Urban shrinkage in post-socialist countries

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Abstract

The article has two main tasks. On the one hand, it attempts to perform a comparative analysis of the shrinkage process of post-socialist cities in an international perspective and to formulate generalisations and recommendations. On the other hand, it presents the specificity of this process in various national, regional and local contexts. The analysis covers selected countries located in post-socialist Europe (with emphasis on East-Central and Southeast Europe), Russia and China and is focused on three issues: 1) geography of the shrinkage process of post-socialist cities; 2) common and country-specific factors responsible for urban shrinkage; 3) comparative analysis and conclusions in the context of managing urban shrinkage. The article points to the fact that urban shrinkage (especially in terms of demography) is one of the world challenges (with its scale being particularly large in post-socialist Europe), and the COVID-19 pandemic has started to affect its course and spatial distribution. The following key problems associated with the shrinkage of post-socialist cities are identified: 1) overcoming the demographic crisis; 2) demographic compensation for the migration outflow of the population; 3) overcoming the negative consequences of deindustrialization; 4) the problem of “wild” uncontrolled suburbanization, etc.

Keywords list (en): urban shrinkage, post-socialist cities, East-Central and Southeast Europe, Russia, China

Publication date: 28.04.2022

Citation link:

Introduction. Urban shrinkage (especially its demographic aspect) has become one of important challenges of today’s world. In the most concise terms, this process is defined as a long-term decrease in the number of inhabitants combined with the crisis of a local economy, degradation of built environment and growing social problems [18; 52]. It may take various forms and its determinants are different, extensively discussed in the source literature. Admittedly, the shrinkage process occurred in
some cities in the US and Western Europe (mostly in traditional industry centres) before; however, after 1990 it has become particularly large in many post-socialist cities\(^1\) of East-Central and Southeast Europe, Russia and China. Initially, a decrease in the population number there was treated as a temporary phenomenon (related to the change in socio-economic and political systems, i.e., the so-called systemic transformation), hence it was not given due attention in urban policy. Today, this approach has begun to change, and the shrinkage of post-socialist cities is subject to an increasingly lively interdisciplinary discussion of researchers and practitioners. This discussion covers many strands (e.g. causes, the scale and spatial distribution of urban shrinkage, consequences of this process and ways of overcoming them) and its most important results are included in the works of Petrović\(^2\), Steinfeld, Haase\(^3\), Großmann et al.\(^4\), Audirac, Fol and Martinez-Fernandez\(^5\), Bontje and Musterd\(^6\), Stryjakiewicz, Ciesiółka and Jaroszewska\(^7\), Siljanoska, Korobar and Stefanovska\(^8\), Rumpel, Slach\(^9\), Stryjakiewicz, ed.\(^10\), CIRES Synopsis Report\(^11\), Haase\(^12; 13\), Constantinescu\(^14\), Ubarevičiene\(^15\), Bartosiewicz, Kwiatek-Soltys and Kurek\(^16\), Jaroszewska\(^17\), and Jaroszewska, Stryjakiewicz\(^18\).

The increasing scope of research on the shrinkage process of post-socialist cities in various countries prompts, on the one hand, attempts to undertake comparative analysis and to formulate generalisations and recommendations in an international perspective and, on the other hand, to show the specificity of this process in different national, regional and local contexts. This is also a dual purpose of this publication.

Not only the topicality of the issue was an incentive to write this article, but also the author’s long-standing participation in scientific and practical projects related to urban shrinkage in an international perspective\(^2\), editing CIRES Synopsis Report\(^11\), as well as co-editing a monograph entitled ‘Post-socialist shrinking cities’\(^64\), comparing the experiences of shrinking cities in post-socialist Europe, Russia and China. The analysis of urban shrinkage in this article has been reduced to three groups of issues: 1) geography of the shrinkage process of post-socialist cities; 2) common and country-specific factors responsible for urban shrinkage; 3) comparative analysis and conclusions in the context of managing urban shrinkage.

These issues are presented in a synthetic form (often only as an indication of the problem), with frequent references to the literature for a detailed, more in-depth analysis of the process.

**Geography of the shrinkage process of post-socialist cities.** Geographical analysis of the shrinkage process of post-socialist cities is not easy. This is so, because they are located in three different megaregions (Europe, Russia and China) that vary in terms of size, environmental, political and institutional conditions (post-socialist transformation took various forms there), the intensity and dynamic of the shrinkage, and the availability and reliability of statistical data and other source information. What is also different are definitions and criteria of delimitation of cities and their size classification in settlement patterns of particular countries. Szymańska\(^58, p. 97\) rightly observes “what is regarded as a small town in one country may be considered a large city in another”. Given the objections above limiting the possibilities of comparative analyses, it may be stated, however, that the process of urban shrinkage occurs in all three of the above-mentioned megaregions, whereas its determinants, scale, dynamics, forms of manifestation, consequences and spatial distribution vary considerably.

In relative terms, unquestionable ‘shrinkage leaders’ are cities in East-Central and Southeast Europe. In some countries of this region (Baltic States, Bulgaria, Romania) the scale of the process is so large that the vast majority of cities can be described as shrinking in all the aspects of this phenomenon, i.e., demographic, economic, social and spatial, and the demographic dimension seems to be crucial. While in the USA the proportion of shrinking cities is about 35 %\(^22\), in the EU about 20–25 %\(^35; 63\), it is between 70 % and 90 % in the above-mentioned countries\(^17; 63\). Moreover, Mykhnenko and Turok\(^37\) point out that the shrinking process is very fast. It is therefore not surprising that Steinführer et al.\(^51\) call the post-socialist part of Europe a ‘new pole of shrinkage’ and Eva, Cehan, Lazar\(^17\) the ‘epicentre of urban shrinkage’. The detailed characteristics of the urban shrinkage process in post-socialist Europe can be found in the works of Mykhnenko and Turok\(^37\), Stryjakiewicz, ed.\(^52\) and Haase\(^20\), among other researchers.

The scale of urban shrinkage in Russia is hard to be clearly determined because it is subject to considerable fluctuation. According to Cottineau\(^12\), as late as in 1979–1989, only 11 % of Russian...
cities could be recognised as shrinking. From 1989 to 2010, the percentage of cities, which went through at least a short-term demographic shrinkage, increased up to about 70%, mostly in 2002–2010. However, in the light of the latest research of Averkieva and Efremova [3], in 2010–2019, only about 25% of 864 cities with the population of more than 10,000 displayed shrinkage symptoms in terms of demography. It can be therefore recognised that there was a significant slowdown in the shrinkage process. What is typical, however, is a rapid polarisation of the urban system and the spatial distribution of shrinking cities. About 2/3 of them are small towns (these are cities up to 50,000 inhabitants in the Russian size classification of cities). Among large shrinking cities are mainly centres of raw materials extraction and traditional industry with unfavourable climate conditions. Most shrinking cities (in relation to the number of all cities) are located in the North, North-West and Far East macroregions. It should be highlighted, however, that the situation in the Far East improved significantly in 2010–2019 as compared to the initial transformation period (it concerns especially cities on the Russian-Chinese border). The relatively smallest proportion of shrinking cities can be found in the central regions of the European part of Russia, in the West Siberia and the North Caucasus [3; 6; 12].

The identification of shrinking cities in China is even more difficult than in Russia. It results, e.g., from a large discrepancy of statistical data concerning officially registered places of residence (hukou) and the actual whereabouts of population. Owing to this fact, cities that go through an economic boom and attract many labour migrants may show population regression de jure in the hukou system (hence the features of demographic shrinkage), whereas the number of people living there is de facto growing. Although an interest in urban shrinkage in China started relatively late, it has been investigated as part of large projects funded by national foundations and grants almost from the very beginning (i.e. since 2015). Unfortunately, these studies do not present a complete picture of the current shrinkage process in Chinese cities, because the last population census was carried out in 2010, and the results of the 2020 census have not been made fully available yet. Despite that, based on the works of He [23], He et al. [24], Li, Mykhnenko [33], Long, Gao [34], Jiang et al. [30] and Zhou, Dai [66] one might be tempted to formulate the most important regularities concerning the scale and shrinkage geography of Chinese cities.

1. The scale of urban shrinkage is relatively smaller than in the remaining megaregions analysed in this article, i.e., in post-socialist Europe and Russia (Zhou and Dai [66] identify 180 shrinking cities). 2. Geography of urban shrinkage is highly diverse. Most shrinking cities (so-called resource-depleted) can be found in the north-eastern region (where the process is related to the depletion of resources) and in the western and central parts of the country (as the result of population migration to economically more developed eastern regions). 3. It may come as some surprise that shrinking cities can also be found in the booming regions of Beijing and the Yangtze River valley. This applies to cities whose economy is export-oriented and is strongly influenced by globalisation processes while being less resilient to world crises (e.g. the 2008–2009 financial crisis, the pandemic). 4. Geographical pattern of shrinking cities and its dynamics in China are more strongly determined by the global economic situation and the national policy than in the other countries analysed.

Common and country-specific factors responsible for urban shrinkage. The urban shrinkage process depends on many factors, some of which concern all cities and regions and are repeatedly described in the literature and some are specific, related to a particular country or a regional context.

The first group of common factors includes especially demographic change, often called a ‘demographic shock’ (fall in the birth rate and natural increase, population aging). The trends are similar in all post-socialist countries (and concern not only cities), although they vary over time: they started earlier in richer countries. There are considerable regional differences in demographic processes in Russia, e.g. in the Caucasus Republics with a specific national and religious structure or in the southern part of Siberia (inhabited by a relatively young population) unfavourable demographic tendencies do not occur. In China, however, the procreative behaviour of the population was negatively influenced by administrative prohibitions related to the birth control policy introduced in the early 1980s (the one-child policy).

The second common factor is related to the transformation of the economy (in particular its deindustrialisation). This factor has become the main reason behind the shrinkage of former mining
and traditional industry centres (metallurgy, iron and steel, textiles), privileged for many years in the system of a centrally planned economy. Its impact on urban shrinkage in post-socialist Europe, Russia and China was similar to that of Great Britain, Germany or France earlier. The systemic transformation meant, however, that it was of a shock-like nature. In Russia, the transformation crisis hit especially cities and towns closely linked to industrial plants (so-called company towns), closed cities (ZATO) and some seaports and transhipment hubs. In turn, in China a large group of shrinking cities are resource-depleted cities in which the existing production resources, especially raw materials, have been exhausted [33].

The third crucial factor behind urban shrinkage is the **transformation of the settlement system** (in particular **suburbanisation**). In needs to be emphasised at this point that suburbanisation (which started even before the systemic transformation in many analysed countries) causes the demographic shrinkage of cities within their administrative boundaries. This does not mean, however, that the whole urban agglomeration is shrinking since nearby towns and villages may actually increase the population and/or develop economically (because of convenient business locations). Moreover, post-socialist suburbanisation does not usually lead to a multiscale physical degradation of city cores, or the creation of ‘perforated cities’ typical of many shrinking cities in North America [29].

The notion of post-socialist suburbanisation may be misleading in some regional contexts, e.g. in the Balkans, where the suburbanisation process, except for a typical form related to urban sprawl, also includes the development of illegal shrinking suburbs with substandard living conditions [42]. Such illegal settlements shrink together with city cores [1]. Therefore, suburbanisation patterns may vary significantly between particular post-socialist countries (contrasting examples are Serbia and Slovenia).

Another factor, **migrations**, may be recognised as common (universally present), but the role of two basic geographic types of migration, i.e., international and domestic, is different. While emigration abroad is one of the most important factors determining demographic urban shrinkage in post-socialist East-Central and Southeast Europe, for Russia and China its impact is relatively negligible in comparison to the role of domestic migration.

The significance of mass emigration in East-Central and Southeast Europe is well illustrated by UN estimates, according to which since the beginning of the systemic transformation, i.e., 1990, those countries have lost in total about 18 million residents (6 %), mainly urban, with some of them (Lithuania, Latvia) losing ¼ of the population [31; 58; 59]. This emigration intensified especially after the EU enlargement and opening of the EU labour market. In many countries of this region, the actual scale of emigration is unknown. This refers particularly to the Balkan Peninsula states, e.g. North Macedonia. In other countries of this peninsula (Bosnia-Hercegovina, Serbia) migration was forced by warfare in 1992–1995. Domestic migrations in Russia and China are mainly economically motivated.

Among specific factors behind urban shrinkage, the following deserve special attention regarding post-socialist cities: (1) **urbicide** and (2) some administrative regulations.

The term **urbicide**, used for the first time by Michael Moorcock in 1963 [36] (cf. also [8; 14; 15; 47]), denotes physical (material), structural and symbolic forms of ‘violence against the city’, caused most often by warfare. This is best illustrated by the cities of Bosnia and Hercegovina. During the war after the breakup of Yugoslavia (1992–1995), 2.2 million people, that is over half of the population, left their homes in this country, and the emigration rate amounted to 38.9% (World Bank 2011). Moreover, one of the lowest fertility rates was recorded (1.26). In cities like Mostar and Sarajevo, physical destruction of the built environment, ethnic cleansing and forced migration have become atypical causes of shrinkage, and the post-war ‘recovery’ has been slow.

Another specific factor responsible for post-socialist urban shrinkage is some **administrative regulations** regarding especially Russian and Chinese cities. Before the transformation, many cities in Russia were closed cities (ZATO); inhabitants were also ‘assigned’ to a particular place of residence (by the so-called propiski). Moreover, the development of cities in the North, Siberia, the Far East, located in difficult climate conditions, was artificially induced by the system of governmental subsidies and individual economic incentives to settle there. The systemic transformation resulted in the loss of this comparative advantage, and in turn, the population outflow. Meanwhile in China — in addition to residency restrictions — the policy of administrative prohibitions related to birth control
(one child per a family) exerted a significant impact on urban shrinkage.

With regard to the recent pandemic situation, it is worth asking: What is (or may be) the impact of the COVID-19 pandemic on the post-socialist urban shrinkage process? It is too early to fully answer this question. However, there are clear symptoms indicating that the pandemic has not only stopped migration outflow (in East-Central and Southeast Europe to the west, and in China to the east) but has also initiated return migration. As The Economist points out [16, p. 2]:

“An estimated 1.3 million Romanians went back to Romania in 2020. (…) Perhaps 500,000 Bulgarians returned to Bulgaria — a huge number for a country of 7 million. Lithuania has seen more citizens arriving than leaving for the first time in years. (…) Politicians in Eastern Europe had long complained of a ‘brain drain’ as their brightest left in search of higher wages in the west. Now the pandemic, a shifting economy and changing work patterns are bringing many of them back. A ‘brain gain’ has begun.”

The COVID-19 pandemic and the rapid spread of remote working related to it has also slowed down the existing trend in domestic migration from the west to the east of China, and as a result, has stopped the urban shrinkage process in western and central regions. The consequences of the pandemic for the shrinkage process should be a subject of further in-depth studies.

**Comparative analysis and conclusions in the context of managing urban shrinkage.** An attempt at synthetic comparative analysis of urban shrinkage in terms of its scale and the most important factors has been presented in Table 1 on the example of selected post-socialist European countries, as well as Russia and China. It shows that the scale of this process is strongly diversified, and negative demographic trends and systemic transformation (especially deindustrialisation that goes along with it) are common factors for all cities.

*Table* Comparison of the scale and main determinants of urban shrinkage in selected post-socialist countries of Central-Eastern and Southeast Europe, Russia and China

| Country           | Scale (in terms of population loss)* | Main determinants | | | | |
|-------------------|--------------------------------------|-------------------| | | | |
|                    | large | moderate | small | demographic processes | suburbanisation | migrations | postsocialist transformation (including deindustrialisation) | |
| Central-Eastern Europe | foreign | internal | | | | | |
| Czechia            | x | x | x | | | | |
| Hungary            | x | x | x | x | | | |
| Lithuania          | x | x | x | x | | | |
| Poland             | x | x | x | | | | |
| Slovakia           | x | x | x | | | | |
| Southeast Europe   | | | | | | | |
| Bosnia and Herzegovina | x | x | | | | x | |
| Bulgaria           | x | x | | | | x | |
| Romania            | x | x | | | | x | |
| Serbia             | x | x | | | | x | |
| Slovenia           | x | x | | | | x | |
Urban shrinkage constitutes a considerable challenge for state and local administration authorities at various levels and for planning institutions, (Batunova and Gunko [6] write about an ‘unspoken challenge’ for spatial planning). This challenge takes on a special character in the post-socialist countries of East-Central and Southeast Europe, where planning culture was developing based on the continuous growth paradigm for decades [25; 38; 43; 44; 54; 61]. Therefore, this problem was ignored for many years in the majority of post-socialist cities, because it was assumed that shrinkage was temporary and the return to a development path (in demographic terms) would follow. Today, this approach has begun to change, e.g., under the influence of the experience of West-European cities, where it has already been observed from the beginning of this century that it is necessary to get liberated from the ‘obsession of the continuous growth paradigm’ in urban policy and to develop relevant forms and tools of planning for shrinkage, as well as to perceive the urban shrinkage through the prism of chances and possibilities of a change in the current development path [4; 7; 9; 10; 21; 25; 26; 28; 32; 60; 62]. It is also about linking shrinkage to qualitative change in the urban space, e.g., to its regeneration process or the adjustment to technical and social infrastructure to changing needs (the principle of shrink smart).

Conclusions. The author’s own research results as well as those of other authors make it possible to identify the following key challenges related to the shrinkage of post-socialist cities and the management of this process: 1) overcoming the demographic crisis (incentives introduced in various countries, such as childbirth allowances, have so far proved ineffective); 2) demographic compensation for loss caused by mass emigration. According to Yudah [65, p. 3] “only Poland manage to compensate in a significant way for mass emigration and low natural increase by the immigration of more than a million Ukrainians”; 3) coping with negative deindustrialisation effects. There are either good or bad experiences related to economic, social and spatial restructuring; what has also appeared are reindustrialisation attempts (it is too early, however, to assess their results); 4) the problem of ‘wild’, uncontrolled suburbanisation; 5) integration of national, regional and local levels of governance (the last one seems too weak).

Moreover, the need to modify western approaches to manage the urban shrinkage process so that they would fit better the specificity of a given country has been also highlighted. In any case, the shrink smart principle will remain a future imperative of urban policies.

Remarks:

1. In this article, the term ‘post-socialist city’ denotes cities developing in the system of a centrally planned economy, which, after the so-called systemic transformation, began to function in different conditions, adopting many elements of a market system. Despite the fact that this transformation took various forms in East-Central and Southeast Europe, Russia and China, still all these cities have undergone changes related to overcoming the heritage of a ‘socialist city’. An extensive discussion on the features of socialist and post-socialist cities can be found in the works of Sailer-Fliege [46], Stanilova [49], Sykora [55], Parysek [40; 41], and Stryjakiewicz, Ciesiółka and Jaroszewsk [53], among others.

2. These are the following projects: CIRES — Cities Regrowing Smaller. Fostering knowledge on regeneration strategies in shrinking cities across Europe — the project implemented as part of COST, i.e., European Cooperation in Science and Technology, and Re-City — Reviving shrinking cities – innovative paths and perspectives towards livability for shrinking cities in Europe — the project implemented as part of Horizon 2020 Marie Skłodowska-Curie ITN Action.

3. In some of these works, e.g. [30], the research results are based on the latest geoinformation technologies.

References:


12. Cottineau C. (2016), A multilevel portrait of shrinking urban Russia, Espace populations sociétés, no. 2015/3-2016/1, pp. 2–16.


40. Parysek J. (2012), Współczesne miasta i problemy ich funkcjonowania i rozwoju [Contemporary cities and problems with their functioning and development], Kształtowanie przestrzeni miejskiej: aspekty teoretyczne i praktyczne [Development of urban space: Theoretical and practical aspects], ed. Parysek J., Poznań-Kalisz, University of A. Mickiewicz in Poznań, Faculty of Pedagogy and Art, pp. 9–57. (In Pol.).


42. Petrović M. (2005), Cities after socialism as a research issue, Discussion papers (South East Europe series), 34, London School of Economics and Political Science, London, UK, 26 p.


54. Stryjakiewicz T., Jaroszewska E. (2016), The process of urban shrinkage as a challenge to urban governance, Quaestiones Geographicae, no. 35 (2), pp. 27–37.


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Аннотация

The article has two main tasks. On the one hand, it attempts to perform a comparative analysis of the shrinkage process of post-socialist cities in an international perspective and to formulate generalisations and recommendations. On the other hand, it presents the specificity of this process in various national, regional and local contexts. The analysis covers selected countries located in post-socialist Europe (with emphasis on East-Central and Southeast Europe), Russia and China and is focused on three issues: 1) geography of the shrinkage process of post-socialist cities; 2) common and country-specific factors responsible for urban shrinkage; 3) comparative analysis and conclusions in the context of managing urban shrinkage. The article points to the fact that urban shrinkage (especially in terms of demography) is one of the world challenges (with its scale being particularly large in post-socialist Europe), and the COVID-19 pandemic has started to affect its course and spatial distribution. The following key problems associated with the shrinkage of post-socialist cities are identified: 1) overcoming the demographic crisis; 2) demographic compensation for the migration outflow of the population; 3) overcoming the negative consequences of deindustrialization; 4) the problem of “wild” uncontrolled suburbanization, etc.

Ключевые слова: urban shrinkage, post-socialist cities, East-Central and Southeast Europe, Russia, China

Дата публикации: 28.04.2022

Ссылка для цитирования: