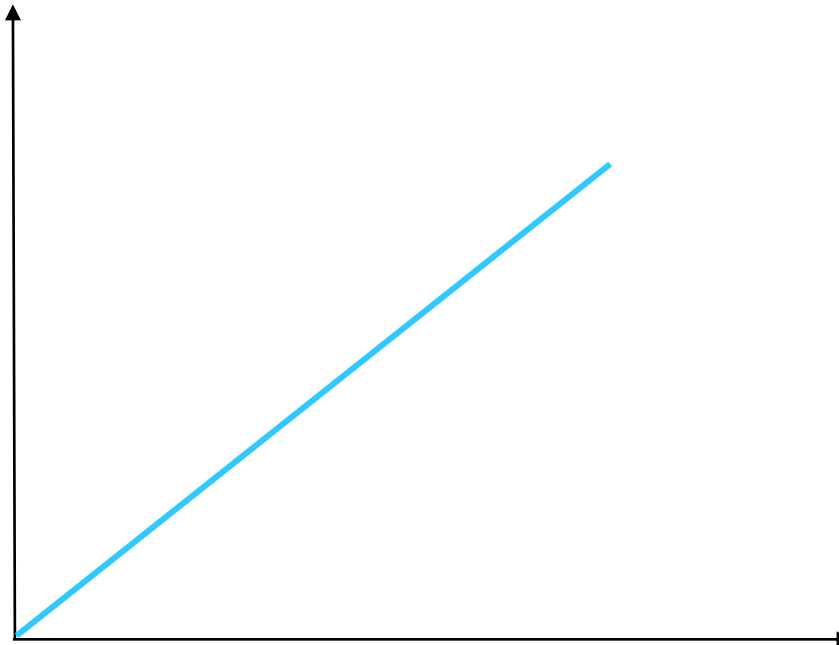




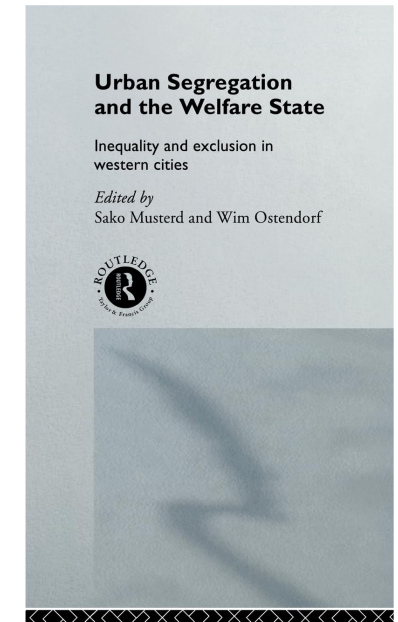
Social polarization thesis

Inequality and segregation are positively related to each other

Residential
segregation

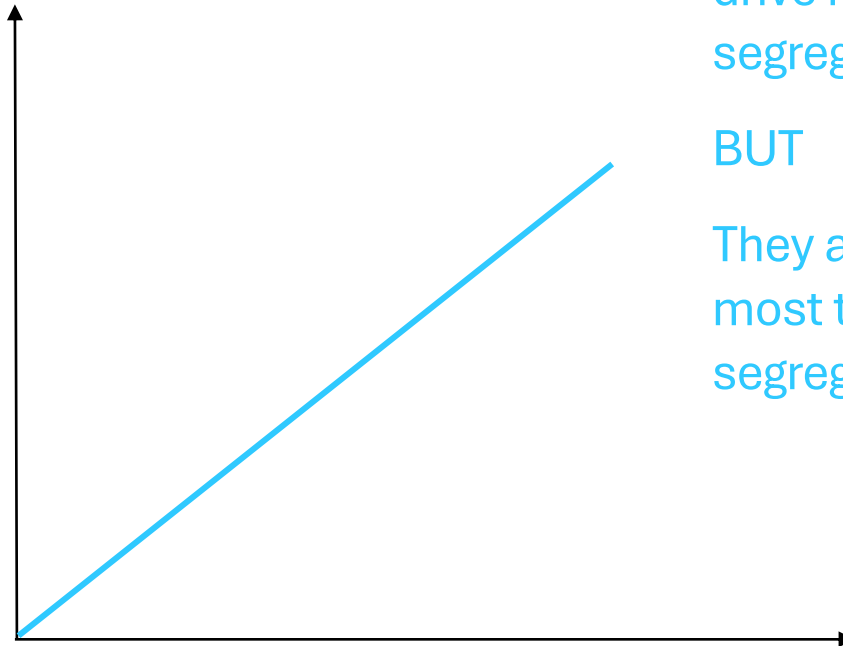


Income
inequality



Inequality and segregation are positively related to each other

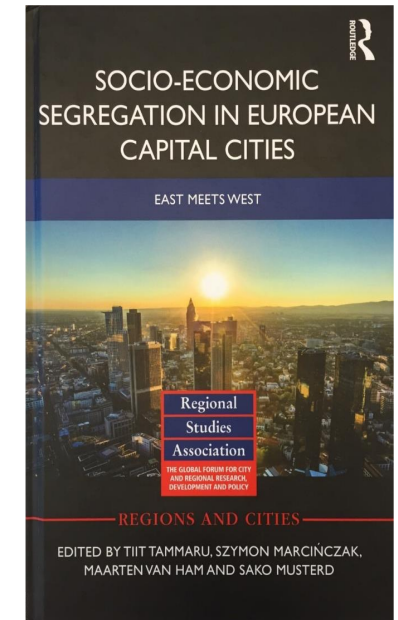
Residential
segregation



Higher-earning
households tend to
drive residential
segregation

BUT

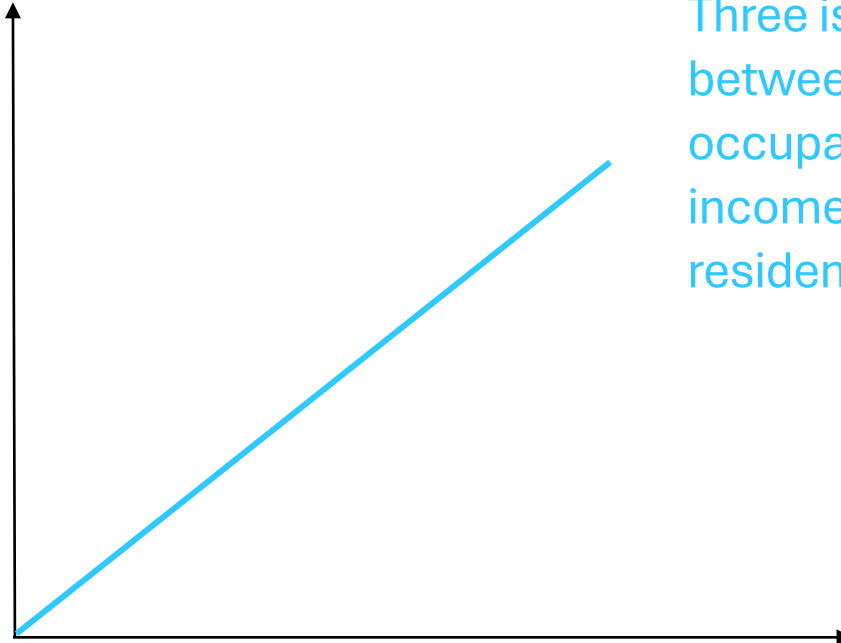
They are not necessarily
most the most
segregated group



Levels of income inequality and segregation are correlated to each other

Residential
segregation

T



There is a time lag
between changes
occupational change and
income inequality, and
residential segregation

Articles

Relationship between income inequality and residential segregation of socioeconomic groups

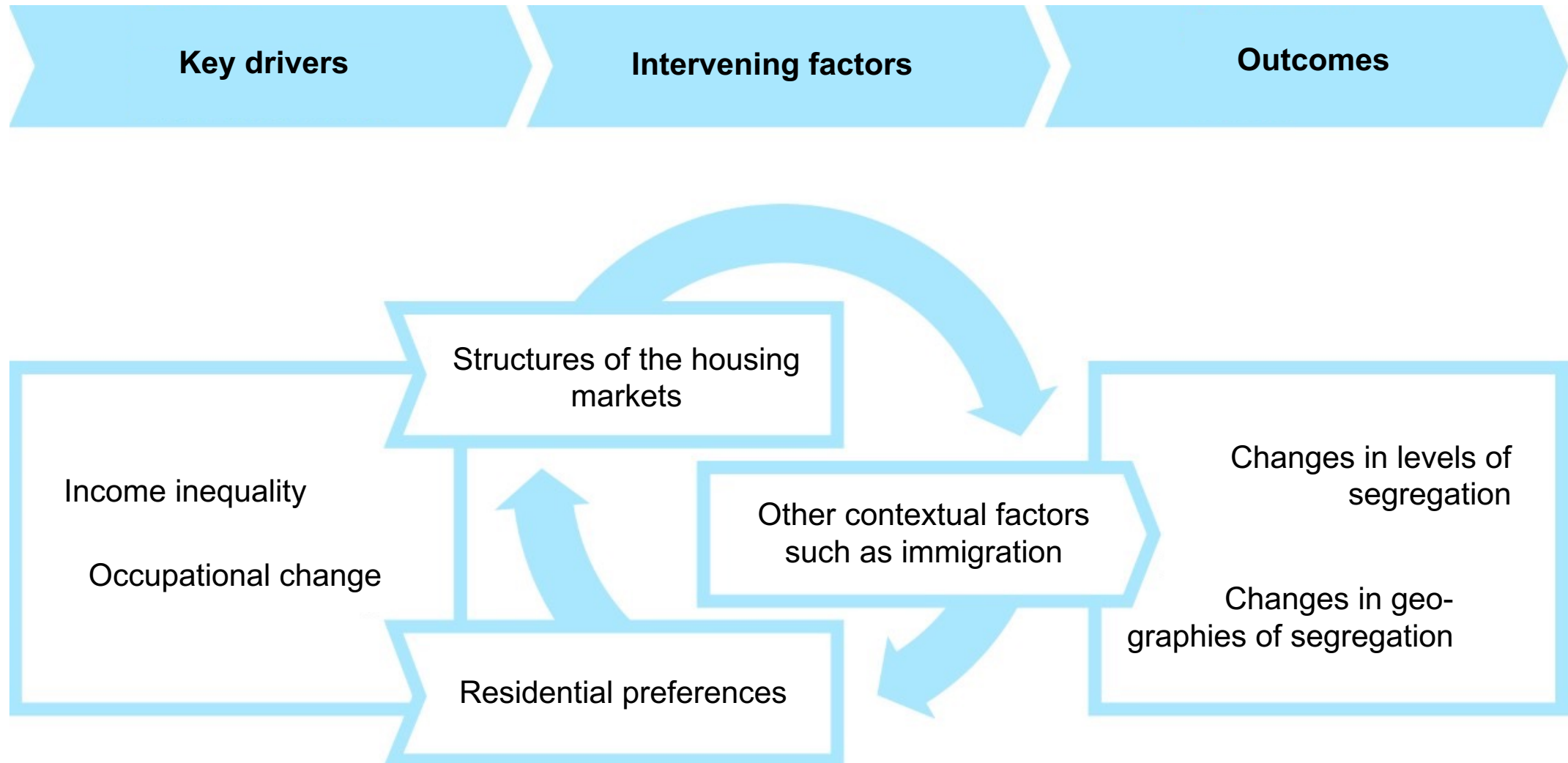
Tiit Tammaru , Szymon Marcin¹ czak , Raivo Aunap, Maarten van Ham  & Heleen Janssen

Pages 450-461 | Received 26 Aug 2017, Published online: 04 Jan 2019



Income
inequality
T-1

Key elements of study framework



DESIGN OF THE STUDY



ISCO-88 occupational categories

Main occupational categories

- 1 – Managers
- 2 – Professionals
- 3 – Technicians
- 4 – Clerks
- 5 – Sellers
- 6 – Industrial workers
- 7 – Machine operators
- 8 – Elementary occupations

ISCO-88 occupational categories

Main occupational categories

1 – Managers	Higher
2 – Professionals	
3 – Technicians	Middle
4 – Clerks	
5 – Sellers	
6 – Industrial workers	Lower
7 – Machine operators	
8 – Elementary occupations	

Main indicators

Income inequality – national **Gini Index**

Residential segregation – **Index of Dissimilarity**
between Higher and Lower occupational groups in
neighbourhoods of around 1000–5000 inhabitants

Less than 20

20–39

40 and more

Low segregation

Medium segregation

High segregation

City-regions included to the comparative study

2001-2011-2021 census rounds
16 case cities / teams
~ 25 authors



MAIN FINDINGS OF THE STUDY

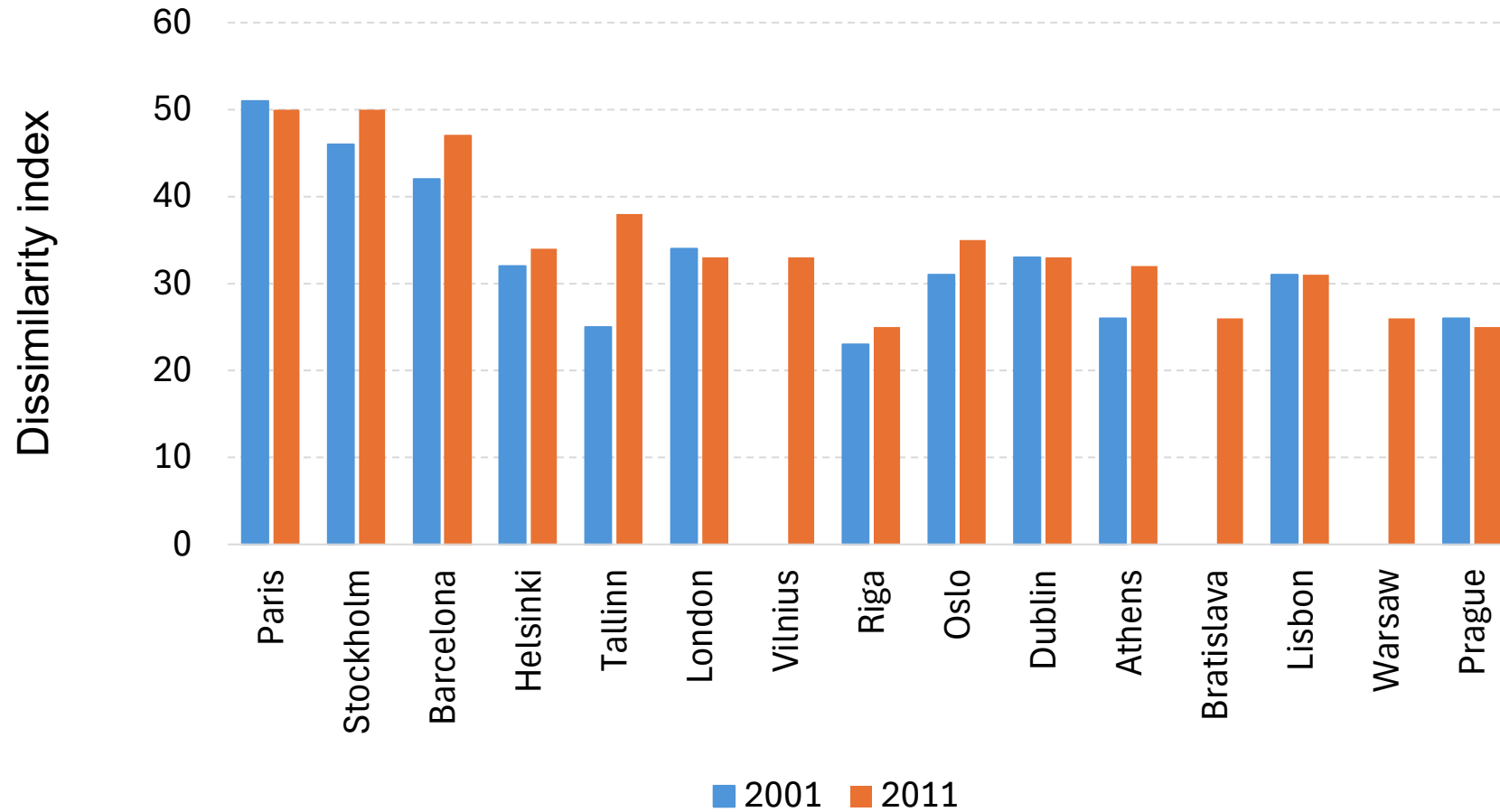


Changes in the occupational structure

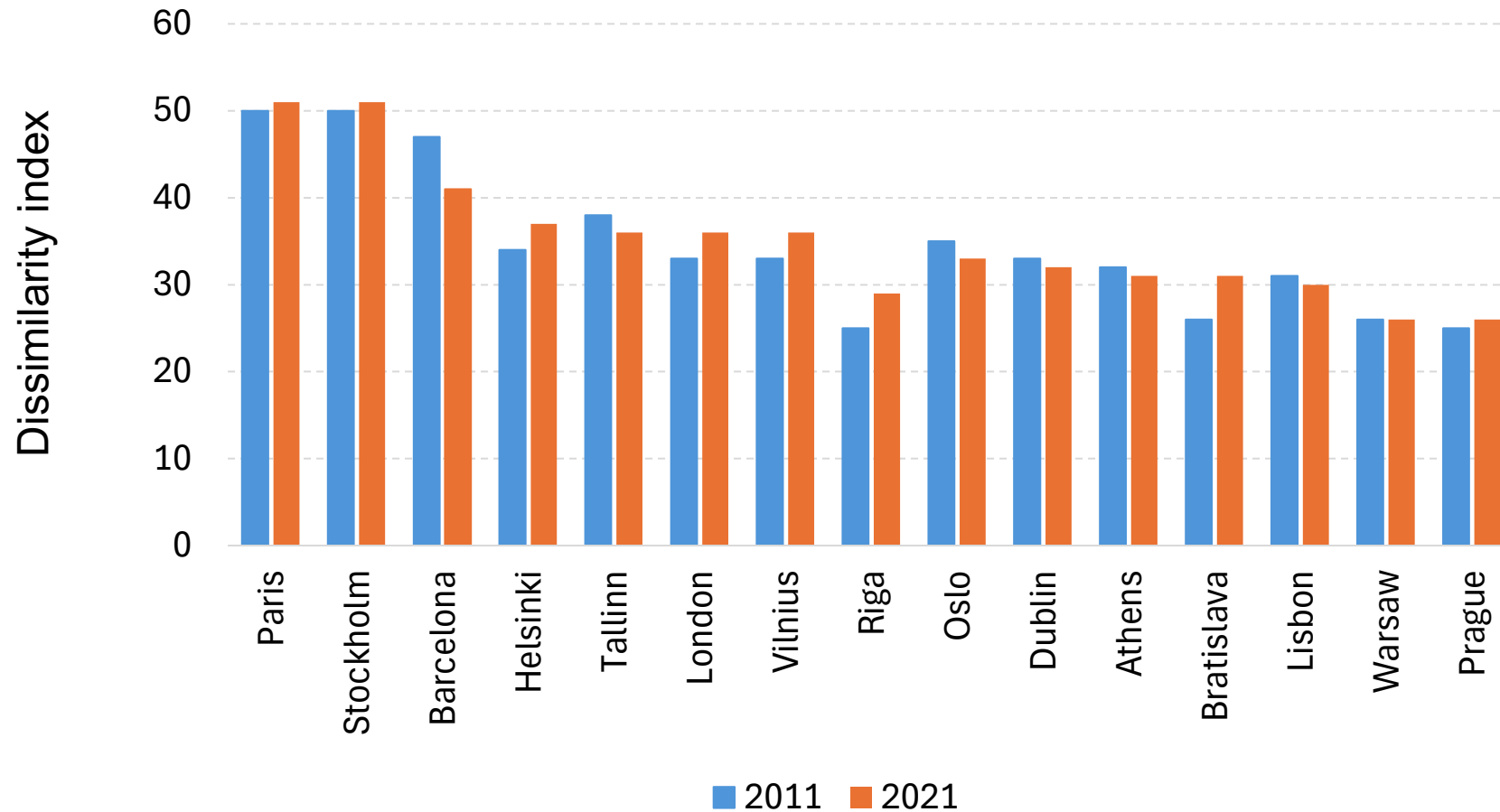
■ Higher
■ Middle
■ Lower



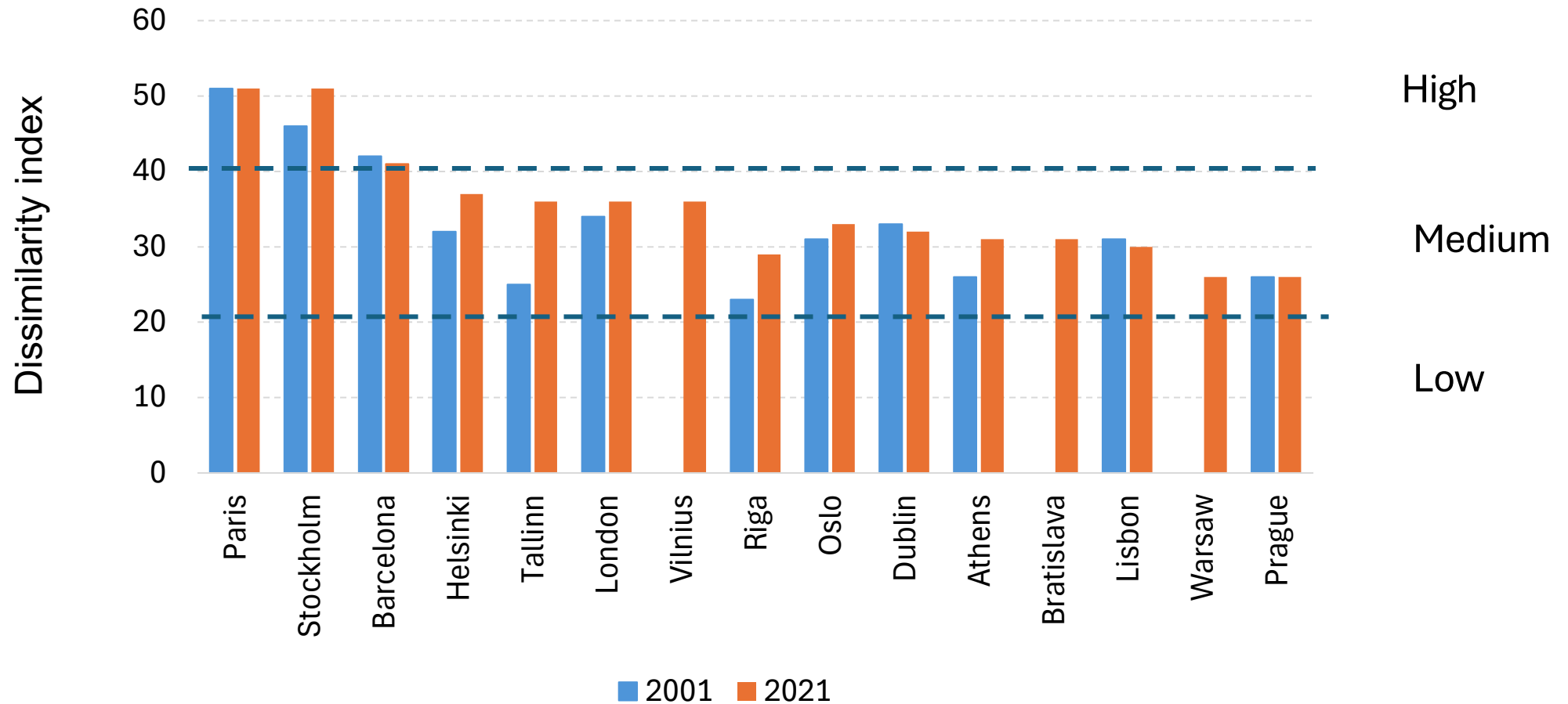
Changes in segregation between higher and lower occupational groups, 2001 and 2011



Changes in segregation between higher and lower occupational groups, 2011 and 2021



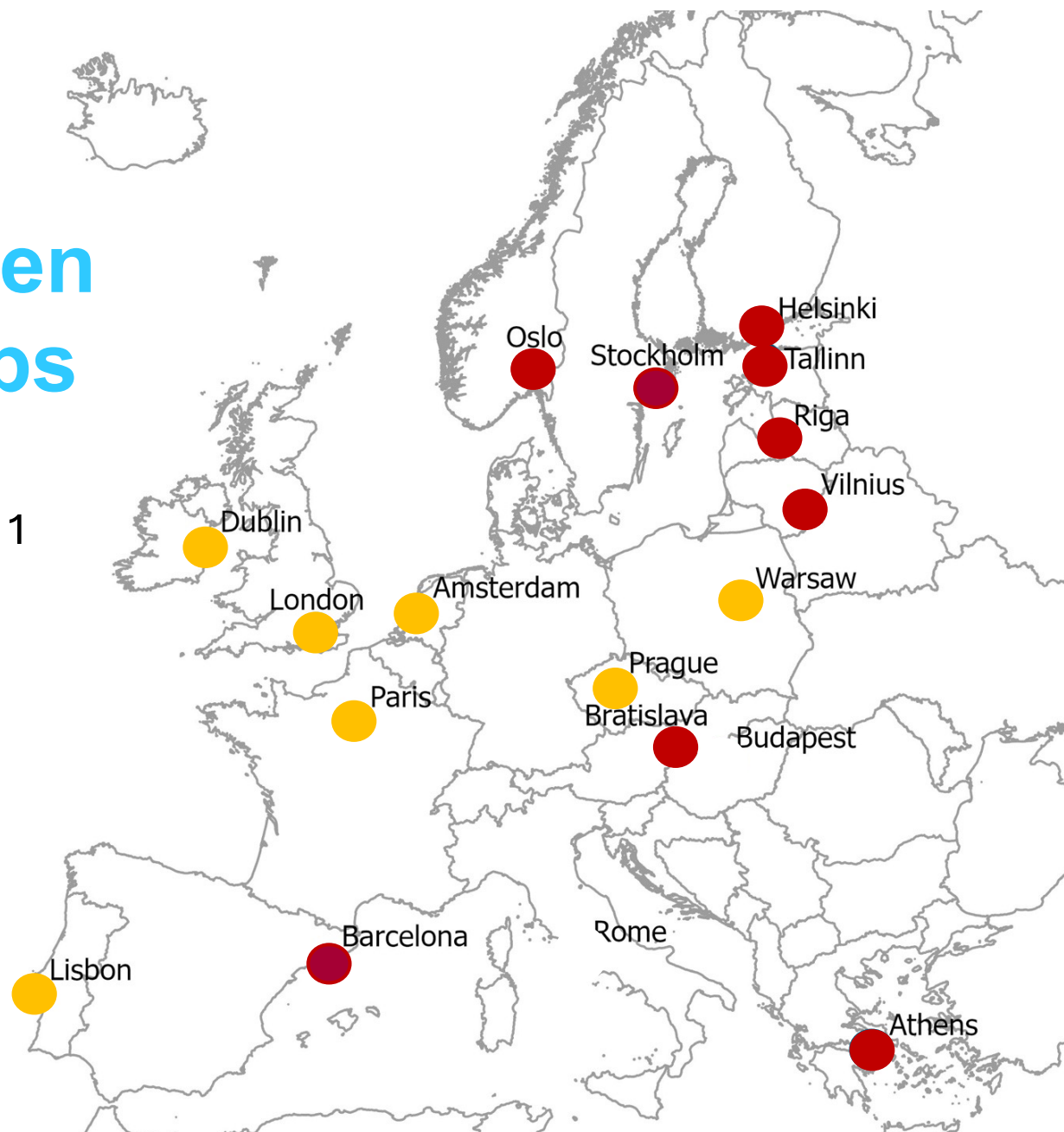
Changes in segregation between higher and lower occupational groups, 2001 and 2021



Segregation between occupational groups

Change in the DI between 2001 and 2011

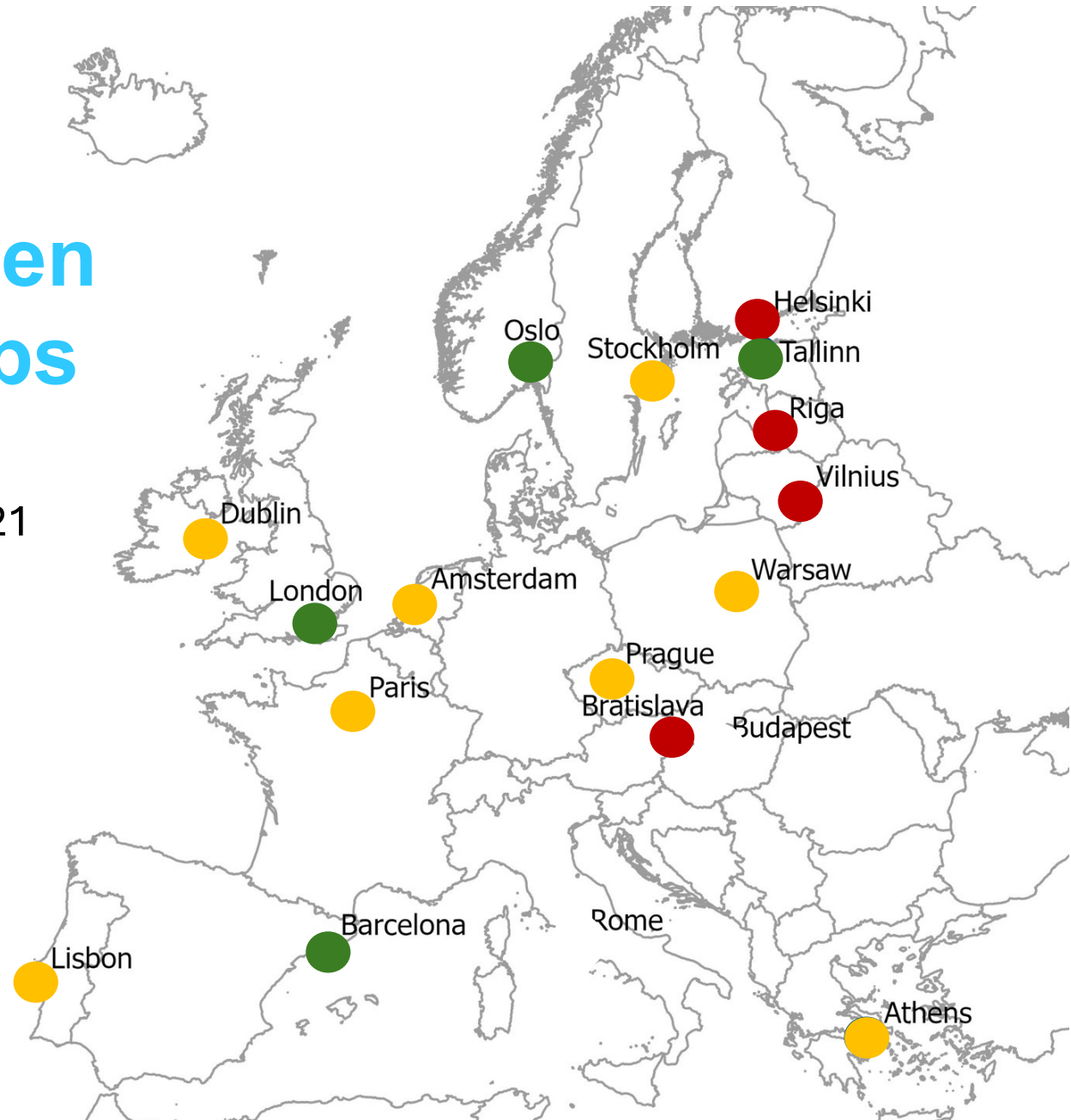
- Increase
- Decrease
- No change



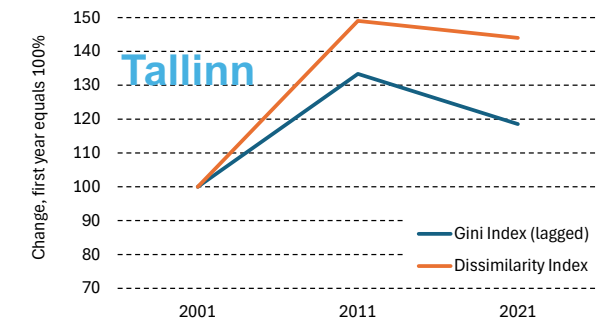
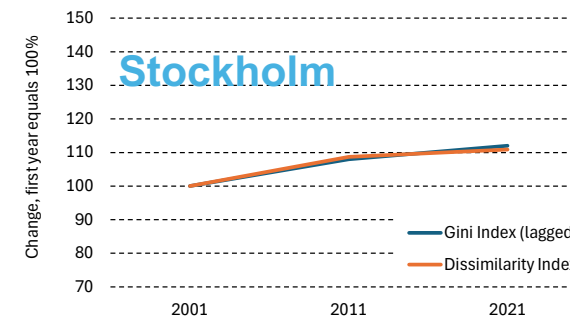
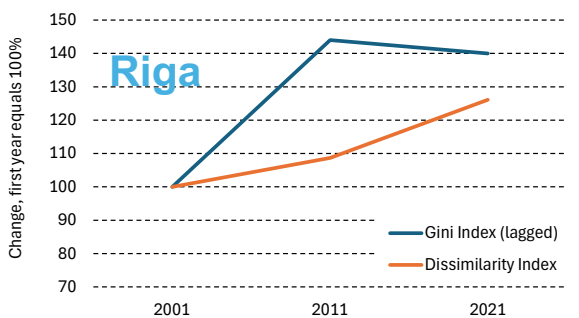
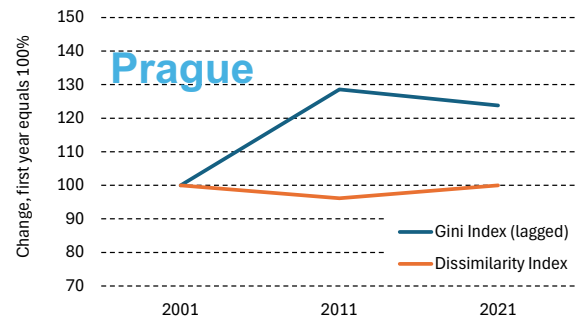
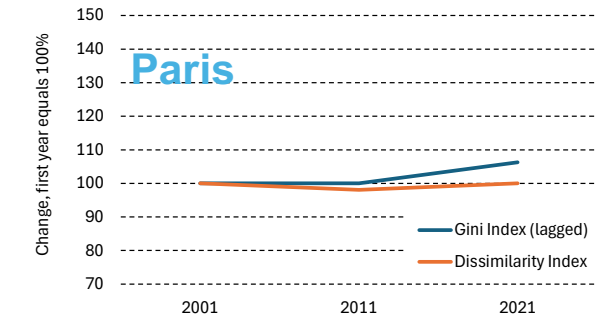
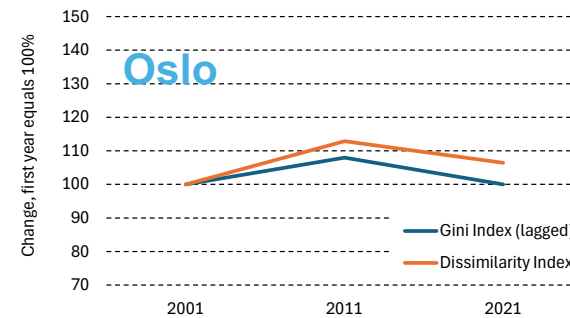
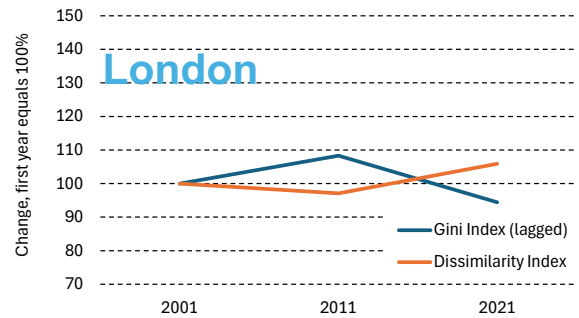
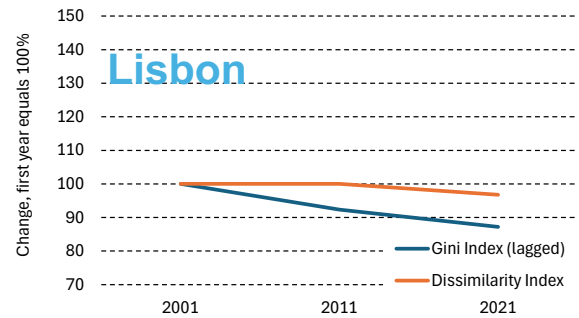
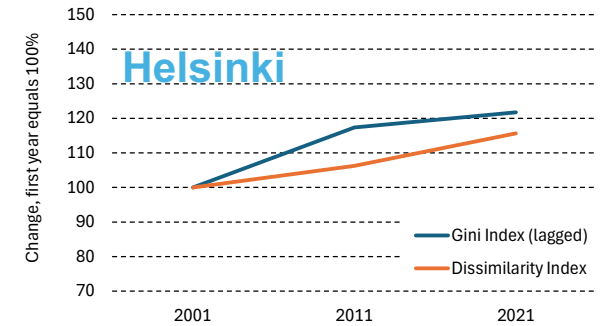
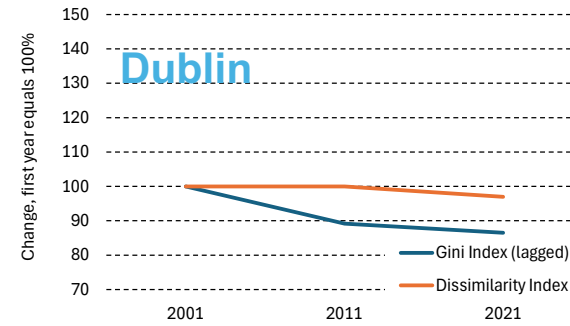
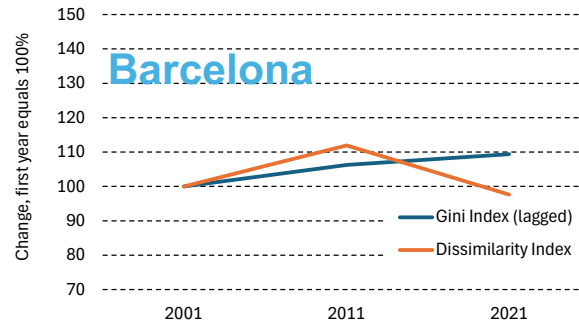
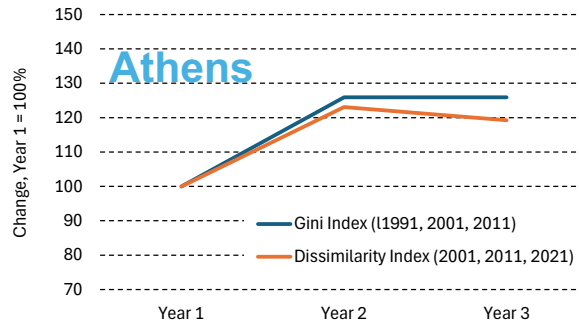
Segregation between occupational groups

Change in the DI between 2011 and 2021

- Increase
- Decrease
- No change

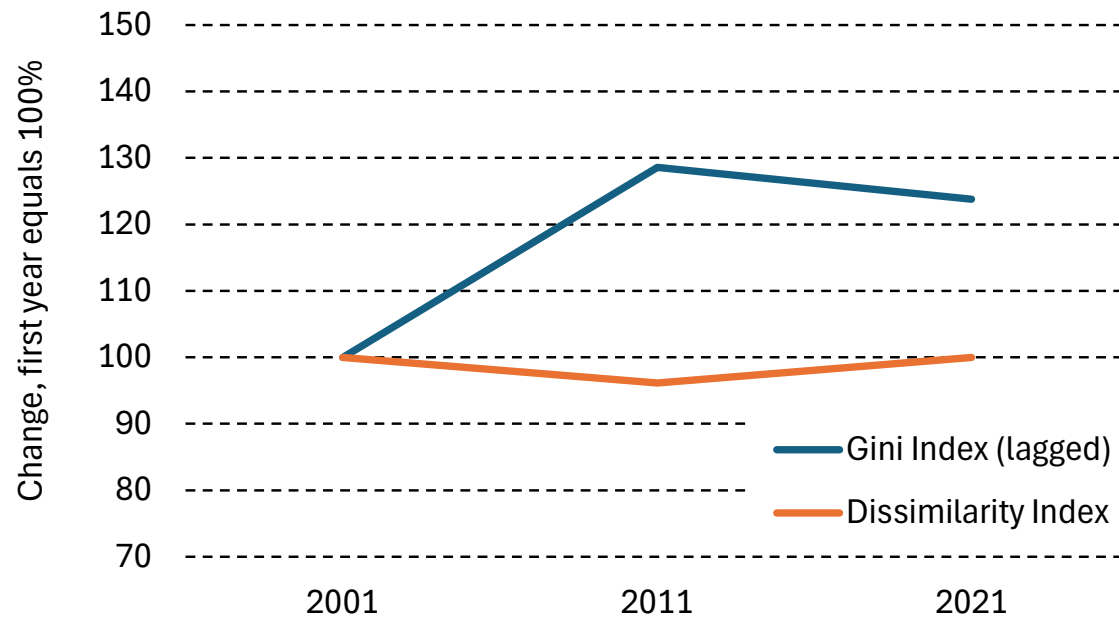


Changes in inequality (lagged) and segregation in 2001–2021, 2001=100%

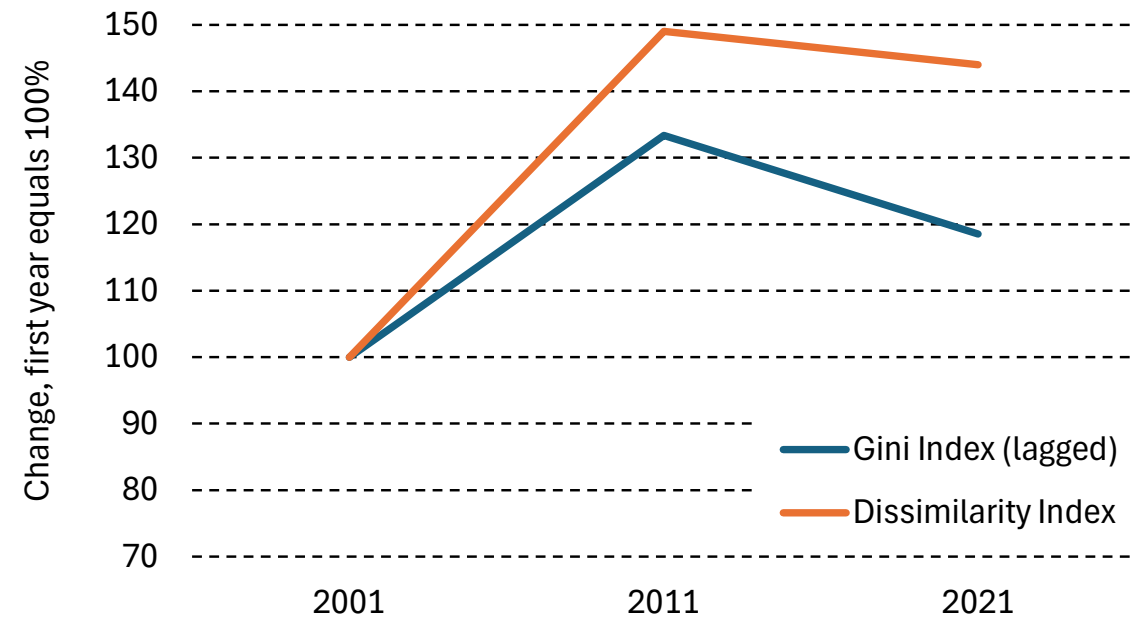


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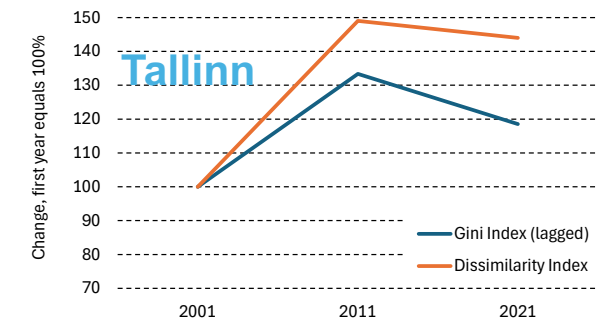
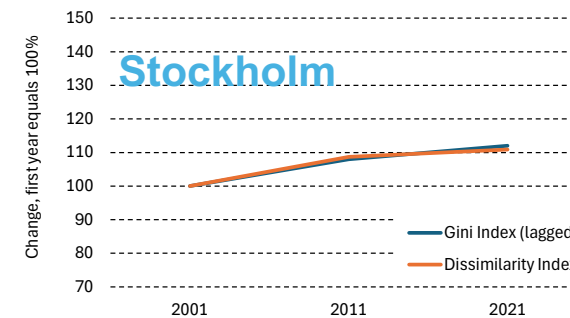
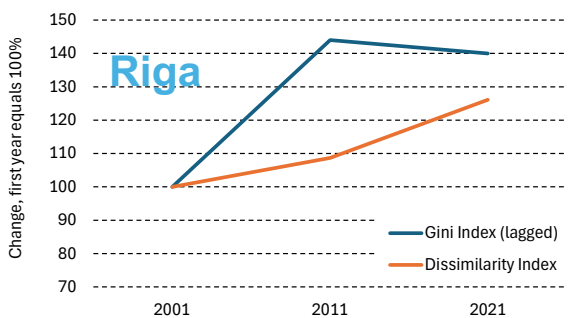
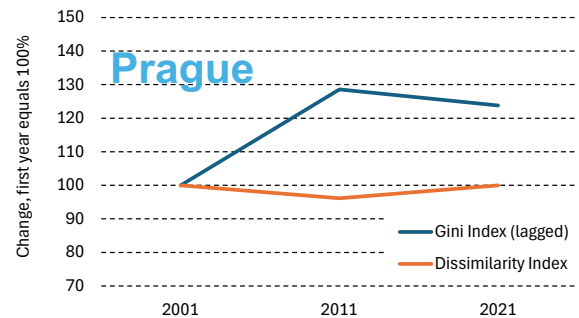
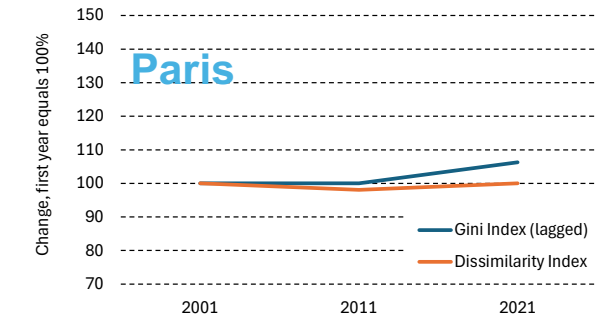
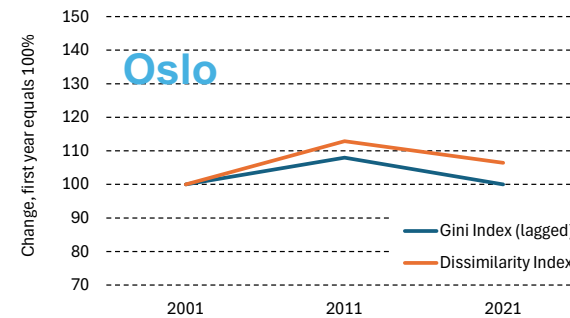
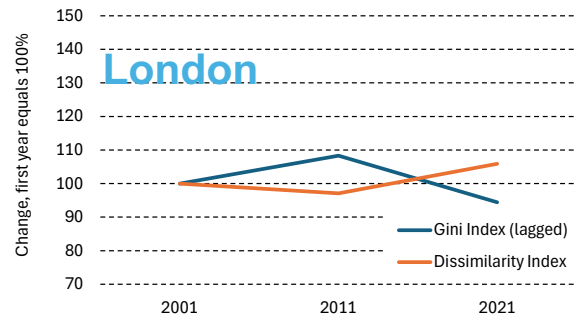
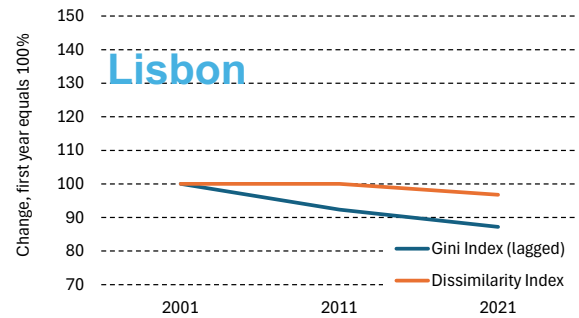
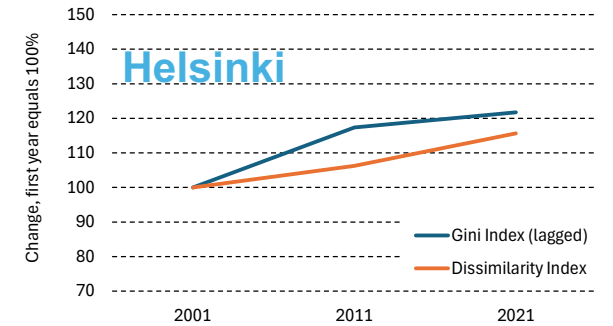
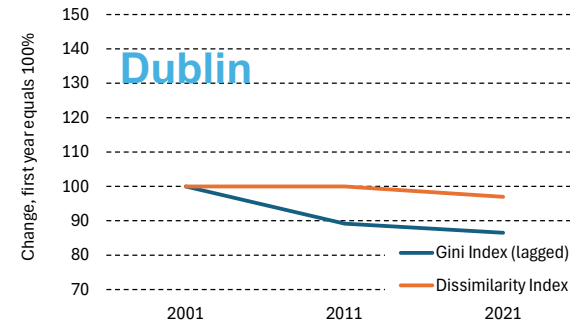
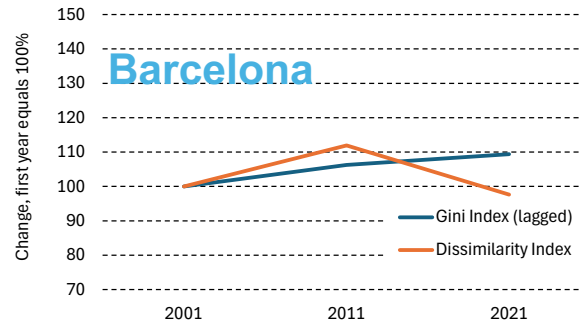
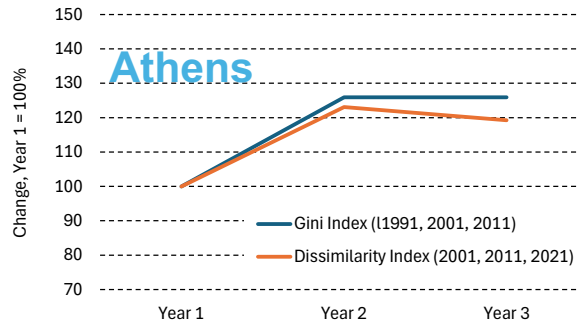
Prague, DI 26



Tallinn, DI 36

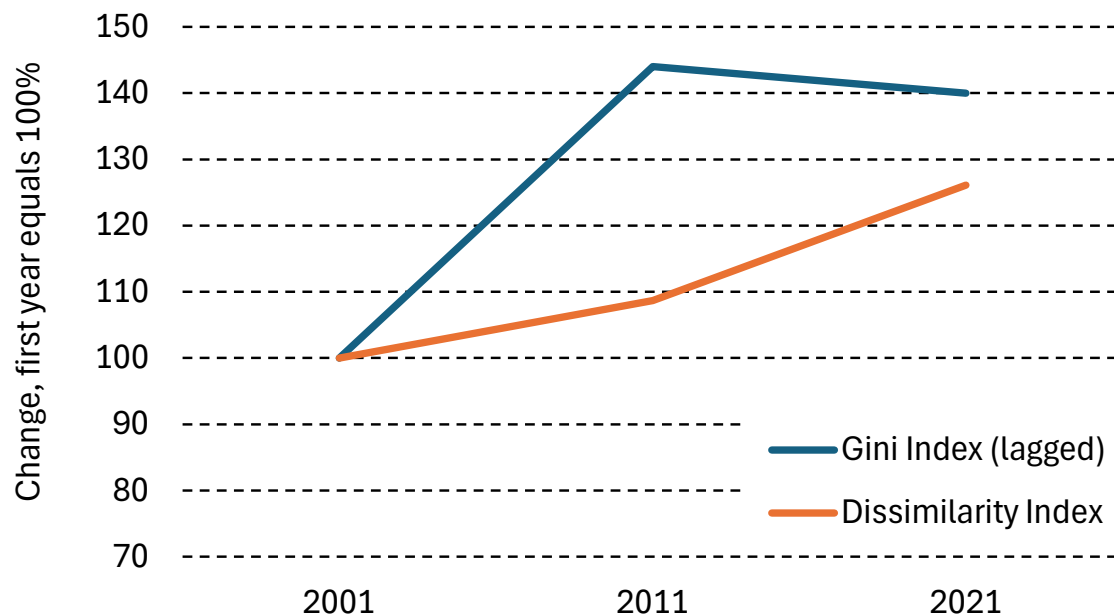


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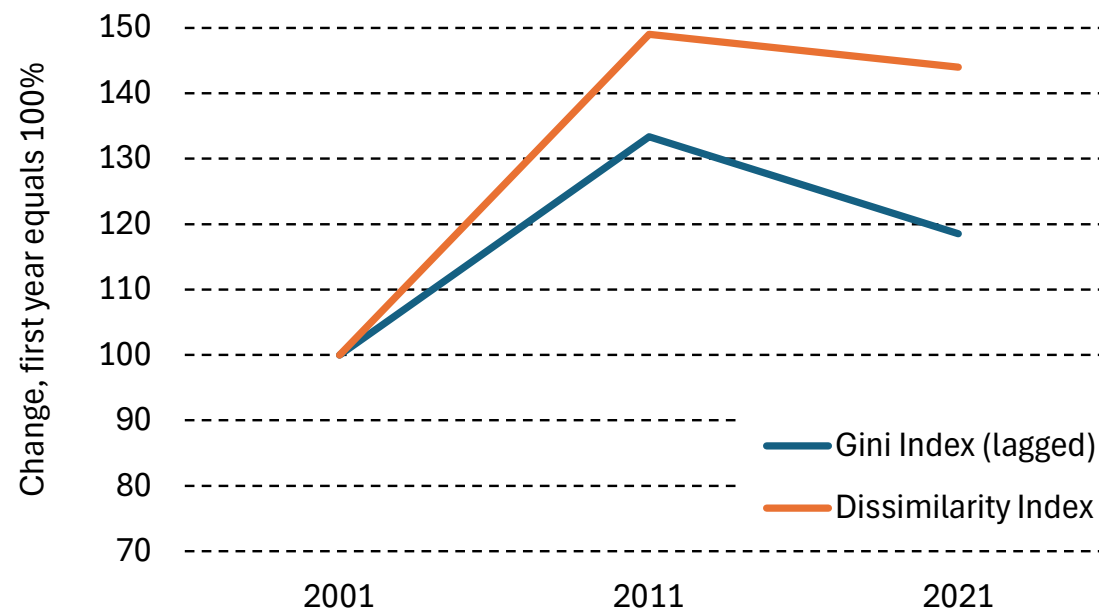


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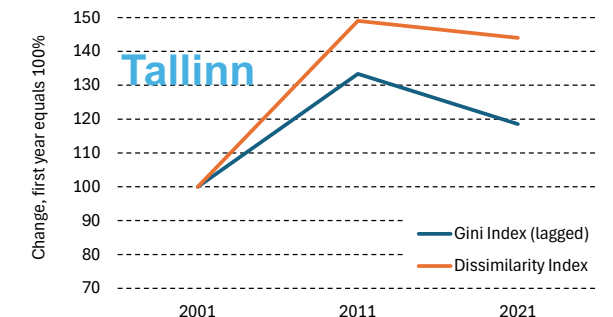
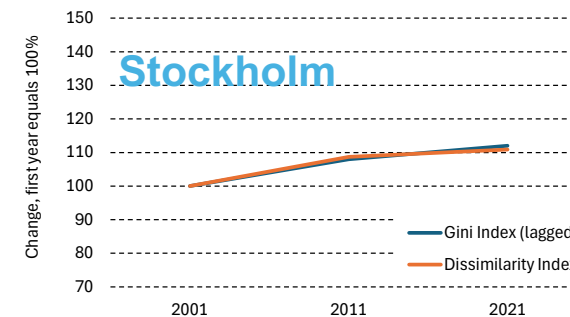
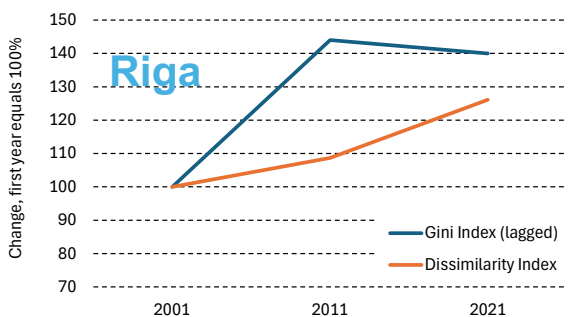
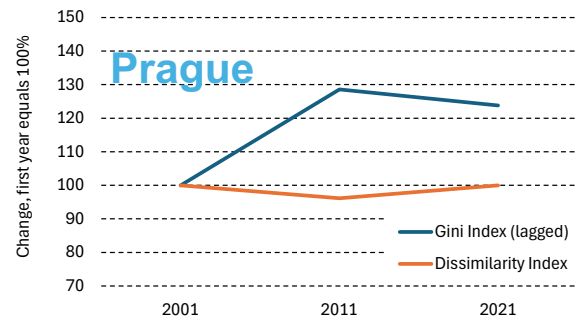
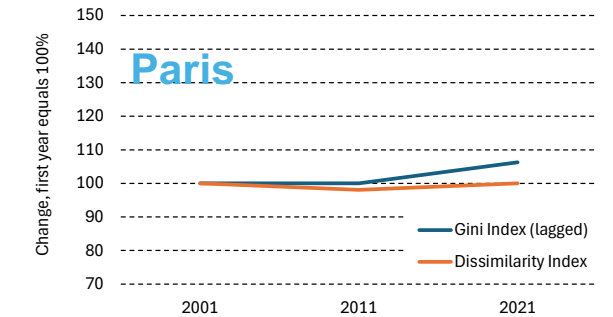
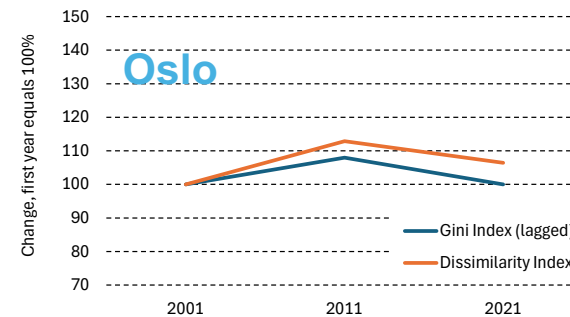
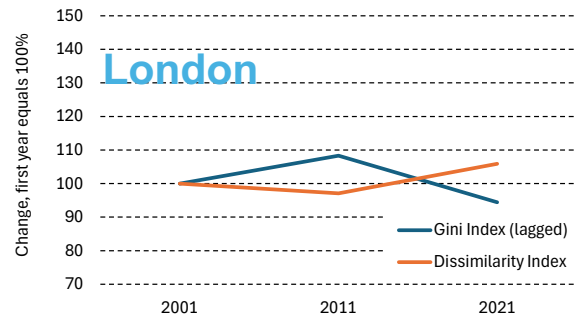
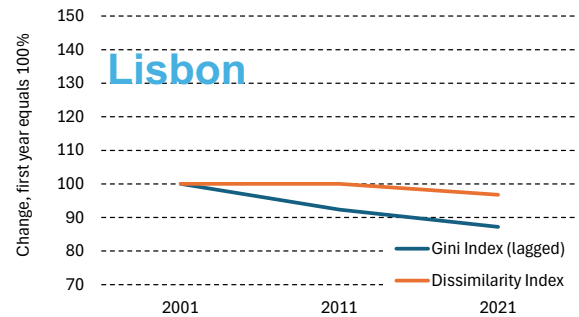
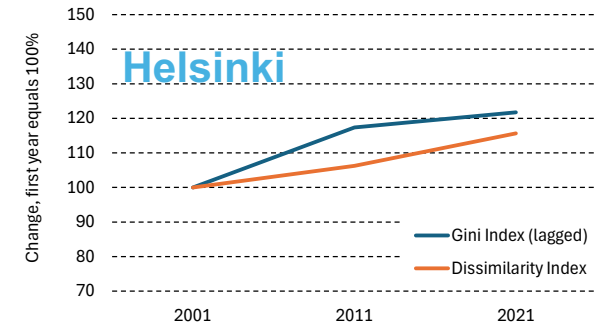
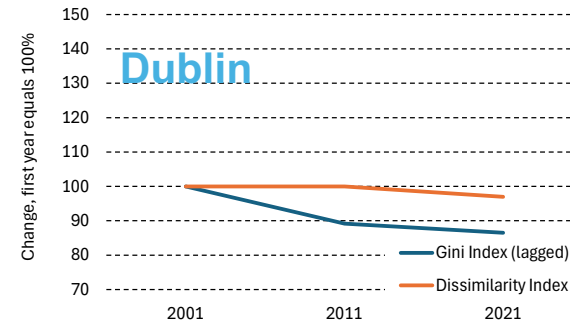
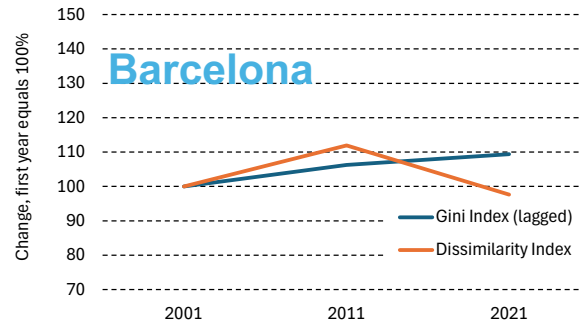
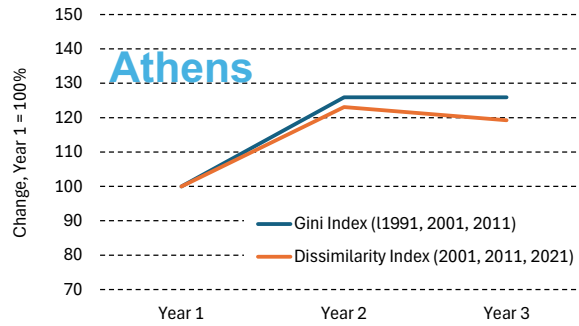
Rig, DI 29



Tallinn, DI 36

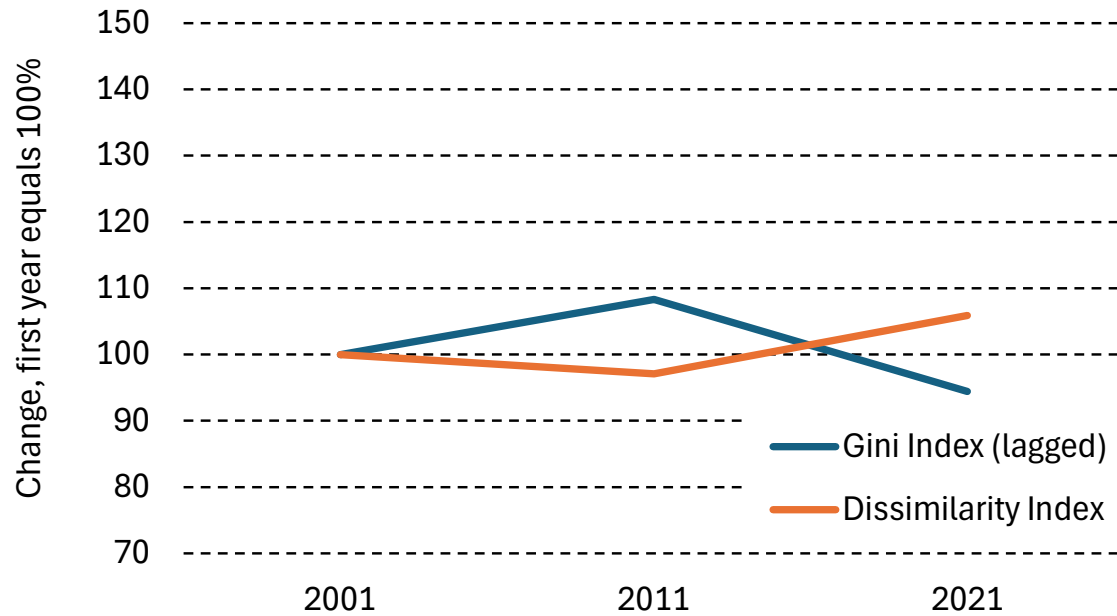


Changes in inequality (lagged) and segregation in 2001–2021, 2001=100%

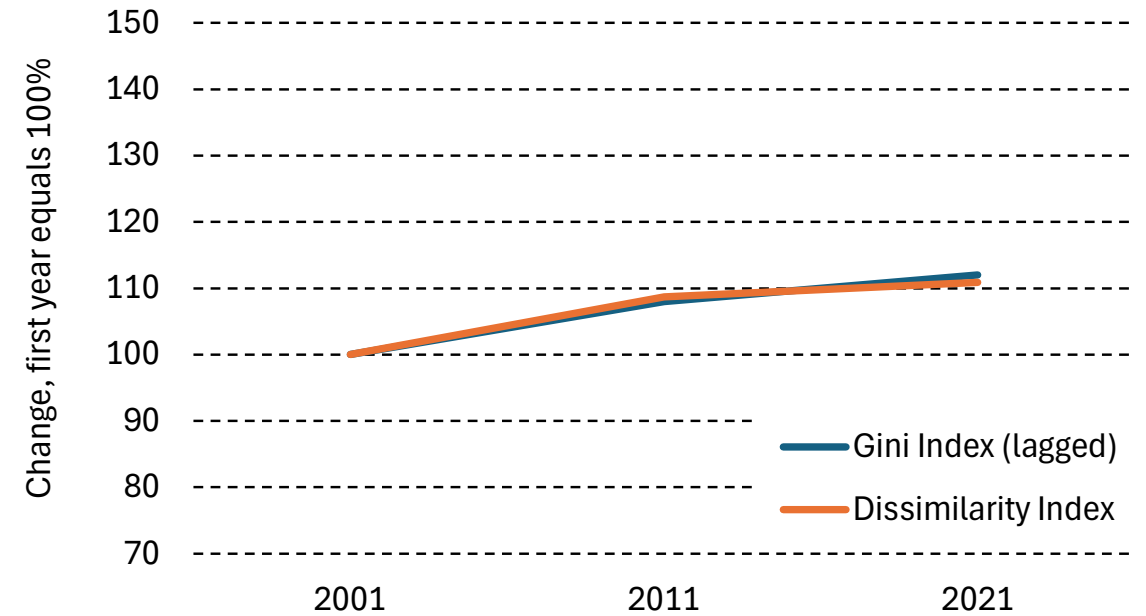


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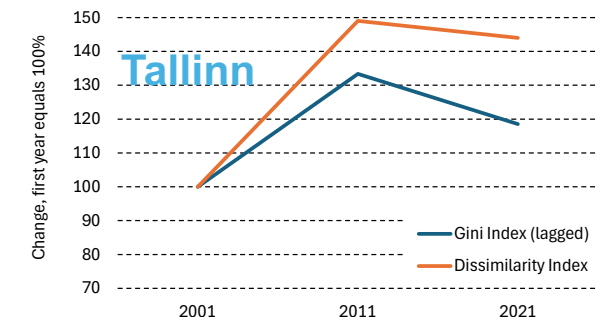
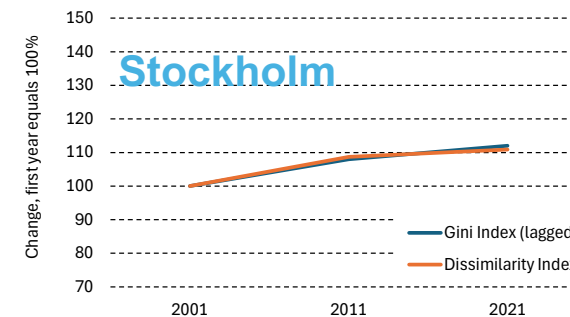
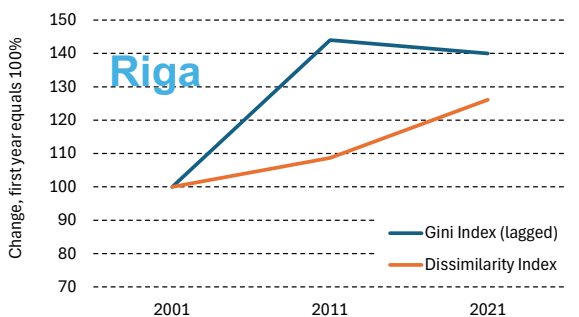
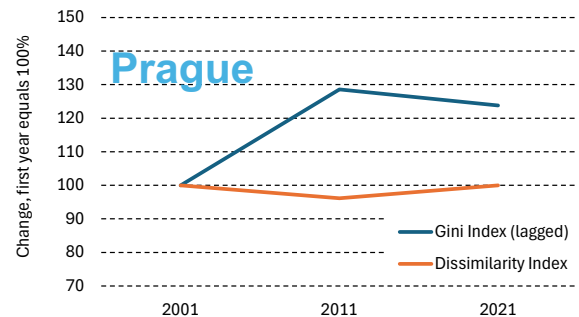
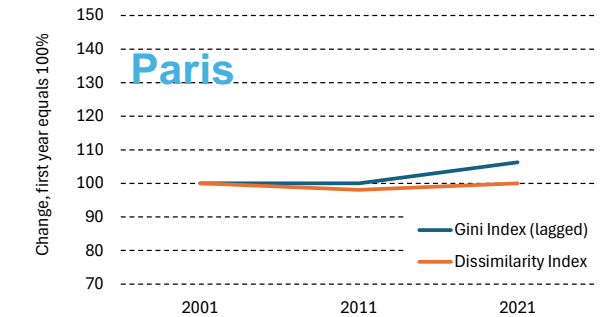
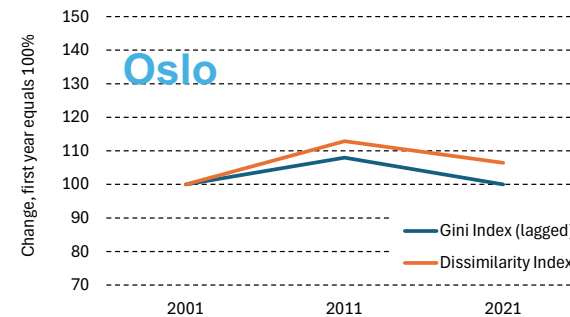
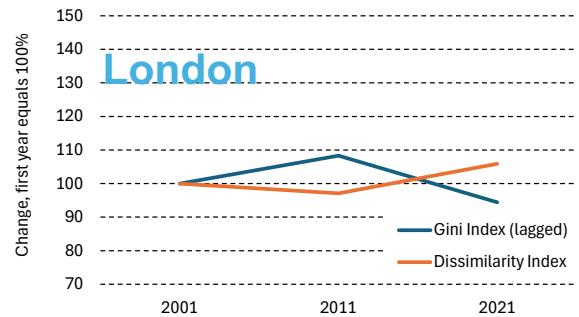
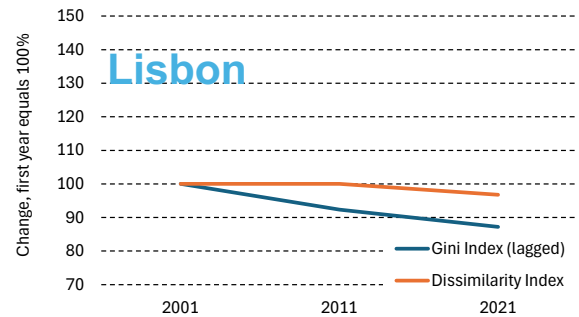
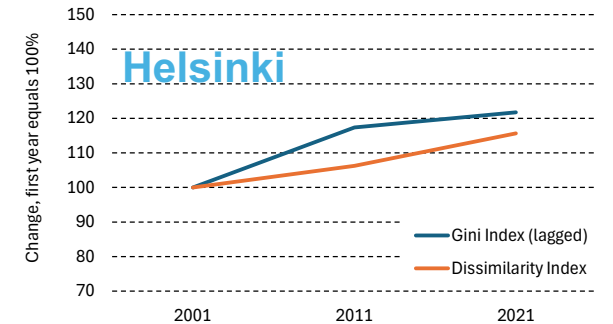
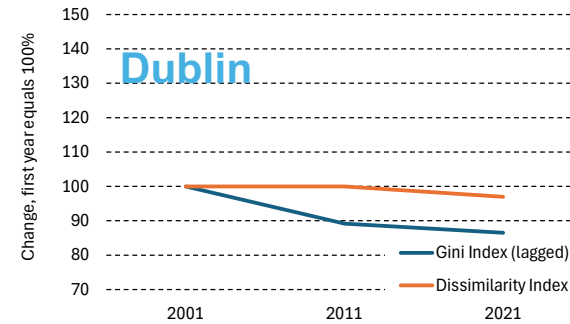
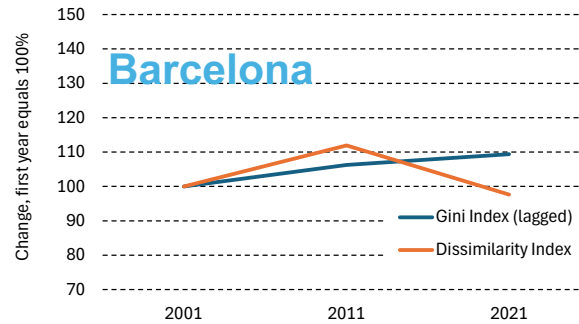
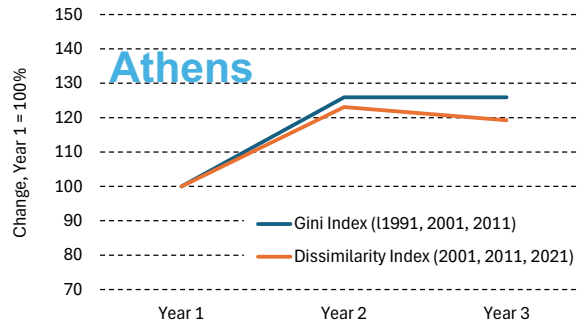
London, DI 36



Stockholm, DI 51

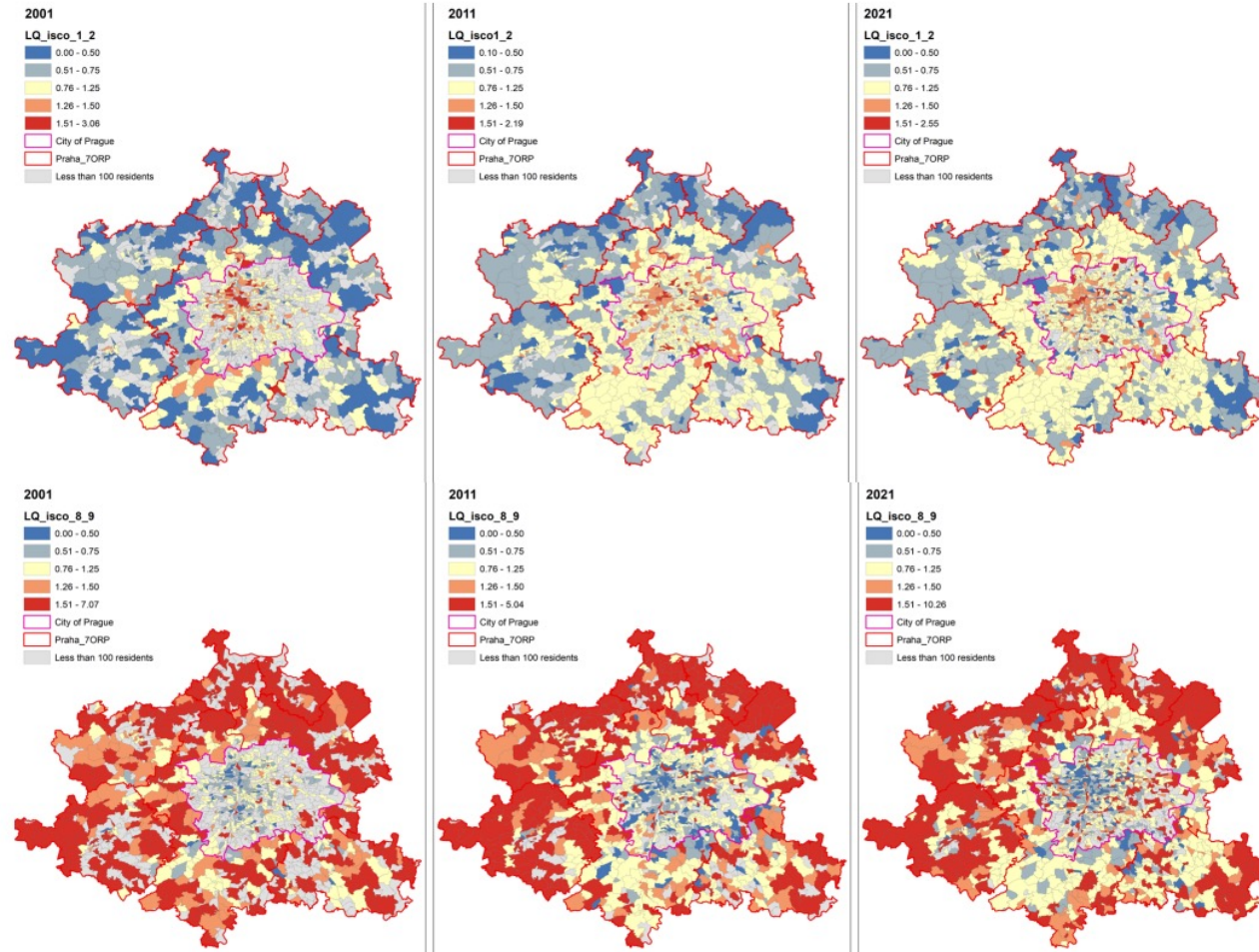


Changes in inequality (lagged) and segregation in 2001–2021, 2001=100%



Changes the geographies of segregation Prague

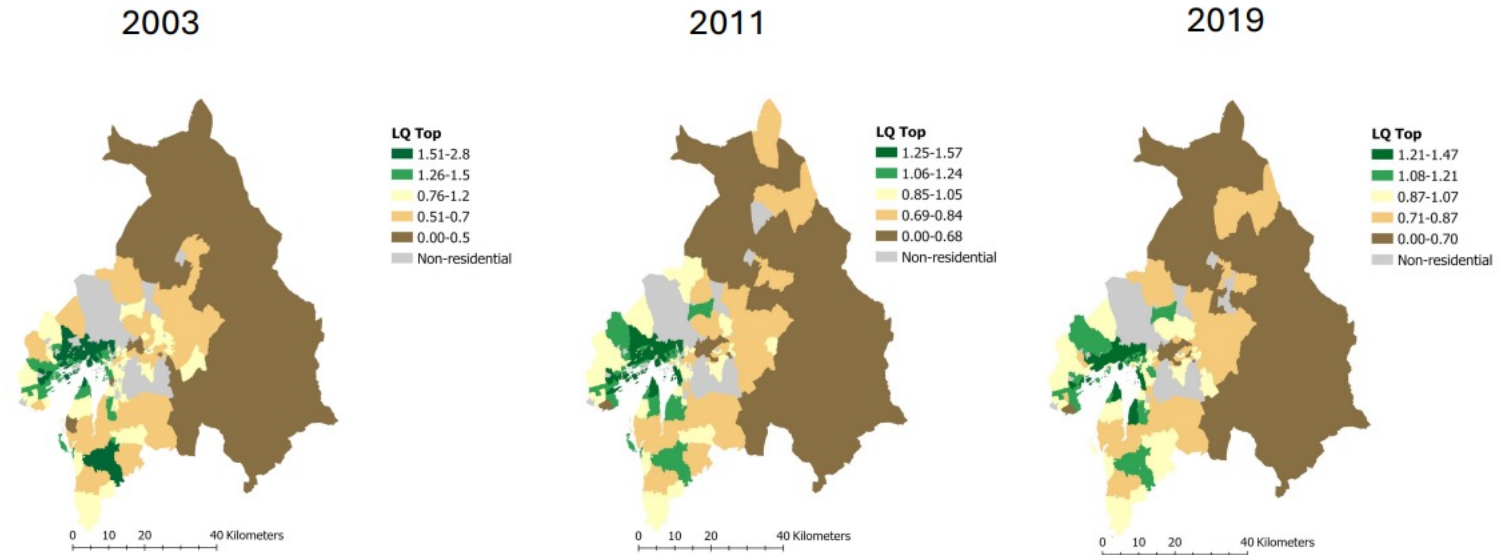
LQs of higher
occupational groups



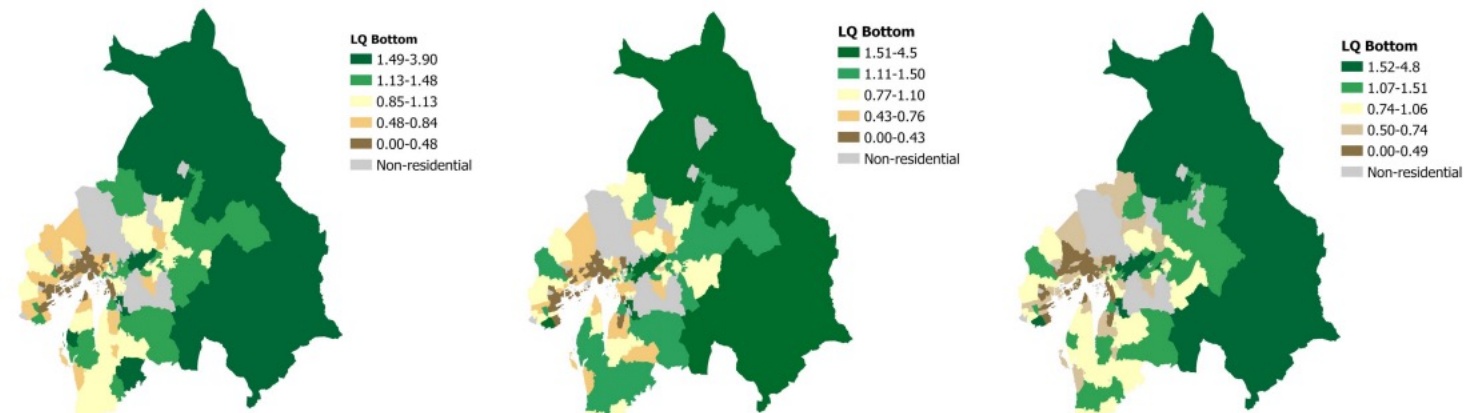
LQs of lower
occupational groups

Changes the geographies of segregation Oslo

LQs of higher
occupational groups



LQs of lower
occupational groups

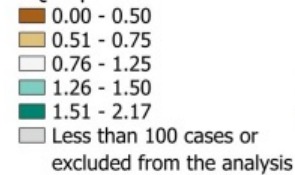


Changes the geographies of segregation Helsinki

LQs of higher
occupational groups

Top

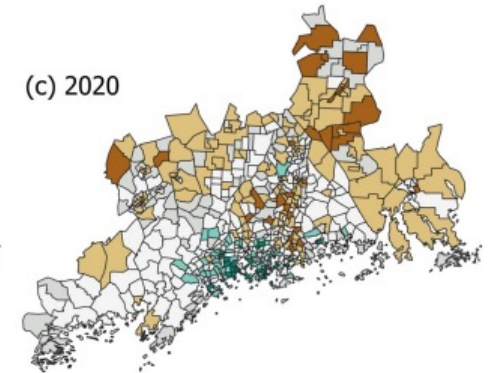
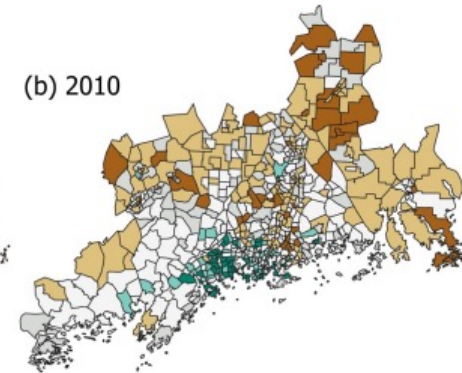
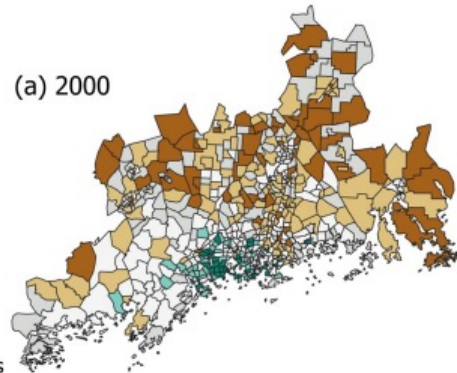
LQ Top



(a) 2000

(b) 2010

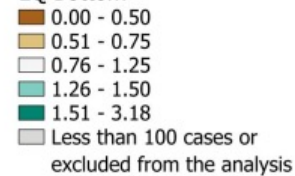
(c) 2020



LQs of lower
occupational groups

Bottom

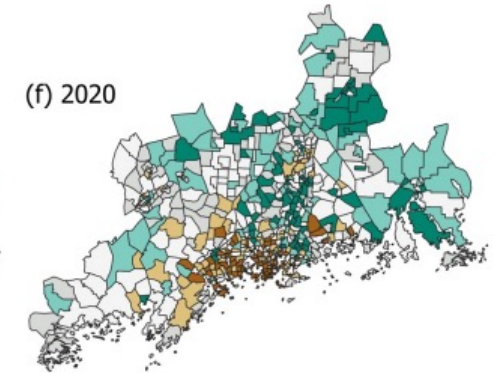
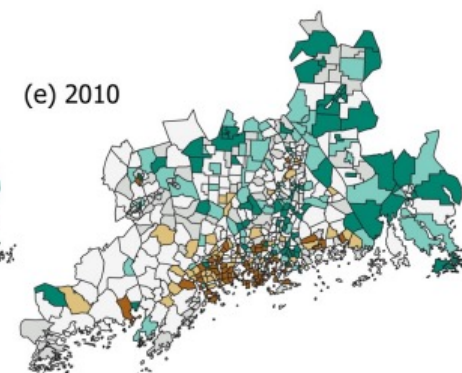
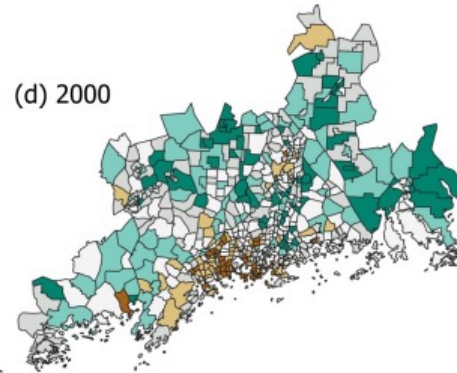
LQ Bottom



(d) 2000

(e) 2010

(f) 2020



Main takeaways from the study

- A clear trend of professionalisation is evident across all studied cities
- The rise in income inequality has slowed down or reversed
- Correspondingly, the rise of residential segregation has slowed down or reversed, too
- Higher occupational groups are over-represented in inner cities, and their residential space continues to expand
- Lower occupational groups remain over-represented in suburban areas

CENTRE OF EXCELLENCE IN
ENERGY EFFICIENCY



Thank you!

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