RESILIENCE IN THE BUILT-UP AREA OF CITY REGIONS – TOWARDS A SOCIAL INNOVATION

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Abstract. Many recent catastrophes have necessitated ever more innovative approaches to prepare for resilient urban areas and city regions. In contrast to sustainability, a more established concept in research on the built environment, resilience refers to how to manage an unsustainable situation at a predominantly local level. While natural hazards, epidemics and armed conflicts make up the core of resilience research, also social hazards require some attention: hitherto the spectre of socioeconomic factors, demographics, and institutions herein can be considered neglected topics (in relative terms). This study deliberates on the current discourse surrounding these matters from a realist perspective. Additionally, it argues for a potential social innovation in the form of a localized, socioeconomic and demographic urban resilience index. The importance of real estate situations within local and regional governance circumstances is highlighted as it is central to the argumentation and proposed research strategy.

Key words: urban resilience, social hazard, socioeconomic

1. Introduction

According to the Oxford dictionary, resilience refers to the capacity to withstand or to recover quickly from difficulties. In an urban setting, resilience can be defined as "…the capacity of a city or community to prepare for, respond to and adapt from dangerous and disruptive events, such as natural disasters, economic crises, demographic changes, health epidemics and others" (Figueiredo *et al.*, 2018). As argued in this text, resilience is currently gaining ground as an academic and scientific research topic in its own right. When we examine the general meaning of the resilience concept, we note some similarities, but also crucial differences, with other, related concepts, such as sustainability or sustainable development.

It could be argued that resilience needs to be treated as an objective in its own right and not just as part of the sustainability paradigm. While it can be observed that the resilience concept arose from the sustainability framework, it has already established itself as an academic topic with own theoretical core – not unlike the way sustainability and sustainable development became relevant topics when the contemporary discourse on resource efficiency was extended gradually during the late 1980s and early 1990s. At the very least, we need to make a difference between the two concepts: sustainability is a generally accepted concept whereas resilience is debated, as it has so many meanings and each of them is contested. In contrast to the more general sustainability concept, resilience

is a more advanced spatial development concept that requires considerable detail in its definition and methodological treatment (cf. Stumpp, 2013; Zhang and Li; 2018). In systemic terms, sustainability is about 'balancing the world' whereas resilience is about 'managing an imbalanced world' (Petrişor, 2014).

According to Carpenter and colleagues (2001) resilience is completely contextual, and therefore any discussion on resilience should always clearly state the 'resilience of what to what', for example, the resilience of built structures to flooding and storm surge. At the same time, by contrast, sustainability is a quasi-general context, and does not need to be particularized. This point resonates with the aim of this contribution. One could namely argue that the recent pandemics, war and economic crisis experienced in cities have been and are being navigated in search for sustainability (Boca, 2023).[1]

Natural catastrophes such as pandemics can have a near global economic impact whereas flooding is rather localized to a tangible zone on each side of a river. Here the crucial level of analysis of resilience is the local level (i.e. self-government); this is in contrast to sustainability driven analysis which in principle is related to globally set agendas (following Rio 1992). While it could be argued from a theoretical point of view that each level (global, national, local) is essential in bringing in the relevant issues involved, the local level is usually neglected. Thus, focusing on the local level is a real place-based approach, and that is different from the sustainability concept.

Due to the local nature of the concept, tackling urban resilience requires incremental improvement and conversion at site-level – and bottom-up rather than top-down. In fact, Hoffman (2014) notes that, while attention has shifted from sustainability to resilience, at the same time we lack the necessary social infrastructure for localities affected by natural disasters or infectious diseases. Therefore, Hoffman suggests increasing the autonomy of decision making at the local level. Thus, the socioeconomic consequences and opportunities arising in an existential crisis is – or should be – dominated by local level decision making. The main idea here is that urban and regional resilience policy concerning environmental, social and economic crises needs to consider the input afforded by the private sector too. Especially the way various real estate sectors may or may not recover after severe crises relate strongly to this point. These arguments will be reviewed critically in this undertaking.

The aim is to bring new knowledge in two ways: one, making a distinction between the emerging resilience aspect from the established sustainability aspect; and two, within the former, identifying the hitherto neglected socioeconomic and demographic side of resilience research as a core object for both academic and policy relevant studies. In what follows the implications of urban / regional resilience (or the lack thereof) are examined from several particular viewpoints: real estate, urban form, and complexity and adaptability (Fig. 1). Real estate is crucial as a node of activities and provision of space for shelter and business functions. Urban form becomes relevant when we zoom in on cities and their hinterlands. Complexity and adaptability are crucial concepts to understand the nature of the phenomena under study at the interface of natural and man-made elements that enhance the resilience of urban areas and city regions on their path towards sustainable futures.

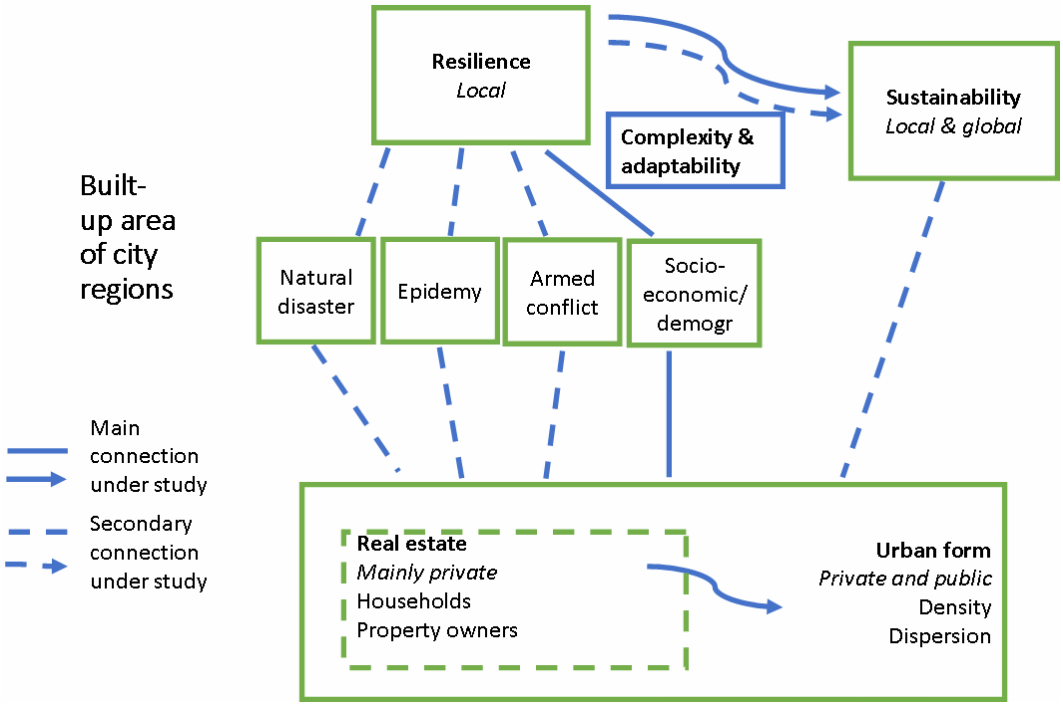

Fig. 1. The structure and topic of the study, including the essential concepts and the relations between them.

In this vein, this study deliberates on the current discourse surrounding the resilience of the built environment, cities and regions – and more precisely, the built-up area of city regions – from a realist perspective[2]. In doing so, the focus is on the socioeconomic aspects of resilience. Compared to the environmental or ecological perspective, the social one is less covered. In the words of Glaeser (2022): "Cities are far more vulnerable to economic and political dislocation than earthquakes, wars and even pandemics. The most consequential catastrophes are those that fragment existing institutions and economies, which is why the strength of civil society determines the consequences of any disaster."

The contribution is intended as a theoretically and methodologically informed research plan. Here the author draws on prior contributions on this topic, on both natural hazards (Kauko, 2022a), social hazards (Kauko, 2022b), and the Covid-19 crisis (Kauko, 2020). When we examine the natural side of the resilience issue, what we often hear is that the aim is to 'drain the swamp' in order to improve the defence of a location against storm surges and floods. One might wonder what an equivalent procedure would be on the social side. To prepare for the likely influxes of masses of immigrants from different cultures? And to combat potential criminality and urban pathologies? And similar measures for other looming threats.[3]

In a generic sense, the resilience of urban development refers to how cities and their hinterlands may or may not recover after sudden environmental, social and economic crises. For the sake of a manageable discussion, the focus is on the socioeconomic consequences and opportunities arising in an existential crisis. The issues at stake concern the extent of dominance afforded by the private sector together with the average households and property owners as well as density or dispersion of urban property development.

The remainder of this contribution is organised in three sections. The next

section reviews critically the conceptual basis and background of the analysis on the basis of the literature on urban and real estate resilience. The section that follows specifically examines the socioeconomic and demographic aspect of urban resilience, through a prism of various related approaches. The final section provides a summary and conclusion.

2. The background and conceptual basis

2.1. Urban and regional resilience

The concept of resilience refers to the ability of a system to cope with a serious problem. It is always tied to sudden crisis situations emerging in a particular place and time. For example, how a coastal area can cope with damages caused by flooding, storm surge or tsunami. Considering the challenges ahead, the resilience concept is considered more developed in a rural context than in an urban one (Collier *et al.* 2013). Regardless of the relatively short research tradition, when examining how the resilience idea is being taken up in the urban context, a number of specific issues have been identified. Among others: defining main criteria for developing an urban resilience assessment system (Sharifi and Yamagata, 2014); expanding the discussion so as to deal with social and ecological issues together (Beilin and Wilkinson, 2015), whether resilience is to be considered a positive or negative character (Meerow, Newell, and Stults, 2016); that a city can be 'resilient in itself' or just 'managed in a resilient way' (Spaans and Waterhout, 2017), and the validity of the concept 'resilient city' (Anthony *et al.*, 2018). Economic resilience, in turn, comprises a somewhat different concern for a city, as it is primary related to how the territorial economy can bounce back after a recession (Antonescu and Ciocănel, 2018).

It could be argued that resilience is much dependent on the affected segment of the population as well as the actor groups involved in the planning. Furthermore, resilience is not something that happens instantly, but requires a considerable period of maturity to shape up. When summarizing essential resilience issues, Boštjan Kerbler picks six items (2016): spatial planning for climate change, restructuring of post-communist cities, revitalisation of parks and open spaces, role of migrants in transforming neighbourhoods, gated communities and intergenerational living. In the final analysis the issue is about finding the apt spatial level to formulate and review the goals of resilience policy – a relatively well-researched topic already (Coaffee, 2013; Johnson and Blackburn, 2014; Bandyopadhyay and Philip, 2015; Chelleri *et al.*, 2015; Wagenaar and Wilkinson, 2015).

It is to note that resilience is not the same as sustainability, even if the two concepts usually are part of same discourses: as noted in the introduction, the principal difference is that sustainability is about 'balancing the world', whereas resilience is about 'managing an imbalanced world' (Petrişor, 2014). Following Eva-Maria Stumpp (2013), the key to understanding the difference between sustainability and resilience is that the former concept can 'be made' whereas the latter 'happens'. Thus, it cannot 'be made'; only managed to a limited extent. Elsewhere, Zhang and Li (2018) distinguish between the 'active process' of creating urban sustainability through a long time, and the 'passive process' of urban resilience aimed at problem solving. (Thus, in line with the definitions by Petrişor and Stumpp.)

Another conceptual difference is that between resilience and adaptive capacity.

The latter refers to a short-term situation: the immediate response of a system to bounce back, given the defence mechanism in place to parry the threat. Resilience in turn refers to the longer-term prospects of how the system develops. This is a generic meaning and is applicable for the built environment and real estate as well as for urban and regional circumstances.

2.2. Complexity and adaptability

Various related problems – and indeed opportunities – brought by the inherent complexity of the concept resilience are commented by scholars with a wide variety of backgrounds. Drawing on a complex adaptive systems perspective, Bristow and Healy (2014) developed a robust conceptual understanding of what role policy-makers, particularly at sub-national level, might play in building economic resilience in regions. Elsewhere Mierzejewska and Wdowicka (2018) distinguished between the concepts 'city resilience' and 'resilient city' in so far as the former concept is a process and the latter a desired ideal (utopian) state. More recently, Masik and Grabkowska (2020) synthesised selected qualities of resilient cities and regions into a new model of resilience strategy.

Given the richness of the discussion, it is evident that we need an interdisciplinary approach to deal with challenges in resilience. We can also observe the relatively detailed arguments concerning resilience, compared to the more general sustainability discussion. Here a few salient points can be made based on prior research. One of the most obvious issues concerns the aptness of regulative frameworks to support urban resilience. The basic tenet is that apt planning measures need to be in place for both resilient communities and resilient natural environments (De Lucia *et al.*, 2022). However, often planning regulations lack sufficient protection for areas where natural catastrophes are likely to occur frequently (Kauko, 2022a).

A related issue concerns the adaptability of any urban area or community (see Cutter *et al.*, 2014). It is about learning self-restoration from best practice, via feedback loops, in an evolutionary manner. In order to take account of the unpredictability we need to incorporate elements of complex systems such as multiple pathways, nonlinear dynamics and thresholds; urban green infrastructure being a particular example of resilience enhancing feature of urban systems (Borri, 2022). Here a complexity theoretical framework would prove beneficial (Atun, 2014; Kauko, 2022a, Walloth, 2014).

2.3. Real estate

At the core of the study is an assumption of the pervasiveness of real estate situations[4] – specifically in an urban setting. We can also identify the connection to an innovative place making agenda. Real estate, as offering both physical space and a functional node, is predominantly a local concern, and often also occupies a strategic role in a company's business activity. At the industry level, its role is substantial when evaluating both gains and losses for the community and company alike. In short, real estate is omnipresent in cities and city regions.

Earlier research by the author outlined some likely consequences of Covid-19 for the real estate sector – mainly in and around city regions in Europe and North America (see Kauko, 2020). Here the discussion is also related to crisis management in a general sense. It is furthermore suggested that, whenever

indicators for resilience are required, financial and subjective (common) risk concepts should be combined as means to analytical decisions on particular situations in terms of resilience. It could namely be argued that combining natural catastrophe risk (peril) with financial risk (potential loss) is long overdue – in financial and business economics in general and in real estate economics and valuation in particular.

Moreover, the conceptual apparatus behind this kind of amalgamation of different research traditions can be related to broader research ideas by the same author. Most recently, two such efforts can be highlighted: First, what could be termed Political real estate economy offers a perspective on the long-term gains and losses distributed as a result of real estate economic activity (see Kauko, 2022a). Here a broad view of the real estate economy is applied, involving behavioural and political aspects. In a generic sense, real estate economic activity is tied to specific territorial and temporary conditions where it is shaped by social and cultural processes. Nevertheless, a common reality exists for all; thus, this position is realism rather than relativism in so far as we need to understand the constraints under which each actor operates. It furthermore needs to be clarified that the 'political' in this framework pertains to political realism rather than political idealism.

Second, within this framework it is possible to examine the resilience of property developments together with concerns of safety and security. Here the Islands of property management (IoPM) approach – proposed by this author elsewhere – is well placed to offer useful insight; this approach focuses on the empty spaces left between elements of the urban environment. Here the basic idea would be to focus on the activities taking place in spaces left between adjacent buildings or sites rather than only the buildings and sites themselves. In this conceptualisation the owners would extend their responsibility of care-taking to include the immediate surroundings and common areas in the vicinity. Something akin the idea of homeowners' associations and neighbourhood watch. While people matter, of course, for development, valuation and so forth, it is to note that this is an evolutionary approach that does not follow the standard progressive liberal or egalitarian discourse of today – and therein lies its cutting edge.

2.4. Urban form

The role of urban form much extends the arguments about the importance of real estate above (cf. Taşan-Kok, 2020). Since several decades the most convincing arguments concerning the ideal urban form were framed using criteria of energy efficient and compact spatial structure. While counterarguments concerning attributes such as quality of life and liveability existed, the opposite ideal, outwards directed urban development, was considered more of a deviation than a seriously taken alternative. It is evident that such an outcome has been justified by economic and environmental arguments rather than concerns of individual household choices, whenever the harm of continued urban sprawl was likely. (E.g. Kotkin, 2016).

What is missing in this debate on density vs. dispersion is the resilience aspect: the ability of a system to recover from shocks. For example, how a coastal area can cope with damages caused by flooding, storm surge or tsunami (e.g. Cosson, 2020). Considering the

implications of Covid-19, suddenly the resilience of urban – and by implication, urban housing – development was on the agenda (see Kotkin, 2020). And in lieu of the usual argumentation, the densification ideal was not seen as the default option anymore, and the opposite strategy carried clout, even if not directly related to the traditional pro-market anti-urbanist's view: household's freedom of choice. While we cannot yet conclude about how permanent such a turn may be, at least the balance has shifted from uncritically embracing compactness and densification towards a halfway recognition of the potential strengths of a less dense built-up environment.

As the discussion suggests, in an urban development context, resilience relates to several other issues than the densification vs. dispersion debate. The role of the private sector in property development and housing provision is also frequently brought up when options for urban development are brought up. And what is more, an urban area's ability to cope with crisis would arguably entail a reasonable agency for the individual household, given that affordable homeownership has become a grave concern for the working- and middle-class households across our urban, globalized world (e.g. Kotkin, 2016).

It can furthermore be argued that land use plans indeed can be amended, as a pre-emptying measure against future catastrophes with particularly devastating consequences such as land-slides (Bydłosz and Hanus, 2013; Kauko, 2022a). This obviously puts lots of demands on the appropriateness of land-use plans. At a different level of conceptualisation, thus when looked at against the communicative planning ideal, communication across the different positions of the actors involved becomes the key. How to get all potential stakeholders on board? In this context, we can accept the help offered by improved technology.

It is true that technology cannot be overlooked in this context where examples are abundant. To give an illustrative example, urban ecosystem services (UES) are well-placed to enhance urban climatic resilience in so far as the concept of green infrastructure is applied in Mediterranean circumstances, as Pelorusso and colleagues (2022) show. The applicability of UES has this way become expanded from leisure – the traditional use – to engineering. Integrating human activity and nature through a network of natural and engineering systems is by these authors seen as a promising solution for the challenges that especially Mediterranean cities face with climatic resilience.

When looking at ways to improve community resilience by social innovations, Balena and De Lucia (2022) emphasise the role of knowledge-based governance for resilient societies. They assert that digital tools work well towards improved cognitive processes in given socioeconomic and spatiotemporal conditions. Citing a study by C. Folke from 2006, they purport "innovative responses through social behaviours" (p. 361).

The basic tenets here go nevertheless well beyond technological development or even communicativeness. We refer to essentialism (in a neo-Heideggerian sense). Buildings, land areas and people have some fundamental qualities, and these could be used also for securing resilient and safe places. Think for example of walls to be built for flood protection, or for keeping the yard free

from clutter in order to secure escape routes in the event of emergency. Or allowing spaciousness and spatial segregation of functions, to enable social distancing, in case a virus breaks out again.[5] And indeed, installing surveillance cameras and deploy security personnel to monitor suspicious looking passers-by, in order to avoid intruders – and to the extent laws allow: frisking such potential intruders. And similar initiatives.

3. The socioeconomic aspect of urban resilience

3.1. Theoretical framework

Already before the emergence of Covid-19 in 2020, notable voices were heard about alternative ideals for urban form and land use. Evidently, the long period of consensus among urbanists and planners concerning a preference for densification and concise urban development has begun to break down somewhat. It has become recognised among academics and practitioners alike that also dispersion and urban sprawl – unfashionable as these terms are – have some benefits, and not only from a real estate business point of view, but in a holistic manner, embracing quality of life and functionality. While examples of the problems stemming from uncritical densification of the urban environment can be found all over the world, also some pragmatic countermeasures have become prevalent in recent years. In the United States, for example, these projects do not embrace the traditional American suburbia, but pragmatic balanced solutions with optimizable benefits of densification and dispersion (e.g. Kotkin, 2016).

Now, in the aftermath of the Covid-19 crisis and with an ongoing war in Ukraine, the resilience aspect of urban development has gained momentum. The extent to which cities and their hinterlands are able to recover from sudden environmental, social and economic crises, is not anymore marginal science, but something that requires urgent action at all levels of society. When examining the resilience of city regions and urban areas, as well as neighbourhoods, various urban real estate and housing situations stand up as important research objectives. Evidently, in this line of research the socioeconomic and demographic side is neglected in relation to the environmental-economic one.[6] The argument concerns the need to involve the private sector together with the average households and property owners more than hitherto.

Such a conceptualization of urban and city-regional developments would take its starting-point in micro (rather than macro) level analysis, which would be in the spirit of the basic idea of resilience as seen as a foremost local, place-specific and community-based issue. Thus, to follow Glaeser (2022), the social dimension is indeed important for urban resilience analysis. And on this point, the perils of mass immigration enter the frame.

While it is true that real refugees such as those fleeing the war in Ukraine should be helped, it is also believed that in a reasonable period of time those immigrants should either integrate into the host community or return to their homelands. The situation we see in much of Western Europe with an increasing passive and crime ridden immigrant population – so not just refugees, but also economic migrants, many of whom are born in the host country, but totally isolated from its labour market and its culture – is neither justifiable from economic nor moral point of view. And when contemplating a response strategy, when soft institutional measures break

down, we must resort to harder ones: when all well-meaning assistance and favourable immigrant policies are ineffective, a stricter law enforcement (including repatriation of criminals to their countries of origin) might be the only thing that works.

This assertion can be illustrated with an extremely serious current example. During the summer of 2023, widespread riots occurred in France. The picture is bleak. Young Arab and African immigrants from the banlieues were destroying cars and buildings, when a hapless police force tried to minimize the damage. There is a senseless rage boiling under the surface, and occasionally it flares up like this situation.

It is obvious that the community of existing residents' matters, and when newcomers who do not align themselves with the same values of the community arrive in large numbers, the situation becomes untenable. This is the innovative part of the research idea; however, also – as previous contributions by this author have shown – the controversial part. What is so controversial here has to do with the split between the mainstream progressive liberal and more conservative (or even classic liberal) worldviews (cf. Kauko, 2022b).[7]

When we drop the pretensions of political correctness, we can finally admit that the current situation in many big cities around Europe would suggest a causality between mass immigration and crime (i.e. the immigration-criminality nexus). To give an example of the difference in outcomes, at present, the reported criminality in Berlin is tenfold compared to Warsaw, a city half the size (Adamczyk and Cody, 2023). Massive immigration of people with completely different identity (and potential criminals) is the problem, but it is the proverbial 'elephant in the room' to many Western academics and policy analysts alike. Such tensions cause an extra strain on the community, and the original residents might opt to move away. It is not only a worsening security situation, as also the tax-base of the population is eroded, when the newcomers are worse off financially than the existing residents. White flight is indeed a grave problem in this context; for example, Kaufmann (2023) has found that white flight occurs as an ethnic tendency, regardless of ideological leanings.

While powerful as a general model, this trajectory of events is however not applicable everywhere. For example, in the case in Poland the ethnic dimension is yet negligible and the main concerns are rather different. None the less, in Poland the implications of an ongoing war in a nearby country are acute. Without apt policymaking at the local level the situation might worsen with time.[8]

3.2. Methodological considerations

The afore described positioning of the research – the problem centricity notwithstanding – allows for innovation in the research design. The practical constraints will then set the direction and scope of the undertaking. In these preparations, the exact selection of variables is up to availability. The rest of the knowledge base required is then to be collected. Within this rich universe of possible particular trajectories to take, the socioeconomic indicators comprise income, wealth, unemployment and so forth, but also demographics matter – age and ethnicity of immigrants in particular. Additionally, the research would use approximations of physical variables such as amount of open green space.

For a realist, there is – in principle – no limits in the range of datasets and research techniques to be utilised. What matters is the overall approach of searching for an objective truth – even if such a goal eludes us. For example, any research on the links between criminality and immigration is difficult to cover at present, but from this observation it does not follow that such an endeavour would not be worth pursuing. However, as the over-representation of any given non-white population of offenders is brought up, sharp critique of the selection of topic follows from social justice activists, who are inclined to claim that it is all about racial inequality biases. None the less, such difficulty is not an excuse to shy away from the responsibility of covering the immigration-criminality nexus.

To illustrate the arguments with a country case, Poland, for instance, is historically affected by natural catastrophes, in particular, floods, whereas the social and demographic side of unwanted development has not traditionally been an issue of substantial relevance. Apparently, mass migration movements in Poland were non-existent before the war in Ukraine and changed radically after the war started. As such this is an apt moment to undertake this type of research, as it is happening in real time. In other words, this can be treated as a quasi-natural experiment. According to Elsawah and colleagues (2020) standard social science modelling falls short of research on socio-environmental systems, which has triggered the launch of new promising methods for better capturing actual social behaviour (beyond historical data), such as field and natural experiments (pp. 16-17). On the other hand, it is true that the various resilience issues are related at a higher level of analysis. The war in Ukraine is a kind of 'living lab' for the issue tackled (migration, forced energy transformation, real estate and housing markets in Polish cities, health and education system, to mention a few elements of reality that changed suddenly in spring 2022).[9]

If we stick to the example of Poland afore, the following list of safety variables would be worth considering (see Kauko, 2022b):

- Perceived nuisance caused by antisocial behaviour or presence of anti-social groups.
- Share of social housing of all stock.
- Presence of asylum centre.
- (Violent) crimes per capita.
- Surveyed perceptions regarding safety of local residents or visitors.
- Efficiency of law enforcement (incarceration rates, agility of police powers).
- Frequency of riots.
- Design features that increase the risk of being targeted (lack of surveillance, dark alleys, isolated closed micro-locations).

Other resilience indicators that may be relevant for Poland and the other CEE countries at present expose less enforcement such as camera systems or limits on the number of refugees, and instead include institutional capacity indicators such as health service reaction to migration flows, absorption of refugees by school system and linguistic support. Here comprehensive reviews that may be helpful for index building include Figueiredo, Honiden and Schumann (2018) and WHO (2022). Both of these reports underscore the importance of data driven frameworks for resilience analysis. In the former report the resilience indicators can be grouped at three geographical scales: one, global and national disaster risk reduction; two,

socio-ecological cities and communities; and three, sustainable livelihoods for households and communities. For the present purposes the latter two scales seem apt for the analysis. In WHO (2022), in turn, the aim was to review "…the relevance of international indicators and datasets to support urban planning for resilience"; apart from those still baked within a sustainability model, there are specific resilience frameworks, notably, UNDRR Disaster Resilience Scorecard for Cities and Public Health System Resilience Addendum, OECD indicators for resilient cities, Risk Systemicity Questionnaire, and ThinkHazard! Tool.[10]

Innovation might also emerge in the selection of methods. In this case particular research techniques would then comprise the following:

- Direct observation (field study)
- Focus groups
- Utilizing ICT and large-scale geocoded databases
- Content / document analysis
- Statistical / mathematical tools.

The research would proceed in two stages: first, a general theory base on urban resilience would be elaborated, and then a more specific empirical application on socioeconomic (including demographic, so perhaps 'socio-demographic') index. The following issues would be targeted:

- Sudden shocks and pressures caused by migration, economic crises, companies' closedowns, demographic changes and other social turmoil, in order to show what is novel in adding social aspects to resilience concepts.
- Hitherto the coverage of resilience research is mainly in environmental aspects, whereas socioeconomic aspects have played a lesser role.
- The described index will also be prescribed for applications, in so far as it can be a tool for cities to benchmark their resilience.

In sum, the scope could include anything from natural hazards (e.g. flood, drought and landslide), epidemics and conflicts, to social hazards with dire consequences at the community level. However, in order to manage the undertaking within a pre-specified time frame, some selections need to be done. Therefore, the study would mainly cover the socioeconomic side of resilience in urban areas and city-regions. This selection is justified, given the notable gap in existing resilience research when it comes to essentially socially, economically and demographically harmful events together with political upheaval. In such a research strategy the first task would be to compile a general review of the concept urban resilience, with focus on the social, economic, demographic and institutional elements therein. Various resilience issues would subsequently be examined in relation to safety problems caused by mass immigration as well as other problems for the society and economy, in specific geographical and institutional circumstances. This would also support the critical review of the urban and real estate literature on the subject as in the present contribution.

4. Conclusions

This study deliberated on the current discourse surrounding urban and regional resilience matters (in particular, the resilience of the built-up area) from a realist perspective. Additionally, it considers a social innovation in the form of a localized, socioeconomic and demographic urban resilience index where neither local community nor private sector business circumstances would be neglected. Particular attention was devoted to local and regional

governance circumstances involving real estate – with the case of Poland exemplifying some of the salient points involved. The methodology comprises critical literature review on the subject, at real estate specific, urban and regional scales.

The literature review suggests that resilience is highly contextual and predominantly a result of bottom-up activities. Therefore, the concept requires local level engagement. More specifically, the issue concerns the resourcefulness of the local community. This in turn would mean an added significance for the private sector, and within this group of actors, the real estate industry. In a sense, we are dealing with a stretched place making problem here.

The motivation for this line of research stems from the observation that many recent catastrophes have necessitated ever more innovative approaches to prepare for resilient urban areas and city regions. Such potential innovations do not even need to be far-fetched, as familiar concepts and modelling frameworks exist at arms-length. However, in contrast to sustainability, a more established concept in research on the built environment, resilience refers to the ability to manage an unsustainable situation at a predominantly local level. And while natural hazards, epidemics and armed conflicts make up the core of resilience research, also social hazards require some attention: hitherto the spectre of socioeconomic factors, demographics, and institutions herein are neglected topics (in relative terms).

When examining the total picture of resilience related to urban development, local level decision making argued to be is the key. Furthermore, it is notable that the private sector needs to be brought on board – and that includes the real estate industry too. And, following a prior study on the likely consequences of Covid-19 for the real estate sector, the suggestion here is also related to crisis management in a situation of social turmoil and political upheaval. Eventually, in the indicator approach proposed, financial and subjective (common) risk concepts would be, to the extent possible, combined as means to analytical decisions on particular housing situations in terms of resilience, because a feasible analysis includes the best of both worlds: natural catastrophe risk (peril) and financial risk (potential loss).

When projecting the balances in this vein, events such as sudden waves of mass immigration will put a great strain on society's safety networks. Here recent examples are abundant. First and foremost, the institutional capacity matters, and events such as the ongoing war in Ukraine will generate a stream of real refugees who need to find settlement and support in nearby regions. However, the other side of the coin here is that in many parts of Western Europe the influx of refugees will inevitably contribute to the general safety problems the host community is likely to experience with mass immigration. Despite well-meaning altruism on behalf of the host society, in the short to medium term, the massive influx of groups of people with fundamentally different values, behavioural patterns and identity concerns than the existing communities will erode the social capital, worsen the safety situations, and add to the financial longer term, more serious problems such as the formation of immigrant ghettoes and a vulnerable parallel society of illegal residents is likely to lay roots. Other looming social, economic and political

harms need attention too. The resilience in the face of such harms then becomes a function of apt social institutions and infrastructures, legal frameworks, administrative agility and political will – not the least, concerning the war in Ukraine with implications for the CEE region – in place both at the level of individual sites and the city as a whole.

The proposition for a viable research strategy here is based on the premise that the relative neglect of the socioeconomic side in resilience research with applications is correctable with an improved general knowledge base composed of socioeconomic information of urban areas and city regions. This, in turn, requires attention to both theoretical perspective on what kind of controversial assumptions must be accepted, and empirical analysis using up to date information on relevant indicators of resilience situations. Eventually, when a correct theoretical framework is in place together with factual knowledge of proven assertions, robust and applicable analyses of resilience can be provided for academic and policy relevant purposes alike.

When we evaluate possibilities to assist on the policy side, the motivations of actors become the key. It is therefore likely that a further requirement for successful resilience policy would be to involve the private sector too. And as already asserted, here the real estate industry can prove to be a particularly helpful case in point. When we focus on the built-up area, the role of real estate situations becomes evident for the safeguarding and, by implication, resilience of urban areas and city regions.

The contribution added new knowledge by first making a distinction between the emerging resilience aspect from the established sustainability aspect, and subsequently, by identifying the hitherto neglected socioeconomic and demographic resilience concept within both academic and policy relevant domains. Considering the multitude of socially challenging situations, urban analysis indeed needs such research attention. The local level is here the key. Against the backdrop of looming social hazards in cities and city-regions, the overarching innovative idea put forward is two-fold. First, at the individual property occupancy and site level the goal is to generate trust within the community of neighbours, together with robust law enforcement strategy as backup. Second, when examining the particular urban policy and planning circumstances, in turn, the key is institutional selection in relation to relevant projects that have real value instead of utopia building.

NOTES

1. The author thanks prof. Alexandru-Ionut Petrişor for making this point.
2. The realist perspective here refers to one of the main Philosophy of Science positions. The distinction to relativism is that we assume a common, objective reality, rather than accept several truths. The other distinction is to positivism, where a methodological purity is expected, that is to say, mathematical modelling and statistical data sets, in accordance with classic scientific model postulates. The realist approach is pragmatic instead of tied to particular guidelines; triangulation of methods and institutional analysis are often seen as the broad methodological frameworks, and can be negotiated further according to the specific goals of the research.

3. That this perspective may not be entirely rational does not invalidate Heidegger's notion that a person's experiences are dependent on local – often provincial – cultures and affected by prejudices.
4. Note that this theme brings together a wider array of issues beyond mere real estate market circumstances.
5. Besides, evidence from the United States suggest that a trend towards more spacious accommodation with comfortable teleworking conditions was evident already before the Covid outbreak, as Kotkin (2016, p. 189) argues.
6. This is easily seen by searching for resilience related studies and comparing the results in terms of their share in representation between natural science and social science domains. Curiously, Cosson's (2020) study from Japan on the preparedness of a community in the face of an earthquake and the tsunami that followed straddles both domains.
7. The racial inequality biases inherent in the 'diversity, inclusion and equity' agenda propagated by globalist elites can indeed be argued to be disadvantageous for the average citizen, see Kauko (2022c).
8. While not possible to verify, Poland also seems to be at the forefront in various lines of research in urban and regional resilience models (see Mierzejewska and Wdowicka, 2018; Masik and Grabkowska, 2020). We also note the development of statistical and financial tools for the control and understanding of the risks associated with natural disasters across different perils and regions (e.g. Burnecki and Giuricich, 2017; Burnecki *et al.*, 2019).
9. Nb. Anecdotally, wars tend to be something governments invest more in than own institutional capacity measures. For example, the Biden regime in the US spent three times more on providing for the Ukrainian war (in two years) than the Biden and Trump regimes together spent on border control measures in their own country (during a seven years' period).
10. Although this is only for natural hazards.

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