

A Geographical Perspective on Socioeconomic Disparities

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Abstract: *Academics, politicians, and governments have been worried about urban inequality and their effects for decades. This is particularly important since geographical disparities affect health, education, job and income, and well-being. This commentary reviews spatial disparities and contextual and neighborhood impact literature. We cover some of the fundamental issues in modeling contextual effects and show that no one research can conclusively explain whether and how much spatial context effects affect individual outcomes. Only when considered together does the extensive research on spatial context effects prove its relevance. The discussion concludes with the segregation model's vicious spiral and suggests strategies to break it.*

Keywords: spatial inequality, segregation, neighbourhood effects, spatial context effects

I. INTRODUCTION

For decades, academics, politicians, and governments have fretted about urban inequality. This is crucial since regional inequities influence health, education, employment, income, and well-being. Two forms of inequality geography research exist. The first examines city and regional spatial inequality trends and their evolution. This study examines residential sorting, socio-economic segregation intensity and geography, income disparities, and spatial segregation. Thomas Schelling's (1971) segregation models show that modest preferences may lead to city segregation, motivating segregation research. The neighborhood or spatial context impacts of regional inequalities on individual outcomes are studied in the second research area (Petrović, Manley and van Ham, 2020). This approach implies that living in poor communities hurts outcomes beyond schooling. Recent spatial context effects research shows that where people live and grow up may impact many life outcomes. These studies help us comprehend urban inequality's roots and impacts. We also address some of the underlying challenges in modeling contextual effects and demonstrate that no one study can answer the question of whether and how spatial context effects impact individual outcomes. Many studies use data from different countries, outcome variables, and conceptualizations of the geographical context in which individuals (inter)act. This vast literature on spatial context effects gives a sophisticated knowledge of its potential influence and increasingly confirms its significance.

This is concluded by the segregation model's vicious spiral (van Ham, Tammaru and Janssen, 2018b; Tammaru et al., 2021). The model explores how people are geographically chosen to residential communities, schools, jobs, and leisure time activity venues and how they benefit from them, including social connections. The model shows how generations and individuals reproduce spatial inequalities. Finally, we offer ways to reduce geographical inequality and segregation.

Residential Sorting and Geographies of Inequality

Globally, social segregation separates affluent and poor communities. In Socio-Economic Segregation in European Capital Cities: East meets West, Tammaru et al. (2016) examined 12 European cities' segregation statistics. Although modest compared to other nations, socioeconomic segregation in European cities is developing. Globalization, economic restructuring, neoliberal politics, and declining social rental housing investments in certain cities may have produced this. Van Ham et al. (2021) studied 24 major African, Asian, Australian, European, North American, and South American cities. Their book examined geographical segregation and economic disparity in case study cities via occupational structure modifications. The book demonstrates global trends. Unequal cultures segregate communities by wealth. In high-income nations, the affluent move to the centers and the impoverished to the peripheries, causing

suburbanization. Smith (1996)'s urban revanchism confirms this 1970s suburbanization reversal, when many wealthy people migrated to suburban gardens. Enclaves of affluent people reside in low-income nations. Professionalization of urban workers changes city social geography. Professionalization means favoring high-paying, high-status employment over low-paying ones. High-income workers may afford central, attractive places, displacing lower-income locals, explaining geographical shifts. Income inequality is nearly always linked to geographic segregation. Global inequality causes socioeconomic segregation. Segregation and inequality are greater in low-income areas but have grown quicker in high-income cities in recent decades. These trends will bring high-income cities closer to low-income nations' inequality. Since worldwide income and wealth disparity has developed for decades, socio-economic segregation should occur (Piketty, 2014; Alvaredo et al., 2018). Because neighborhoods affect socio-spatial mobility and well-being, growing inequality and probable spatial segregation threaten cities' social survival. More unequal cities impair socio-spatial mobility (Nieuwenhuis et al., 2020).

Spatial context effects

Cities with rising inequality and socio-economic segmentation have uneven opportunity landscapes. Rich and poor live apart as segregation rises. Individual outcomes may suffer from neighborhood poverty. The interaction of residential segregation of parents and school segregation of children is central to understanding intergenerational transmission of inequality. Neighborhood effects have long been studied, but recently it has been recognized that inequality extends beyond the residential neighborhood. Even though we examine spatial dynamics, our home, social, and urban settings are ongoing. Petrović, van Ham, and Manley (2018) found that spatial context effects may occur not just in the home but also in major metropolitan regions with concentrated dwellings, schools, and businesses. Low-skilled businesses and "notorious schools" become common in low-income communities (Delmelle, Nilsson and Adu, 2021). Only one socio-spatial context in which people interact with others and the environment is the house. School, employment, shopping, and relaxing may have cumulative spatial context effects.

Challenges in modeling the role of the spatial context

Assessing spatial contextual influences requires discovering "pure" causal effects of the geographical environment on individual outcomes. Due to cheaper housing, poor people go to impoverished neighborhoods, making living there linked to poverty. Up to a decade ago, most spatial context effects studies reported large negative impacts of living in geographic concentrations of poverty on individual outcomes because they disregarded selection factors and observed correlations. The literature controls selection effects, but most studies still detect spatial context effects (although at lower levels).

Many analytical and modeling approaches for discovering "real" causal effects have drawbacks. In an ideal experiment, people are randomly assigned neighborhoods and tracked for years. This technique is unethical and impractical. In US poverty deconcentration (quasi) trials, results are ambiguous and confounding is high (Clark, 2008; Manley, van Ham and Doherty, 2012). Economic solutions are chosen because experimental designs are limited. Some studies suggest geography affects results, others don't. Geographic context affects individual outcomes less when studies adjust for geographic sorting, but it's still essential. We believe residential sorting is vital for residential context and impact, yet studies disregard its neighborhood influence. Sorting mechanisms should be explored since connection with a catch-all measure like low income or deprivation does not elicit a causal mechanism by which the environment may affect individuals (van Ham, Boschman and Vogel, 2018a). Due to intergenerational neighborhood effects, impoverished individuals live in poor neighborhoods, lowering their life chances. Much study on how location affects people examines neighborhood factors. One research cannot address these essential issues. A research that corrects for selection effects and shows spatial context effects must be carefully examined. Spatial context research involves more than sorting bias and other econometric issues. Neighborhood definitions vary greatly in studies. Some studies employ counties, states, or local authorities, others use local environmental units. Scales provide context for systems, processes, and meanings. A multi-scale strategy is necessary since one geographical unit cannot adequately reflect all family situations (Petrović, van Ham & Manley, 2021). Recent art has employed "egohoods" or customized neighborhoods, where a person is at the center of their own geographical environment at different proportions. A multi-scale approach holds that causal processes occur at different spatial scales. Labor market processes are geographical or supply and

demand, but peer group and positive role model impacts are probable on streets or blocks of homes. Multiple processes occur at various scales, hence there is no one geography for understanding spatial context influences and policy responses. Petrović et al. (2021) suggest that policy solutions should focus on large local poverty concentrations due to greater spatial context effects at lower scales. Quantification is needed to quantify spatial context effects given geographical context indicators. The contextual influence is often focused on neighborhood prosperity, but other geographical variables should be examined. People and times affect space intensity, which is usually tied to locations and events. Thus, studying one city in one nation may not show how the same geographical environment impacts individuals elsewhere or at another period. For different groups, researchers employ different outcome factors. Spatial context studies examine such implications on children, adolescents, young adults, and diverse socioeconomic and ethnic adults. Studying health, education, crime, employment, income, etc. This vast literature shows geography's importance. Finally, qualitative and anthropological research shows geographical context impacts. To explore spatial context affects, these studies analyze people's everyday lives, habits, attitudes, and behavior. They disregard spatial context modeling. In conclusion, geographical context impact research should examine selection effect control mechanisms, geographies, and outcome variable operationalizations. All these researcher decisions affect study results.

Empirical studies of the role of spatial context

Many national datasets have been used to examine geographical context effects for decades. Studies focus on US, UK, Netherlands, and Sweden. Even with small populations, the latter two countries offer longitudinal and geocoded individual data. The huge differences between countries and even communities within countries should be considered while reviewing literature from different cultures. They relate to segregation, poverty, inequality, socio-politics, welfare, and urban form. Comparing results from different countries is important, but they may not apply elsewhere. It's remarkable that US and Swedish results may be equal despite welfare system differences. Neighborhood effects literature has mostly focused on adult outcomes and spatial contexts during adulthood, but there is a growing literature on how context affects childhood, either by predicting shorter-term outcomes or by using childhood experiences to understand later outcomes. This second component is crucial, and the relationships are clear. Sociological study links children's socioeconomic status to their parents', however Manley, van Ham, and Hedman (2020) found that community settings are also handed down. Hedman and van Ham (2021) outline recent studies. In low-quality US neighborhoods, Vartanian, Buck, and Gleason (2007) discovered that childhood neighborhood disadvantage is linked to community quality. Chetty and Hendren (2018) utilize a quasi-randomised mobility scheme and causal econometric modeling to demonstrate that mobility out of concentrated poverty increased employment earnings in later life. Sharkey (2008, 2013) and Pais (2017) find comparable US results.

Moving beyond economic effects, Glass and Bilal (2016) explore the "stickiness" of neighborhood traits in early infancy and discover that poverty may cause obesity in adulthood. Similar results were obtained in European research. Gustafson et al. (2017) and van Ham et al. (2014) discovered that children's neighborhood status is connected to their parents', and immigrants are more likely than locals to remain in disadvantaged areas for two generations in Sweden. Family is included by Manley et al. (2020): closely related children live more similarly than unrelated individuals, although the neighborhood of origin impacts residential careers separately. Wixe (2020) showed that 'individuals who grow up in ethnically separated neighborhoods are more likely to become self-employed later in life' (p. 2733). Segregation may affect self-employment, which can be good for entrepreneurship but bad for labor market connection. According to Dutch statistics, de Vuijst, van Ham, and Kleinhans (2017) say greater education may reduce intergenerational transmission but is less likely among immigrants. Nordvik and Hedman (2019) and Galster and Wessel (2019) think higher education may aid immigrants in Norway socially. In maternal neighborhood status transmission, Hedman and van Ham (2021) found substantial route reliance. Many spatial context effect studies ignore neighborhood sorting selection bias, even though it is part of the influence. We also know that home and other spatial factors impact education spatial sorting. More people agree that context important, but who, when, and how remain unanswered.

Many empirical studies have studied neighborhood effects on income and other outcomes (Galster and Sharkey, 2017, p. 21). In addition to the single research and child-based literature, Minh et al. (2017) highlight contextual impacts'

theoretical processes and stress place (where the neighbourhood effect occurs) and person. This suggests that childhood neighborhood context is more important than adulthood environment for predicting later life outcomes.

Several variables cause residential neighborhood poverty to effect life outcomes. These mechanisms include collective socialization, social control and cohesion, air pollution, and access to education, employment, and other amenities. Research reveals unique geographical scales for each mechanism (Sharkey and Faber, 2014; Galster and Sharkey, 2017; Petrović et al., 2018, 2020), highlighting the necessity for multi-scale methods in empirical studies.

Recently, additional research has simulated spatial context using individual-level, longitudinal, high-resolution geocoded data. Some studies found strong evidence for geographical context effects, whereas others found that spatial context was a surrogate for other, frequently absent, factors. After modeling community choice to develop a corrective component, Van Ham et al. (2018a) modeled neighborhood income implications. They utilize Dutch data to show that neighborhood selection limits reduce the neighborhood's income influence but remain significant.

Another study by Hedman, Manley, and van Ham (2019) used sibling data to evaluate how neighborhood histories and early family settings impact career income. Adult neighborhood experiences influence income, whereas childhood neighborhood impacts are family context effects. They found that family context affected income later in life, regardless of neighborhood route. Hedman et al. (2019) review spatial context effects studies. US data shows that moving from high- to low-poverty areas before 13 improves college enrollment, income, and single parenting risk. Galster and Santiago (2017) find that US children exposed to higher-performing neighbors early perform better at 18. Some neighborhood consequences are delayed and long-lasting, according to Chetty et al. and Galster and Santiago. Hedman et al. (2015) discovered that parental neighborhood affects children's earnings for 17 years after leaving home in Sweden. Sharkey and Elwert observed in 2011 that children's cognitive ability is affected by their parents' neighborhood, even if they've never lived there. Transmission may have long-term effects on parents and children's performance. It is clear that geographical environment affects individual results and that spatial sorting decreases this influence.

Vicious circle of segregation and in equality

Spatial sorting and context effects form the vicious cycle of segregation model (van Ham et al., 2018b; Tammaru, 2021). The model uses many of the aforementioned study findings to explain how childhood experiences impact adulthood and intergenerational inheritances. Sorting places babies in their parents' neighborhoods. This neighborhood impacts kids' and parents' schooling and social lives. The neighborhood where kids grow up influences spatial sorting in schools and other places. Most children attend a primary school close home, therefore low-income children in disadvantaged communities will go with others. This school setting affects kids' education. Rich kids in wealthy communities attend affluent schools. Their family, area, and school may provide them an advantage over low-income neighborhood kids. Geographic sorting affects leisure time activities. Such activities are usually done with neighbors or classmates.

Education affects children's transition to employment as adults, and children from impoverished and rich neighborhoods start at different levels. Spatial sorting and context effects in early childhood affect children's earning potential as adults, which affects their residential neighborhood sorting. When they become independent, children from low-income neighborhoods generally live in similar neighborhoods as their parents.

This is particularly true for minority youngsters. Thus, neighborhood has a large intergenerational influence on individual results and residency. New parents live in low-income neighborhoods and send their children to local schools, perpetuating segregation. This circle spans generations and a lifetime. The vicious spiral is not deterministic; we all know folks who grew up in low-income neighborhoods and succeeded socioeconomically. The social and economic frameworks around the model and processes that define (spatial) opportunity sets that people navigate as they mature do affect individual results. This approach focuses on socio-economic results, not happiness or other well-being indices. However, the evidence suggests considerable path dependence.

Breaking the vicious circle

Poverty and inequality are clearly linked to place and affected by geographical environment at various scales. People-based, area-based, and place-based policies may break segregation cycles. People-based policies invest directly in

education, skills, health, and well-being to provide more equitable possibilities. Given children's spatial context effects and their impacts later in life, early life policies should ensure that all children have access to effective schools and education. People-based strategies must also improve adult education and employment throughout the life cycle. Without investing in the spatial opportunity structure, people-based policies will fail.

Second, area-based policies complement people-based policies by developing more socio-economically diversified residential neighborhoods to avoid negative spatial context effects. De-segregation policies may not improve individual results in the near term, but they may in the long run. Building homes for lower-income families in wealthy neighborhoods or introducing middle-income households in lower-income neighborhoods may generate more diversified neighborhoods in the city. Lower-income housing is routinely destroyed to make way for higher-income housing, making these policies contentious. Thus, such programs must respect local structures and improve living circumstances for displaced people. Also, new residential zones should be created to provide a sustainable socioeconomic mix. As individuals want to be with others like them, mixing should occur at a moderate spatial level. Mixing should also allow youngsters from diverse socioeconomic backgrounds to attend mixed schools and meet. Both people- and area-based programs need long-term expenditures with minor initial benefits but significant collective effects over decades and generations.

II. CONCLUSION

Finally, connectivity-based policies link people and locations. Low-income neighborhoods hinder kids' schooling. Ensuring low-income children attend decent schools matters. Connecting homes to employment, hospitals, and recreation will minimize spatial inequality. To eliminate urban spatial opportunity inequality, connectivity-based policies should prioritize high-quality, inexpensive public transit. Thus, low-income neighborhoods must be prioritized for opportunities.

As worldwide trends suggest growing socio-economic segregation due to economic disparity and rising property prices in the most attractive sections of cities, breaking the vicious loop demands ongoing attention and active urban management.

REFERENCES

- [1]. Alvaredo, F., Chancel, L., Piketty, T., Saez, E., and Zucman, G. (2018), *World Inequality Report 2018*, Cambridge, MA: The Belknap Press of Harvard University Press.
- [2]. Bailey, N., and Minton, J. (2018), 'The Suburbanisation of Poverty in British Cities, 2004–16: Extent, Processes and Nature', *Urban Geography*, 39, 892–915.
- [3]. Bernelius, V., Huilla, H., and Lobato, I. R. (2021), "'Notorious schools" in "Notorious Places"? Exploring the Connectedness of Urban and Educational Segregation', *Social Inclusion*, 9, 154–65.
- [4]. Chetty, R., and Hendren, N. (2018), 'The Impact of Neighborhoods on Intergenerational Mobility I: Childhood Exposure Effects', *Quarterly Journal of Economics*, 133, 1107–162.
- [5]. Chetty, R., Hendren, N., and Katz, L. (2016), 'The Effect of Exposure to Better Neighborhoods on Children: New Evidence from the Moving to Opportunity Experiment', *American Economic Review*, 106 (4), 855–902.
- [6]. Clark, W. A. (2008), 'Reexamining the Moving to Opportunity Study and its Contribution to Changing the Distribution of Poverty and Ethnic Concentration', *Demography*, 45, 515–35.
- [7]. Darrah, J., and DeLuca, S. (2014), "'Living Here Has Changed My Whole Perspective": How Escaping Inner City Poverty Shapes Neighborhood and Housing Choice', *Journal of Policy Analysis and Management*, 33, 350–84.
- [8]. Delmelle, E., Nilsson, I., and Adu, P. (2021), 'Poverty Suburbanization, Job Accessibility, and Employment Outcomes', *Social Inclusion*, 9, 166–78.
- [9]. de Vuijst, E., van Ham, M., and Kleinhans, R. (2017), 'The Moderating Effect of Higher Education on the Intergenerational Transmission of Residing in Poverty Neighbourhoods', *Environment and Planning A: Economy and Space*, 49, 2135–54.

- [10]. deVuijst, E., van Ham, M., and Kleinhans, R. (2016), 'A Life Course Approach to Understanding Neighbourhood Effects', IZA Discussion Paper No. 10276 (<https://ftp.iza.org/dp10276.pdf>).
- [11]. Galster, G. C. (2012), 'The Mechanism(s) of Neighbourhood Effects: Theory, Evidence, and Policy Implications', in M. van Ham, D. Manley, N. Bailey, L. Simpson, and D. Maclennan, eds, *Neighbourhood Effects Research: New Perspectives*, Berlin: Springer, 23–56.
- [12]. Galster, G. C., and Santiago, A. M. (2017), 'Do Neighborhood Effects on Low-Income Minority Children Depend on Their Age? Evidence from a Public Housing Natural Experiment', *Housing Policy Debate*, 27, 584–610.
- [13]. Galster, G., and Sharkey, P. (2017), 'Spatial Foundations of Inequality: A Conceptual Model and Empirical Overview', *RSF: The Russell Sage Foundation Journal of the Social Sciences*, 3, 1–33.
- [14]. Galster, G., and Wessel, T. (2019), 'Reproduction of Social Inequality through Housing: A Three-Generational Study from Norway', *Social Science Research*, 78, 119–36.
- [15]. Glass, T. A., and Bilal, U. (2016), 'Are Neighborhoods Causal? Complications Arising from the "Stickiness" of ZNA', *Social Science & Medicine*, 166, 244–53.
- [16]. Gustafson, B., Katz, K., and Österberg, T. (2017), 'Residential Segregation from Generation to Generation: Intergenerational Association in Socio-Spatial Context among Visible Minorities and the Majority Population in Metropolitan Sweden', *Population Space & Place*, 23(4), e2028.
- [17]. Hedman, L., Manley, D., van Ham, M., and Östh, J. (2015), 'Cumulative Exposure to Disadvantage and the Intergenerational Transmission of Neighbourhood Effects', *Journal of Economic Geography*, 15, 195–215.
- [18]. Hedman, L., Manley, D., and van Ham, M. (2019), 'Using Sibling Data to Explore the Impact of Neighbourhood Histories and Childhood Family Context on Income from Work', *PLOS*, 14(5), e0217635.
- [19]. Hedman, L., and van Ham, M. (2021), 'Three Generations of Intergenerational Transmission of Neighbourhood Context', *Social Inclusion*, 9, 129–41.
- [20]. Manley, D., van Ham, M., and Hedman, L. (2020), 'Inherited and Spatial Disadvantages: A Longitudinal Study of Early Adult Neighbourhood Careers of Siblings', *Annals of the American Association of Geographers*, 110, 1670–89.
- [21]. Manley, D., Van Ham, M., and Doherty, J. (2012), 'Social Mixing as a Cure for Negative Neighbourhood Effects: Evidence-Based Policy or Urban Myth', in G. Bridge,
- [22]. T. Butler, and L. Lees, eds, *Mixed Communities: Gentrification by Stealth*, Chapter 11, Oxford: University Press Scholarship Online, 151–68.
- [23]. Minh, A., Muhajarine, N., Janus, M., Brownell, M., and Guhn, M. (2017), 'A Review of Neighborhood Effects and Early Child Development: How, Where, and For Whom, Do Neighborhoods Matter?', *Health & Place*, 46, 155–74.
- [24]. Nieuwenhuis, J., Kleinepier, T., and van Ham, M. (2021), 'The Role of Exposure to Neighborhood and School Poverty in Understanding Educational Attainment', *Journal of Youth and Adolescence*, 50, 872–92.
- [25]. Nieuwenhuis, J., Tammaru, T., van Ham, M., Hedman, L., and Manley, D. (2020), 'Does Segregation Reduce Socio-Spatial Mobility? Evidence from Four European Countries with Different Inequality and Segregation Contexts', *Urban Studies*, 57, 176–97.
- [26]. Nordvik, V., and Hedman, L. (2019), 'Neighbourhood Attainment of Children of Immigrants in Greater Oslo: Intergenerational Inertia and the Role of Education', *Population, Space and Place*, 25(3), e2192.
- [27]. Pais, J. (2017), 'Intergenerational Neighborhood Attainment and the Legacy of Racial Residential Segregation: A Causal Mediation Analysis', *Demography*, 54, 1221–50.
- [28]. Petrović, A., van Ham, M., and Manley, D. (2018), 'Multi-Scale Measures of Population: Within and Between City Variation in Exposure to the Socio-Spatial Context', *Annals of the American Association of Geographers*, 108, 1057–74.
- [29]. Petrović, A., Manley, D., and van Ham, M. (2020), 'Freedom from the Tyranny of Neighbourhood: Rethinking Socio-Spatial Context Effects', *Progress in Human Geography*, 44, 1103–23.

- [30]. Petrović, A., van Ham, M., and Manley, D. (2021), 'Where Do Neighborhood Effects End? Moving to Multiscale Spatial Contextual Effects', *Annals of the American Association of Geographers*, forthcoming (<https://doi.org/10.1080/24694452.2021.1923455>).
- [31]. Piketty, T. (2014), *Capital in the Twenty-First Century*, Cambridge, MA: Belknap Press of Harvard University Press.
- [32]. Pinkster, F. M. (2007), 'Localised Social Networks, Socialisation and Social Mobility in a Low-Income Neighbourhood in the Netherlands', *Urban Studies*, 44, 2587–603.
- [33]. Pinkster, F. M. (2014), 'Neighbourhood Effects as Indirect Effects: Evidence from a Dutch Case Study on the Significance of Neighbourhood for Employment Trajectories', *International Journal of Urban and Regional Research*, 38, 2042–59.
- [34]. Sampson, R. J. (2012), *Great American City: Chicago and the Enduring Neighborhood Effect*, Chicago, IL: University of Chicago Press.
- [35]. Sampson, R. J., Sharkey, P., and Raudenbush, S. W. (2008), 'Durable Effects of Concentrated Disadvantage on Verbal Ability among African-American Children', *Proceedings of the National Academy of Sciences*, 105, 845–53.
- [36]. Schelling, T. C. (1971), 'Dynamic Models of Segregation', *Journal of Mathematical Sociology*, 1, 143–86.
- [37]. Sharkey, P. (2008), 'Intergenerational Transmission of Context', *American Journal of Sociology*, 113, 931–69.
- [38]. Sharkey, P. (2013), *Stuck in Place: Urban Neighborhoods and the End of Progress toward Racial Equality*, Chicago, IL: University of Chicago Press.
- [39]. Sharkey, P., and Elwert, F. (2011), 'The Legacy of Disadvantage: Multigenerational Neighborhood Effects on Cognitive Ability', *American Journal of Sociology*, 116, 1934–81.
- [40]. Sharkey, P., and Faber, J. W. (2014), 'Where, When, Why, and for Whom Do Residential Contexts Matter? Moving Away from the Dichotomous Understanding of Neighborhood Effects', *Annual Review of Sociology*, 40, 559–79.
- [41]. Smith, N. (1996), *The New Urban Frontier: Gentrification and the Revanchist City*, New York: Routledge.
- [42]. Tammaru, T., Knapp, D., Silm, S., van Ham, M., and Witlox, F. (2021), 'Spatial Underpinnings of Social Inequalities: A Vicious Circle of Segregation Approach', *Social Inclusion*, 9, 65–76.
- [43]. Tammaru, T., Marcińczak, S., van Ham, M., and Musterd, S. (eds) (2016), *Socio-Economic Segregation in European Capital Cities: East Meets West*, Oxford: Routledge.
- [44]. van Ham, M., Boschman, S., and Vogel, M. (2018a), 'Incorporating Neighbourhood Choice in a Model of Neighbourhood Effects on Income', *Demography*, 55, 1069–90.
- [45]. van Ham, M., Hedman, L., Manley, D., Coulter, R., and Östh, J. (2014), 'Intergenerational Transmission of Neighbourhood Poverty. An Analysis of Neighbourhood Histories of Individuals', *Transactions of the Institute of British Geographers*, 39, 402–17.
- [46]. van Ham, M., Tammaru, T., and Janssen, H. J. (2018b), 'A Multi-Level Model of Vicious Circles of Socio-Economic Segregation', in *Divided Cities: Understanding Intra-Urban Disparities*, Chapter 6, Paris: OECD Publishing.
- [47]. van Ham, M., Tammaru, T., Ubarevičiene, R., and Janssen, H. (2021), *Urban Socio-Economic Segregation and Income Inequality: A Global Perspective*, Berlin: Springer Open.
- [48]. Vartanian, T. P., Buck, P. W., and Gleason, P. (2007), 'Intergenerational Neighborhood-Type Mobility: Examining Differences between Blacks and Whites', *Housing Studies*, 22, 833–56.