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# Does urban shrinkage require urban policy? The case of a post-industrial region in Poland

Anna Runge <sup>a</sup>, Jerzy Runge <sup>b</sup>, Iwona Kantor-Pietraga <sup>c</sup> and Robert Krzysztofik <sup>d</sup>

## ABSTRACT

The problem of depopulation in towns is present in most European countries. In Central and Eastern Europe it emerged primarily after the political transformation at the turn of the 1980s and 1990s. Despite the often-significant demographic decline, the problem did not immediately become part of agenda-setting in towns' local strategies. This paper discusses the above topics, focusing on the principal reasons for trivialization of depopulation in local policies of towns in the Silesian Voivodeship, Poland. In the discussion an emphasis is placed on the fact that in this region the issue of depopulation and urban shrinkage 'vied' with another consequence of transformation: unemployment. Because the Silesian Voivodeship is one of the largest regional labour markets in Europe, the confrontation of the two phenomena in local and regional policy took an original course characterized by phenomena such as policy taboo, trivialization, informal agenda-setting and mismatch strategies. The paper shows that while all the mentioned attributes of urban policy with respect to depopulation may be regarded as negative, considering the gigantic scale of the unemployment and depopulation phenomena and lack of experience in urban governance, they were a 'natural' reaction of the local authorities to the accumulated problems. It also indicates that in the studied region issues such as strongly marked morphological polycentricity and its (post)mining and (post)industrial nature were also not without significance.

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## INTRODUCTION

The development of many Eastern and Central European regions at the turn of the 20th and 21st centuries is characterized by a noticeable demographic decline. In some countries such as Bulgaria, (East) Germany, Poland, the Czech Republic and Latvia, it is strongly supra-regional and not limited to individual administrative regions (Eurostat, 2016a; Großmann et al., 2008; Mladenov et al., 2008; Mykhnenko & Turok, 2008; Oswalt & Rieniets, 2006; Runge, 2008; Stryjakiewicz, 2014; Šerý et al., 2018). In most of these countries, the decline in the urban population was a new phenomenon. In East Germany and Hungary, depopulation of cities was observed as early as the 1980s (Bontje, 2004; Pirisi & Trócsányi, 2014). In contrast, large-scale depopulation occurred throughout Central and Eastern Europe in the 1990s and beyond. Nevertheless, depopulation remained overshadowed by other important processes accompanying the political and economic transformation of Central and Eastern Europe. The political system changed; the principles of the free market and local and regional self-government were restored. There were also other problems that worried city-dwellers: bankruptcy and the closure of many workplaces, unemployment, and social exclusion (Gallie et al., 2003). The problem of depopulation, although increasingly noticeable, was only one of the attributes of the so-called transformation shock. The accumulation of problems accompanying the political and economic transformation caused some marginalization of depopulation.

The process of depopulation and shrinkage is particularly evident in cities and regions whose development is based on traditional industry. Therefore, the cities of Śląskie Voivodeship, the most urbanized and industrialized region in southern Poland, were accepted for study. In certain cities in Śląskie Voivodeship, population decline has been reported over the past 30 years. In this province, depopulation revealed itself with particular force. An attempt was made to answer the question of how urban policy is to be implemented in a region with such specific problems.

The aim of the article is to identify the attitudes of local governments in the analysed cities of Śląskie Voivodeship toward depopulation:

- Is depopulation a tool to create local policy?
- Is it perceived as a threat requiring remedial action or limiting its negative consequences?
- Is it also marginalized as an insignificant problem?

The problem of depopulation in Śląskie Voivodeship has already been the subject of analysis in scientific publications (Krzysztofik et al., 2011; Runge, 2019). However, previous studies focused primarily on the statistical dimension of depopulation or in-depth studies of selected cities (Bytom and Sosnowiec). A research gap occurs in the assessment of the phenomenon from a broader perspective and in relation to more cities in the post-industrial region of Poland. Kantor-Pietraga et al. (2014), Krzysztofik et al. (2012b) and Rink et al. (2014) constitute a starting point to study this issue. There is currently no literature on the evaluation of urban depopulation and contraction in the context of targeted regional and local urban policy that would be based on more cities. This problem is interesting for at least two reasons. First, due to the large number of cities and their polycentric morphology, one should speak about the compression of local policies in a relatively small area of one administrative region (Śląskie Voivodeship). In such cases, the following question always arises: Does the sum of many local policies give a picture of regional policy?

Second, has an anti-depopulation policy played any role in the transformation of the studied region over the last 30 years? This doubt raises further questions. Transformation in the cities of Śląskie Voivodeship is characterized by both positive and negative features. Should the depopulation process and the urban policy that does not follow it be seen only negatively in the

transforming post-socialist state (e.g., Buček & Bleha, 2013; Haase, Rink, et al., 2016; Šerý et al., 2018)? Answers to these questions were particularly important at the end of 2010 when the functional features of the region changed radically (Krzysztofik et al., 2016; Runge & Runge, 2017), as well as the situation in the labour market. An attempt was made to answer the above questions in the context of urban policy in Śląskie Voivodeship.

The research was based on a detailed analysis of planning and strategic documents of the cities of the region, characterized by long-term population loss. A large part of them also experienced the phenomenon of urban shrinkage (Pallagst, 2019; Strykiewicz, 2013; Wolff et al., 2017). The authors were primarily interested in when and how local authorities reacted to the problem of depopulation.

## LITERATURE REVIEW

The research problem highlighted in the introduction takes into consideration two key issues: the depopulation of cities in a large urban region and the reaction of city authorities to this phenomenon, expressed in master plans or strategic documents. This approach to the issue being analysed suggests referring to several basic research discourses. The first of these is undoubtedly the issue of the developmental background of depopulation and the shrinking of cities, with a particular emphasis on deindustrialization and the restructuring of coal districts or industrial monofunctionality at the stage of a structural crisis (Baranyai & Lux, 2014; Krzysztofik et al., 2016; Potrykowska, 1995; Rachwał, 2011). In a more general dimension of the literature on the subject, in addition to the (post-)industrialism and economic problems of cities, attention is paid to the phenomenon of depopulation, suburbanization (Kurek et al., 2014; Spórna, 2018; Spórna & Krzysztofik, 2020), and the demographic, social and cultural features of local communities (Kazimierzczak & Szafrńska, 2019; Ročak et al., 2016; Schetke & Haase, 2008). Studies devoted to these issues are presented in both the local and national or global dimensions (Martinez-Fernandez et al., 2012; Richardson & Nam, 2014; Zhang et al., 2019). Due to the area of research presented here and the (post-)industrialism that characterizes it, the phenomenon of depopulation should be strongly associated with this factor. As recently stated, suburbanization is not only relatively small (Krzysztofik et al., 2017) but also even the 'anti-sprawl' phenomenon is observed in both the demographic and social as well as economic and infrastructural dimensions (e.g., Krzysztofik et al., 2019b; Spórna & Krzysztofik, 2020). Economic problems related to the transformation of industry and mining as the driver of the demographic decline in Śląskie Voivodeship concern not only the larger cities but also the smallest ones (Krzysztofik et al., 2019a).

The discourse on depopulation and shrinking cities is multithreaded. It covers, among other issues, those already mentioned regarding the causes and conditions of certain phenomena as well as the analysis of socioeconomic and spatial structures of shrinking cities (Bernt, 2016; Bontje & Musterd, 2012; Haase et al., 2014; Haase, Bernt, et al., 2016; Mallach et al., 2017; Reckien & Martinez-Fernandez, 2011; Rieniets, 2009), urban policy as well as planning and strategic challenges (Hospers, 2014; Wiechmann & Bontje, 2015). The problem of urban policy with regard to shrinking cities has an important place in the scientific debate. The explanations in this matter aim at analyses and solutions concerning specific cities (Cocks & Couch, 2012; Cortese et al., 2014; Couch et al., 2005; Couch & Cocks, 2013; Krzysztofik et al., 2011; Nelle et al., 2017; Spórna et al., 2016) and refer to more general issues such as smart shrinkage, governance of shrinkage, and shrinkage and depopulation in relation to various national policies (Bernt et al., 2012; Haase et al., 2017; Hattori et al., 2017; Hoekstra et al., 2020; Peters et al., 2018; Rhodes & Russo, 2013; Shetty & Reid, 2014). An important aspect of urban policy discourse focuses on the question of the problem of depopulation and shrinking of cities. Studies devoted to these issues can be divided into, among others, those who treat these phenomena as a

challenge and a problem (Audirac, 2018) and those in which they are treated as a certain stage of the city's transformation, as acceptable, requiring reaction but not treated pejoratively (Hollander & Németh, 2011; Verwest, 2011). In the first of these, depopulation and shrinkage of cities are a fundamental problem of the city, which requires a response and an adequate change of individual urban structures. Their effect should be at least inhibiting negative regressive trends.

The second approach, less radical in the assessment of urban shrinkage, and defined as right-sizing or using urban shrinkage (Verwest, 2011), is undoubtedly focused on the practical dimension from a planning and strategic point of view. They can be defined as: acceptance, reaction, matching and sustainability. From this point of view, it is also similar to the more general mainstream research focused on sustainable urban space, including the sustainable development of shrinking cities (Herrmann et al., 2016; Wang & Fukuda, 2019). Regardless of the two approaches emphasized and intermediate models, it is worth mentioning the trivialization of depopulation and shrinking of cities. This model in Polish cities has two varieties: trivialization via denial and trivialization through taboo (Krzysztofik et al., 2012b; Rink et al., 2014).

The dilemma that emerges from such a divergent assessment of the phenomenon of depopulation in urban policy also prompts a reflection on the social responsibility of municipal authorities for their decisions and the overall role of municipal authorities in modes of governance (Pallagst, 2008; Sousa & Pinho, 2015). This issue is important because urban policy errors made by city authorities, failure to implement development plans or excessive flexibility in this respect may be much more dangerous in shrinking cities than in cities demonstrating population growth (Kantor-Pietraga et al., 2014). On the other hand, as other studies show, the attribute of flexibility of urban policy may prove to be (after some time) ultimately more beneficial than solutions adopted many years earlier that do not reflect the changing economic, social or spatial circumstances (Krzysztofik et al., 2020). This study includes current scientific achievements and existing research discourses at the intersection of issues related to urban policy, depopulation and urban shrinkage.

## DATA AND METHODS

The paper's research methods were adapted to its narration, based on an attempt to explain the problem set out above in the introduction. First, we were interested in how advanced depopulation is in the Silesian Voivodeship. We based this measurement on Statistics Poland data on the number of inhabitants in the region's communes. We independently calculated population numbers for 57 communes (i.e., around 30% of all the communes in the province) whose administrative area had increased/decreased significantly in the period 1978–2018 to ensure the comparability of data in individual periods. The comparison was made with reference to the 2018 borders. The effects of our analysis are shown as cartograms of changes in population numbers in towns of the Silesian Voivodeship. Quantitative research on population dynamics in the cities of Śląskie Voivodeship formed the basis for qualitative research, which was of key importance in this article. They were included in the broadly defined comparative method (Babbie, 2009). This was applied at two levels of interpretation: constant stage and dynamic stage. The separation of these two types of interpretation may be suggested by the use of the method of vignettes (e.g., Hughes & Huby, 2004; Taylor, 2005). Static and dynamic terms define, in this method, two out of three characteristics of the title vignettes (there is a modified variable attribute). Since the assessment of the provisions of local urban policies was made only on the basis of the opinion of the authors and a limited group of local authorities, the method used only refers to the vignettes method. The application of the adopted method consisted of the following:

- Having a full picture of the rate of population change in the region, in the second stage we moved to a detailed analysis of the provisions of strategic documents in selected settlements. We examined strategic documents for 29 depopulating towns of various sizes. Furthermore, we analysed four regional (provincial and metropolitan) documents. While the analysis was based on town development strategies, we additionally analysed 18 master plans. We assumed that the provisions of this document type could also contain solutions to demographic problems.
- In the remainder of the article, a qualitative scenario analysis (representing a group of heuristic methods) was used to compare the development strategies of selected cities in Śląskie Voivodeship, enabling a comparison to be made of suitably hierarchical goals and strategic tasks (Bowen, 2009). The detailed analysis of the documents consisted of assessing the main components in the urban development strategies and master plans adopted in Poland in terms of depopulation and shrinkage. In development strategies, these were strategic analysis, strategic planning and operational planning. The master plans analysed two issues: conditions and destination. An important element in strategic documents is also a strengths, weaknesses, opportunities and threats (SWOT) analysis (Development Strategy for the City of Ruda Śląska until 2030, 2018; Development Strategy of the Silesian Voivodeship ‘Śląskie, 2030’, 2020). In this case, the phenomenon of depopulation was analysed in the SWOT analysis records, as was how to define this problem. This method allowed the indication of the position of a specific strategic goal among the others, and thus to make a comparative analysis among other cities of the *voivodeship*, thus separating specific types of city development vision. We define this level of interpretation as static.
- The third level of interpretation, which was called dynamic, was to place local policy decisions on a timeline. This is important because the urban shrinkage process has gone through different phases over the past 30 years. The social awareness of the urban shrinkage problem also varied over time. In this case, the interpretation tool was a diagram presenting the significance of the discussed problem in the adopted strategic and planning documents.

In the research process, we also used the opinions of local authorities of five towns: Bytom, Jaworzno, Mysłowice, Radzionków and Sosnowiec. We also followed the views of a further 20 of the region’s town councils on the issue. The selection of interlocutors was dictated by the size of the city, the advancement of the city’s shrinkage and the location within Śląskie Voivodeship. We received answers from mayors and vice-mayors of cities, as well as officials responsible for the development of the city. Interviews were unstructured and did not have well-defined templates. They consisted of hearing interlocutors’ opinions on the transformation of cities, with a particular emphasis placed on the issue of depopulation. In this respect, we were also interested in the opinions expressed publicly on the problem of other local authorities. We obtained them during regional conferences and by following statements in traditional and electronic media. Because the key research element here was the interpretation of strategic and planning documents, all information from local authorities was supplementary.

## DEPOPULATION IN THE SILESIA VOIVODESHIP

In recent decades, depopulation and urban shrinkage has touched many regions and towns worldwide (Mykhnenko & Turok, 2008; Oswalt & Rienets, 2006). These processes take the most intensive course in (post)industrial regions (Constantinescu, 2012; Keil & Wetterau, 2013; Slach et al., 2015; Szafrńska et al., 2019). An example of such a region with large-

scale depopulation is the Silesian Voivodeship in southern Poland, and particularly the Katowice and Rybnik mining and industrial conurbations located within it.

Until the end of the 1980s, the Silesian Voivodeship based its economic development on extractive and metal industry and mechanical engineering, relying on an immigrant labour force, as a result of which its population increased. In 1988 it reached 4,900,065 inhabitants, 80.9% of whom lived in towns. However, already in the end period of the centrally planned economy, the rise in population slowed, and from the start of the political and economic transformation a decline in population numbers began. In the period of the movement from the industrial to the post-industrial stage, greatly speeded by the political and economic transformation (a move from a centrally planned to a market economy), one of the most visible and unwanted effects of the province's transformation, particularly in its mining and industrial conurbations, was unemployment. It caused a reduction in migration inflow and stronger emigration of young population who had not found a place on the labour market.

In the period 1988–2018 the population of the Silesian Voivodeship fell from 4,900,065 to 4,533,600 inhabitants, that is, by 7.5%. The problem of population decline primarily concerned towns, where the population fell by 12.3%.

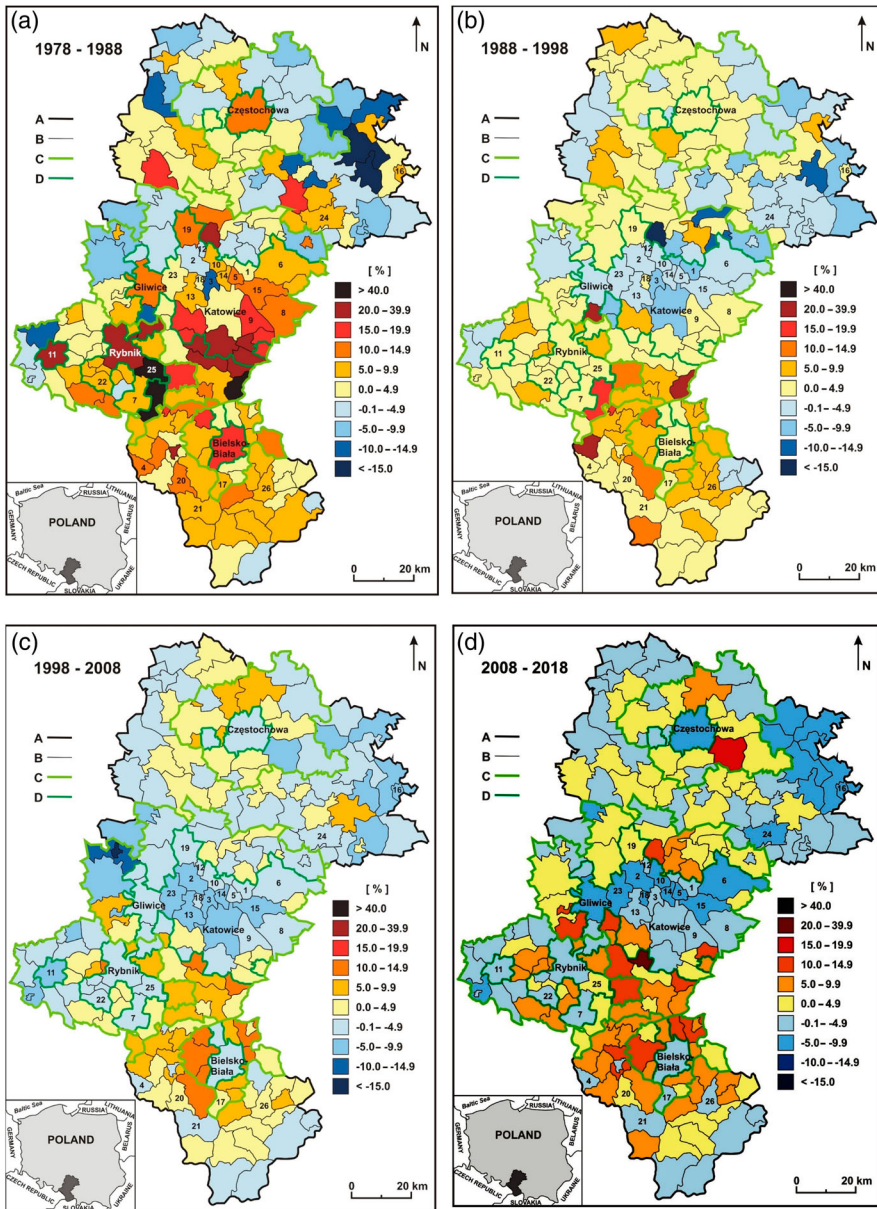
In terms of territory and population, the largest settlement centre in the Silesian Voivodeship is the Katowice conurbation. It is a polycentric system, both morphologically and administratively, and is composed of 33 towns, including nine with over 100,000 inhabitants, and 20 rural communes. In the years 1998–2018 the population of the Katowice conurbation fell by 370,000, that is, by 13.3%, reaching a level of 2,416,800 inhabitants in 2018.

The depopulation of the Katowice conurbation began at the start of the 1990s and is ongoing (Figure 1). A Statistics Poland demographic forecast also assumes further significant demographic decline in the region. Here, demographic decline is a consequence of the exhaustion of the extensive industrialization (traditional industry) model that bases on large resources of low-qualified labour. Streams of migration into towns in the industrial phase weakened significantly already at the end of that phase, and in the face of the labour market collapse in industrial towns in the following decade they reversed (economic migration). The socioeconomic transformations that occurred also caused a change in residential preferences, leading to emptying of towns, particularly their centres, in favour of rapidly developing suburbs. However, the suburbanization factor in this region was not as significant as in Poland's monocentric agglomerations, such as Warsaw, Poznań or Krakow (Krzysztofik et al., 2017; Spórna & Krzysztofik, 2020). In the years between 1999 and 2011, the migration outflow from cities and rural areas of the entire *voivodeship* of Silesia amounted to –703,000 people, of which most departed from the large and medium cities in the Katowice conurbation (a total of 351,200 people), while only 54,300 came from the small towns and rural areas of the conurbation (Runge, 2010, 2015).

Importantly, rapid depopulation quite quickly became a permanent trend in the transformation of almost all the Katowice conurbation's towns. It should also be added that due to the advanced, complicated model of dependencies between elements of the socioeconomic system and spatial transformations, depopulation in most towns of the conurbation should also be seen in terms of urban shrinkage.

Nevertheless, from its appearance in the 1990s, the problem of depopulation remained shadowed in regional and urban policy by the problem of unemployment that to a large extent generated this very depopulation.

Unemployment in the Silesian Voivodeship reached a maximum in 2002, with 330,200 persons touched by it, giving an unemployment rate of 16.5%. However, in many extractive and iron-and-steel industry centres of the Katowice conurbation faced with the largest employment reduction, the unemployment rate kept growing and reached its highest level in 2004: in Świętochłowice (29.0%), Bytom (26.7%), Siemianowice Śląskie (28.1%) and Będzin county (24.2%).



**Figure 1.** Population dynamics in the Silesian Voivodeship: (a) 1978–88, (b) 1988–98, (c) 1998–2008 and (d) 2008–18: A, borders of the Silesian *voivodeship*; B, administrative borders of towns and communes; C, range of urban agglomerations; and D, range of the urbanized core of urban agglomerations (along administrative borders). Towns: 1, Będzin; 2, Bytom; 3, Chorzów; 4, Cieszyn; 5, Czeladź; 6, Dąbrowa Górnicza; 7, Jastrzębie Zdrój; 8, Jaworzno; 9, Mysłowice; 10, Piekary Śląskie; 11, Racibórz; 12, Radzionków; 13, Ruda Śląska; 14, Siemianowice Śląskie; 15, Sosnowiec; 16, Szczekociny; 17, Szczyrk; 18, Świętochłowice; 19, Tarnowskie Góry; 20, Ustroń; 21, Wiślą; 22, Wodzisław Śląski; 23, Zabrze; 24, Zawiercie; 25, Żory; and 26, Żywiec.

Source: Authors based on the Local Data Bank – Population by place of residence and sex divided into urban and rural areas, Statistics Poland, Warsaw; Statistical Yearbooks of Katowice Voivodeship; Statistical Yearbooks of Częstochowa Voivodeship; and Statistical Yearbooks of Bielsko-Biała Voivodeship, 1988–98.



In many towns, both large (Sosnowiec, Zabrze, Chorzów) and mid-sized (Jaworzno, Piekary Śląskie), the unemployment rate exceeded 20% by far.

After Poland's European Union entry unemployment decreased, falling to 122,800 persons in the Silesian Voivodeship in 2008, that is, an unemployment rate of 6.9%. The reduction of the unemployment rate was mainly caused by emigration of young people looking for work abroad. The consequence of the world economic crisis was another rise in unemployment in the Silesian Voivodeship, up to 208,300 people in 2013, with the unemployment rate growing to 11.3%. From that point, the level of unemployment fell constantly, reaching 80,100 persons in 2018, that is, 4.3%.

However, despite the country's gradually improving economic situation, emigration is still present. The reason for this is a roughly threefold difference in salaries (Eurostat, 2016b). At this point, the younger generation does not just want to find a job, but to find a well-paid job. Currently there are jobs in Poland, but in terms of salaries they are not very attractive to Poles.

After 30 years of transformation the Silesian Voivodeship, and particularly the Katowice conurbation, are experiencing further depopulation with a visible partial improvement on the labour market. The improvement is, however, largely a consequence of a distinct decline in population, particularly in the group of persons of pre-working age and 20 year olds. The small size of young age groups results not only from migration but also above all from the second demographic transition. The fall in unemployment is, in turn, the consequence of the above-mentioned 'publicly unemphasized' acceptance of depopulation as a remedy for the previously severe problem of unemployment.

## URBAN POLICY TOWARDS DEPOPULATION IN THE SILESIAN VOIVODESHIP

The problem of urban depopulation in Śląskie Voivodeship, highlighted above, is objectively noticeable in the entire region and in individual cities. Therefore, what place does it have in regional and local urban policy? Before we discuss this issue, the essence of urban policy in Poland based on planning and strategic documents should be briefly explained. Until 2000, there were two such mandatory documents: strategic (Development Strategy) and planning (Study of Conditions and Directions of Spatial Development [Master Plan]). Based on these documents, from 2000 the local government of each commune also has to adopt a local program of revitalization. This new obligation of the city authorities is, among other things, an important element toward the operationalization of activities related to the consequences of shrinking cities, depopulation or functional regression. Of course, the city authorities also adopt other documents that directly or indirectly solve problems arising from demographic decline (e.g., city development programme, report on the state of the city, social problem-solving programme, etc.). Because strategies and master plans are the primary documents for all others, the article focuses on their entries.

As mentioned above, the section on urban policy had two levels of interpretation: static and dynamic. In the first, strategic and planning documents were analysed and selected conditions related to their content and assessment were discussed. Further on, referring to dynamic interpretation, the focus is on the analysis of urban policy in a chronological context.

For the needs of the paper, 36 development strategies written for the purposes of urban policy of 29 towns, as well as documents pertaining to the whole Silesian Voivodeship, were analysed. As mentioned above, we attempted to define two principal issues contained in strategic documents. First, we were interested in how the problem of depopulation was treated in strategic diagnosis. Second, and more importantly, we wanted to find out what strategic goals would be adopted in this respect in both operational programmes and sector policies.

In approaching the problem in question according to the research procedure described above, we noted that in the studied region there are four types of town strategies:

- Those that acknowledge demographic decline but do not comment its sources, course or consequences (in the Katowice conurbation: Gliwice, Chorzów, Świętochłowice, Tarnowskie Góry, Piekary Śląskie and Mysłowice).
- Those that present and comment on the issue of depopulation in the strategic diagnosis, but the problem is not touched on in the part concerning strategic goals and means of implementing policies to counteract the phenomenon (in the Katowice conurbation: Dąbrowa Górnicza; in the Rybnik conurbation: Rybnik, Wodzisław Śląski and Żory; and in rest of the Silesian Voivodeship: Żywiec).
- Those that clearly present the problem, in both diagnosis and strategic goals, but the proposed solutions only concern determinants from one area, for example, social (in the Katowice conurbation: Katowice, Ruda Śląska, Zabrze, Bytom, Sosnowiec, Siemianowice Śląskie and Będzin; in the Rybnik conurbation: Jastrzębie Zdrój and Racibórz; in the Bielsko-Biała agglomeration: Bielsko-Biała and Szczyrk; in the Częstochowa agglomeration: Częstochowa; and in the rest of the Silesian Voivodeship: Cieszyn, Ustroń, Wiśla, Zawiercie and Szczekociny).
- Those where both diagnosis and strategic goals fully accentuate the problem of depopulation. A broad spectrum of solutions with the aim of slowing down the phenomenon and limiting its negative consequences is also proposed (Katowice conurbation: Czeladź).

Such a division of strategic documents allows for a qualitative assessment of local governments' response to the problem of urban depopulation in the Katowice region. This approach had its advantages and disadvantages. Under its advantages, the completeness of sources on the phenomenon in question should certainly be mentioned. This is because every town in Poland is legally obliged to adopt a 'Town strategy'. Only some towns have other documents such as 'Town situation reports'.

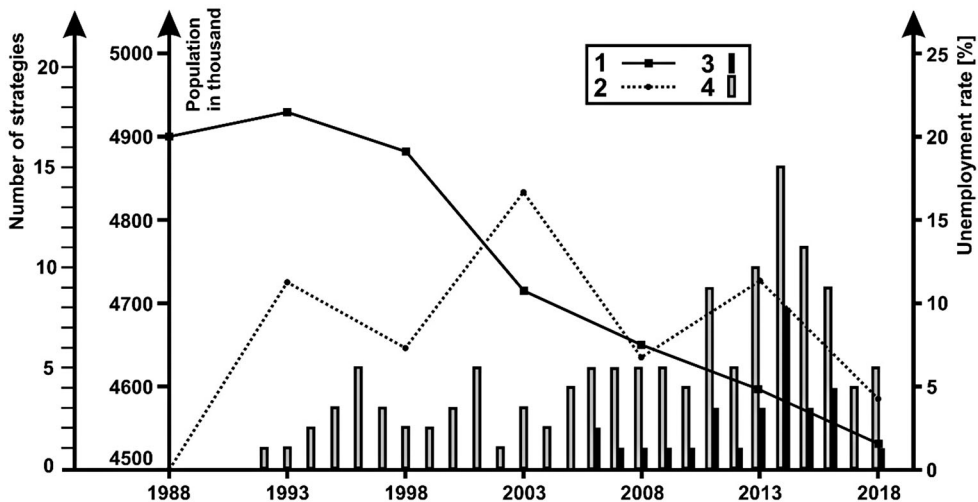
As a disadvantage of a method of analysis based only on strategic documents, we should note that provisions concerning a need for multi-aspect changes in urban space (sporadically) also appear in other documents: master plans and commune revitalization programmes. However, these two documents refer directly to 'strategies' and should be based on them. Thus, the picture obtained from reading a strategy should be theoretically consistent with the master plan or commune revitalization programme. We indicate discrepancies in this area below.

The first conclusion that can be reached from the analysis of Silesian Voivodeship town strategies and which focuses on depopulation is that a typology of documents has to be carried out at all. As mentioned, this is caused by the actual contents of strategic documents with respect to the analysed problem and the diversity of approaches to depopulation issues that results from this. The issues of depopulation and urban shrinkage did not become part of the agenda-setting practically until 2010 (Bernt et al., 2014; Krzysztofik et al., 2012b). Until then in the Silesian Voivodeship, it is part of a trend that is best referred to using terms such as taboo, ignoring, marginalization, lack of attention, symbolic and trivialization (cf. Bernt et al., 2014; Laze, 2009). The attributes mentioned concerning urban policy on urban shrinkage and depopulation were quite characteristic for Central and Eastern Europe, including its industrial regions (Hackworth, 2014; Rumpel & Slach, 2012; Slach et al., 2019; Strykiewicz, 2014; Wiechmann & Pallagst, 2012). Although such attitudes have become less visible in recent years, they are still very common (Runge & Runge, 2017). Considering the size of the demographic decline, its stability over time and self-reinforcement by other negative demographic phenomena (e.g., population ageing and a low fertility rate), this diversity is both surprising and unsettling.

In an analysis of Figure 2, two phenomena may primarily be seen. First, the response of local government authorities articulated in town strategy provisions is quite limited. Only one town (Czeladź) has a comprehensive approach to depopulation. In 17 of 29 towns provisions may be found that quite evidently refer to the challenges of urban shrinkage, but these challenges are approached selectively. Meanwhile, in the years 1988–2018 this group of towns lost 348,500 inhabitants in total. Interestingly, the group includes small tourist mountain towns, Wisła and Szczyrk, where population decline is low, and Ustroń, which has not yet recorded depopulation. Intriguingly, this problem is not a crucial challenge in the remaining group of 11 towns, which lost 195,000 inhabitants in the years 1988–2018. Thus, the total loss of 543,500 inhabitants in 28 towns (a fall in population from 3,230,900 to 2,687,400 persons) did not convince the authorities of these towns to prepare comprehensively for challenges related to depopulation and population ageing.

Specifically, in most urban strategies in the analysed province, the population decline was acknowledged in the preliminary analysis. However, the problem lies in the way this fact was referred to further in the document. The dominant approaches were: brevity (Tarnowskie Góry), inadequacy of the proposed solutions to the scale of the phenomenon and marginalization of the problem (Katowice), and countering depopulation with the importance of other problems, particularly deindustrialization and unemployment (Gliwice and Chorzów).

The second problem is the visibly late reaction of local governments to the phenomenon in question. This issue may be examined in terms of the shifting perception concept indicated by Hartt (2020). Provisions mentioning the need for a reaction to depopulation started appearing in town strategies in 2010–12. While this group included two towns (Bytom and Sosnowiec) from among those most affected by depopulation in the Katowice conurbation, it did not include, for example, Katowice, which loses over 2000 inhabitants annually. A clear reaction to depopulation in the strategy of Katowice, the province capital, is present only in the 2018 document. It



**Figure 2.** Depopulation and urban shrinkage in urban strategies of towns in the Silesian Voivodeship: 1, population in the analysed region; 2, unemployment rate in the analysed region; 3, number of strategies with a comprehensive approach to depopulation; and 4, short analyses without recommendations or urban policy mentioned only.

Source: Authors' own elaboration based on the Local Data Bank, Statistics Poland, Warsaw; Statistical Yearbooks of Katowice Voivodeship; Statistical Yearbooks of Częstochowa Voivodeship; and Statistical Yearbooks of Bielsko-Biała Voivodeship, 1988–98.

should be emphasized that the population of this town fell from 365,800 in 1988, the start of population decline, to 294,500 in 2018. The appearance of such provisions was thus preceded by an earlier loss of 71,000 inhabitants (19.5% of the population in 1988). The case of Katowice, but also of other towns in which there has been no clear reaction to date, indicates that there is a kind of critical point at which a town starts to react to the consequences of population decline. This is the case in the analysed region, at least. At this point the question arises: What ultimately causes depopulation to clearly become an important element of agenda-setting? Is it a numerical or percentage value of decline (which is food for thought for the local authorities), infrastructural problems (vacant properties, badly functioning supply networks) that paralyse town development, or maybe other premises? While there is no one fixed deciding factor here, in the region under study one factor should be deemed dominant. We term it 'deindustrialization'. In this case, we understand it as the stage of town transformation in which previous traditional industry has closed down (in whole or in the most part), but reindustrialisation based on new sectors of industry has not yet occurred. This should explain, for example, the relatively fast reaction of authorities of towns such as Bytom, Sosnowiec and Świętochłowice. In many towns in which urban shrinkage and depopulation became part of agenda-setting relatively late or not at all, traditional industry still stabilizes development (e.g., Dąbrowa Górnicza) or the transformation took a relatively mild course (e.g., Katowice). Thus, we conclude that it is only the combination of a significant demographic decline and the loss of a large number of jobs that caused a clearer response of urban authorities to the problem of urban shrinkage.

Another quite distinct feature of town development strategies is the fairly characteristic approach to the model of action. A package of deceleration actions is almost always proposed, which are supposed to slow down depopulation at some point. While this is important, the actions do not include a realistic vision for the development of a town that will in 15–20 years have a far smaller potential. Town development strategies include assumptions for town development made as if a large demographic decline were not going to occur in the near future. In this respect they differ from development strategies for Western European towns (cf. Bartholomae et al., 2017; Dormois & Fol, 2017; Wiechmann & Pallagst, 2012). Town plans with such provisions are followed by master plans. In almost all depopulating towns, the surface of areas designated for new residential buildings is to increase by at least 5–10% of the current area. Population is also set to fall by such a percentage. Here it is important to add that apart from one town (Sosnowiec), there are no plans to pull down socialist blocks of flats, which has taken place in towns of East Germany (Haase et al., 2018; Radzimski, 2018). Interestingly, the writing style of this provision in Sosnowiec's master plan is very opaque, meeting the criterion of the taboo that is universal on this issue: not to irritate inhabitants, not to give ammunition to political opponents, not to show one's helplessness in administering the town.

When analysing some urban development strategies in the Silesian Voivodeship (Chorzów and Świętochłowice), it may be seen that depopulation is constantly a 'foreseen problem', or on the other hand, a 'needed problem', and its increasingly visible or even deteriorating negative consequences are not noticed. These seemingly bizarre statements usually reflect an official but not publicly voiced remedy to another important problem of the region, namely unemployment. An analysis of statistical data concerning unemployment in the region's towns has shown that this argument is not ungrounded, at least up to 2012–15. At this time, as a result of a strong economic recovery and constant loss of working-age population, a significant improvement on the labour market occurred, followed even by a reversal of the trend (from an employer's to an employee's market). From this point depopulation started to impact the competitiveness of the region negatively, also in terms of the ability to find workers. In 2017 in an interview in a large town of the Katowice conurbation, an employee of the Economic Development Department informed us that they had regretfully declined to help a large potential investor who had been looking for around 100 mechanical fitters. Only five to seven years

previously each job offered by this employer would have seen two to three applicants. The improvement in Poland's and the Silesian Voivodeship's economic situation caused the previous employer's market to turn into an employee's market around 2015. Depopulation became a problem, especially given that the change on the labour market occurred rapidly, which was surprising not only for employers but also for the authorities. Interestingly the solution to this burning issue was to be an inflow of economic migrants from Ukraine and Belarus. While this inflow really did mitigate the consequences of demographic decline in the region's towns (and also in all of Poland), it did not in any way become a long-term solution to the problem of urban depopulation. First, immigration of the Ukrainian population slowed after 2017. This was connected to a smaller total number of persons leaving Ukraine and Belarus and also to the opening of the German labour market to Ukrainian workers in 2019. Second, it should be emphasized that the Polish government does not offer a comprehensive plan of integration and assimilation of immigrants coming to Poland from Eastern Europe and Western and Central Asia. Implementing an immigration policy would significantly limit the negative consequences of depopulation of Polish towns. There is one more specific factor in the region that is not conducive to employment of immigrants. Namely, strong trade unions in the traditional industry sector (mining, heavy industry, energy) limit the possibility of employing foreign workers.

## DISCUSSION

Depopulation as a common phenomenon seen in transformations of European towns is an important problem that is taken into account in local policies. This should have been the case for at least 10 years for towns of the Silesian Voivodeship, and particularly the Katowice conurbation as a large urban complex in Poland, because demographic decline has been observed in the Katowice conurbation for 30 years. In the case of most towns, the two decades of changes were characterized by a taboo in urban policy (cf. Bernt et al., 2014; Krzysztofik et al., 2012a). Avoiding the issue of depopulation in agenda-setting by local urban policies was caused, as indicated above, by an attempt to make this phenomenon a means of dealing with a different challenge: unemployment and a fall in the incomes of a significant part of inhabitants. From the perspective of 30 years it may be deemed that such a model of managing the economic crisis could, particularly in 1989–2012, have been considered correct in a sense, especially in the case of towns that had lost almost all their previous economic base. Putting together economic and demographic problems even led to bizarre local policy provisions such as the following from Zawiercie: 'the increase in number of businesses per 1000 inhabitants is caused both by an absolute growth in number of enterprises and a decrease in number of inhabitants' (Strategy for Development of the Town of Zawiercie, 2011, p. 11). This seemingly obvious observation was not in this case just a filler: the provisions of the strategy studied as a whole reveal that the local authorities' actions have a veiled objective of reducing unemployment and labour market problems (very large in this town).

When the provisions of local urban policies are thus put together with the reality of a permanent demographic decline in the analysed towns, it may be seen that the taboo on depopulation was nevertheless the result of certain conscious decisions by the local and regional authorities. The provisions that appear mainly after 2005 and concern the need for self-governmental reaction to depopulation were strongly linked not to worsening depopulation but rather to the improvement of the labour market situation. Within the challenges of local development, it was possible semantically to balance economic problems and demographic problems. The 2008 economic crisis, which only touched the region in 2009, caused another fall in interest in depopulation as a key challenge of local policy in the towns of the analysed province. And analogously the post-2012 economic recovery increased the interest of self-governments in the topic. The question remains: Was this really about the problem of depopulation per se, or rather about a

vision of the fall in the competitiveness of the local economy due to a labour shortage? From conversations carried out in 2016–19 with the authorities of six towns, and also following media statements from over 20 of them, we conclude that in a significant majority it is the economic factors that cause interest in demographic issues to rise. For local and regional politicians, a worker shortage is a greater worry than the increasing number of empty buildings and the often superfluous communal or transport infrastructure (both existing and under expansion).

Considering the demographic situation in the cities of Śląskie Voivodeship and the image of urban policy that followed this problem (or did not), the question should be asked: Was it active, or rather defensive, accepting, and adaptive? Of course, there is no single answer. The fact that the problem was seen by the city authorities (chapters: Strategic diagnosis 'in the documents': City development strategy) shows that the local authorities were aware of the threats. On the other hand, the limited number of documents in which urban policy arrangements appear regarding these problems may indicate that the problem was marginalized. It is also significant that the defined urban shrinkage problem did not exist in most master plans. With the exception of one city, no master plan mentions (even the potential) demolition of buildings and infrastructure, even though some cities had already lost 25–30% of the population.

This does not mean that the strategies of cities and master plans of Śląskie Voivodeship did not focus on solving urban shrinkage problems and their consequences. However, it was incorrect that each problem was attempted to be solved or counteracted individually. There was no linking of all problems into a more general one – urban shrinkage. The lack of integration in solving more general problems was particularly evident in the financial context. In periods with better economic conditions, demographic problems were highlighted more, and when conditions worsened, they were placed in the background, often actually becoming a remedy that would allow the economic impasse to be broken. Undoubtedly, this state of affairs was strengthened by the well-researched governance of shrinkage and in terms such as 'grant coalitions' (Bernt, 2009) and 'shrinkage and stagnation coalitions' (Rink et al., 2014). The policy of 'grant coalitions' was based, on the one hand, on set central policy priorities, and, on the other, in towns the obtaining of grants created a strong, though sometimes unilateral, local discourse on the most important problem to be solved by local policy. In the context of the lack of funds for complementary urban regeneration, a clearly visible policy of 'grant coalitions' determined the dual image of urban policy versus urban shrinkage. On the one hand, there were spheres of socioeconomic life that (in practice) were financially supported to a minimal extent. For example, most cooperative and communal apartments were privatized (cf. Szafrńska et al., 2019). On the other hand, the 'informal right-sizing' model of cities was visible. It consisted of point revitalization of urban space as a remedy for problems affecting most of the city and more complex than the renovation of one or several buildings. In contrast to using urban shrinkage or right-sizing policies (cf. Verwest, 2011), this model did not answer the question of what to do with the problems of cities that a 'financial grant' will not solve. The widely functioning taboo of shrinking cities at that time was the sum (taboo) of financial possibilities and (taboo) of the policy of waiting and accepting depopulation. This complicated urban policy model had, and still has, its characteristic specificity. It is similar to the model of active prevention of city shrinkage, but mainly at the declarative level, and only when we get into agenda-setting. We can see a substitute for the idea of right-sizing or even using urban shrinkage, but in a form that ecology defines as 'spontaneous succession' – the opposite of a decorated and arranged forest. Perhaps these issues also affect another feature, which is political taboo.

Since 2015, due to the improvement of Poland's economic situation, this urban policy model is gradually disappearing. The inflow of temporary employees from other countries to the cities of the region, new economic investments and the inflow of EU funds created the seeming picture that the situation had changed and that cities should be expanded, and not be tailor made. Because, at the same time, urban shrinkage was taken into consideration when setting the

agenda, another dilemma arose: How does one implement ongoing depopulation into local urban policy in conditions of economic development? The subsequent infrastructure investments in city space were the answer. Compared with 1990 and 2000, these are more and more adapted to the real needs of local communities.

## CONCLUSIONS

As one of the key challenges of the Silesian Voivodeship's transformation, depopulation should be a natural part of regional and local urban policy. In this paper an attempt was made to establish to what extent this obvious principle was implemented in the province's towns. From the research conducted it seems that urban policy started taking this problem into account with significant delay. It only happened in a broader scope 15–20 years after the first evident symptoms of demographic crisis. It should also be added that the reaction was not always commensurate to the scale of the phenomenon in individual towns. In many cases strategy provisions only reported the depopulation phenomenon without attempting to find a solution to the problem, or the solutions did not correspond to the facts presented in the strategic diagnosis. While after 2010 the topic of depopulation was put on the agenda-setting, when reading town strategies a limited scope of proposed responses to the phenomenon in question is still apparent.

The contrast is visible particularly in those towns where demographic decline is especially large. The failure of urban policy to keep up with swift depopulation should be defined in the categories of treating it as an 'unofficial' means of mitigating a different problem of the region, which was a crucial issue for years: unemployment – as stated in one of the presented strategies, where economic development was assessed via the fall in both the number of enterprises and the number of working-age inhabitants. Even at the start of the 2010s it seemed that in urban policy in the Silesian Voivodeship depopulation was a kind of taboo (Bernt et al., 2014); however, from the perspective of the end of this decade it may be said that it was not depopulation that was taboo, but the fact that it was treated as one of the most important remedies used to alleviate unemployment and its consequence. Blurring of the main problem, the fall in the total number of inhabitants, with particular attention to persons of pre-working and mobile working age, causes 'randomness' in the governance of depopulation and shrinkage. More frequently, mainly at the level of local policy, 'shrinkage and stagnation coalitions' were visible (Haller & Altrock, 2010). These 'coalitions' were a fairly characteristic element of policy, which may be defined as 'taboo' policy.

While this policy was largely justified from the 1990s and lasted until the start of the 2010s, it caused a turning point in the development of the Silesian Voivodeship (around 2015) to be missed. This was the point at which unemployment ceased to be a problem, and a shortage of workers, who emigrated in droves to other large towns of Poland in the 1990s and then abroad, became an issue. Interestingly, town strategies refer to this problem to a limited extent: the mismatch of communal, residential and transport infrastructure is emphasized more.

## DISCLOSURE STATEMENT

No potential conflict of interest was reported by the authors.

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## REFERENCES

- Audirac, I. (2018). Shrinking cities: An unfit term for American urban policy? *Cities*, 75, 12–19. <https://doi.org/10.1016/j.cities.2017.05.001>
- Babbie, E. (2009). *The practice of social research* (12th ed.). Wadsworth.
- Baranyai, N., & Lux, G. (2014). Upper Silesia: The revival of a traditional industrial region in Poland. *Regional Statistics*, 4(2), 126–144. <https://doi.org/10.15196/RS04208>
- Bartholomae, F., Woon Nam, C., & Schoenberg, A. (2017). Urban shrinkage and resurgence in Germany. *Urban Studies*, 54(12), 2701–2718. <https://doi.org/10.1177/0042098016657780>
- Bernt, M. (2009). Partnerships for demolition: The governance of urban renewal in East Germany's shrinking cities. *International Journal of Urban and Regional Research*, 33(3), 754–769. <https://doi.org/10.1111/j.1468-2427.2009.00856.x>
- Bernt, M. (2016). The limits of shrinkage: Conceptual pitfalls and alternatives in the discussion of urban population loss. *International Journal of Urban and Regional Research*, 40(2), 441–450. <https://doi.org/10.1111/1468-2427.12289>
- Bernt, M., Cocks, M., Couch, C., Grossmann, K., Haase, A., & Rink, D. (2012). *Policy response, governance and future directions, shrink smart research Brief No. 2*. Helmholtz Centre for Environmental Research – UFZ.
- Bernt, M., Haase, A., Großmann, K., Cocks, M., Couch, C., Cortese, C., & Krzysztofik, R. (2014). How does (n't) urban shrinkage get onto the agenda? Experience: From Leipzig, Liverpool, Genoa and Bytom. *International Journal of Urban and Regional Research*, 38(5), 1749–1766. <https://doi.org/10.1111/1468-2427-12101>
- Bontje, M. (2004). Facing the challenge of shrinking cities in East Germany: The case of Leipzig. *GeoJournal*, 61(1), 13–23. <https://doi.org/10.1007/s10708-004-0843-7>
- Bontje, M., & Musterd, S. (2012). Understanding shrinkage in European regions. *Built Environment*, 38(2), 153–161. <https://doi.org/10.2148/benv.38.2.153>
- Bowen, G. A. (2009). Document analysis as a qualitative research method. *Qualitative Research Journal*, 9(2), 27–40. <https://doi.org/10.3316/QRJ0902027>
- Buček, J., & Bleha, B. (2013). Urban shrinkage as a challenge to local development planning in Slovakia. *Moravian Geographical Reports*, 21(1), 2–15. <https://doi.org/10.2478/mgr-2013-0001>
- Cocks, M., & Couch, C. (2012). The governance of a shrinking city: Housing renewal in the Liverpool Conurbation, UK. *International Planning Studies*, 17(3), 277–301. <https://doi.org/10.1080/13563475.2012.696475>
- Constantinescu, I. P. (2012). Shrinking cities in Romania: Former mining cities in Valea Jiului. *Built Environment*, 38(2), 214–228. <https://doi.org/10.2148/benv.38.2.214>
- Cortese, C., Haase, A., Grossmann, K., & Ticha, I. (2014). Governing social cohesion in shrinking cities: The cases of Ostrava, Genoa and Leipzig. *European Planning Studies*, 22(10), 2050–2066. <https://doi.org/10.1080/09654313.2013.817540>
- Couch, C., & Cocks, M. (2013). Housing vacancy and the shrinking city: Trends and policies in the UK and the city of Liverpool. *Housing Studies*, 28(3), 499–519. <https://doi.org/10.1080/02673037.2013.760029>
- Couch, C., Karecha, J., Nuissl, H., & Rink, D. (2005). Decline and sprawl: An evolving type of urban development – Observed in Liverpool and Leipzig. *European Planning Studies*, 13(1), 117–136. <https://doi.org/10.1080/0965431042000312433>
- Development Strategy for the City of Ruda Śląska until 2030. (2018). [http://www.rudaslaska.pl/theme/rudaslaska/uploads/Strategia\\_Rozwoju\\_Miasta\\_Ruda\\_Slaska\\_projekt\\_aktualizacji.pdf](http://www.rudaslaska.pl/theme/rudaslaska/uploads/Strategia_Rozwoju_Miasta_Ruda_Slaska_projekt_aktualizacji.pdf)
- Development Strategy of the Silesian Voivodeship 'Śląskie 2030'. (2020). [file:///E:/Users/uzytownik/Downloads/Zalacznik\\_do\\_Uchwaly\\_Zarzadu\\_nr\\_489\\_104\\_VI\\_2020\\_z\\_dnia\\_19\\_02\\_2020\\_-\\_SRW%20\(1\).pdf](file:///E:/Users/uzytownik/Downloads/Zalacznik_do_Uchwaly_Zarzadu_nr_489_104_VI_2020_z_dnia_19_02_2020_-_SRW%20(1).pdf)
- Dormois, R., & Fol, S. (2017). Urban shrinkage in France: An invisible issue? *Metropolitiques*. <http://www.metropolitiques.eu/Urban-Shrinkagein-France-An.html>



- Eurostat. (2016a). Population structure indicators. <http://appsso.eurostat.ec.europa.eu/nui/submitViewTableAction.do>
- Eurostat. (2016b). Hourly compensation of employees in EU regions. <https://ec.europa.eu/eurostat/web/products-eurostat-news/-/DDN-20190322-1>
- Gallie, D., Paugam, S., & Jacobs, S. (2003). Unemployment, poverty and social isolation: Is there a vicious circle of social exclusion? *European Societies*, 5(1), 1–32. <https://doi.org/10.1080/1461669032000057668>
- Großmann, K., Haase, A., Rink, D., & Steinführer, A. (2008). Urban shrinkage in East Central Europe? Benefits and limits of a cross-national transfer of research approaches. In M. Nowak & M. Nowosielski (Eds.), *Declining cities/developing cities: Polish and German perspectives* (pp. 77–99). Instytut Zachodni.
- Haase, A., Bernt, M., Großmann, K., Mykhnenko, V., & Rink, D. (2016). Varieties of shrinkage in European cities. *European Urban and Regional Studies*, 23(1), 86–102. <https://doi.org/10.1177/0969776413481985>
- Haase, A., Nelle, A., & Mallach, A. (2017). Representing urban shrinkage – The importance of discourse as a frame for understanding conditions and policy. *Cities*, 69, 95–101. <https://doi.org/10.1016/j.cities.2016.09.007>
- Haase, A., Rink, D., & Großmann, K. (2016). Shrinking cities in post-socialist Europe: What can we learn from their analysis for theory building today? *Geografiska Annaler: Series B, Human Geography*, 98(4), 305–319. <https://www.tandfonline.com/doi/ref/10.1111/geob.12106?scroll=top>
- Haase, A., Rink, D., Grossmann, K., Bernt, M., & Mykhnenko, V. (2014). Conceptualizing urban shrinkage. *Environment and Planning A: Economy and Space*, 46(7), 1519–1534. <https://doi.org/10.1068/a46269>
- Haase, A., Wolff, M., Špačková, P., & Radzimski, A. (2018). Reurbanisation in postsocialist Europe – A comparative view of Eastern Germany, Poland, and the Czech Republic. *Comparative Population Studies*, 42, 353–390. <https://doi.org/10.12765/CPoS-2018-02en>
- Hackworth, J. (2014). The limits to market-based strategies for addressing land abandonment in shrinking American cities. *Progress in Planning*, 90, 1–37. <https://doi.org/10.1016/j.progress.2013.03.004>
- Haller, C., & Altröck, U. (2010). Neue Stagnations- und Schrumpfungskoalitionen im Stadtumbau. In M. Haus, M. Bernt, & T. Robischon (Eds.), *Stadtumbau komplex: Governance, Planung, Prozess* (pp. 158–179). Schader Stiftung.
- Hartt, M. (2020). Shifting perceptions in shrinking cities: The influence of governance, time and geography on local (In)action. *International Planning Studies*, 25(2), 150–165. <https://doi.org/10.1080/13563475.2018.1540296>
- Hattori, K., Kaido, K., & Matsuyuki, M. (2017). The development of urban shrinkage discourse and policy response in Japan. *Cities*, 69, 124–132. <https://doi.org/10.1016/j.cities.2017.02.011>
- Herrmann, D. L., Shuster, W. D., Mayer, A. L., & Garmestani, A. S. (2016). Sustainability for shrinking cities. *Sustainability*, 8(9), 911. <https://doi.org/10.3390/su8090911>
- Hoekstra, M. S., Hochstenbach, C., Bontje, M. A., & Musterd, S. (2020). Shrinkage and housing inequality: Policy responses to population decline and class change. *Journal of Urban Affairs*, 42(3), 333–350. <https://doi.org/10.1080/07352166.2018.1457407>
- Hollander, J. B., & Németh, J. (2011). The bounds of smart decline: A foundational theory for planning shrinking cities. *Housing Policy Debate*, 21(3), 349–367. <https://doi.org/10.1080/10511482.2011.585164>
- Hospers, G.-J. (2014). Policy responses to urban shrinkage: From growth thinking to civic engagement. *European Planning Studies*, 22(7), 1507–1523. <https://doi.org/10.1080/09654313.2013.793655>
- Hughes, R., & Huby, M. (2004). The construction and interpretation of vignettes in social research. *Social Work and Social Sciences Review*, 11(1), 36–51. <https://doi.org/10.1921/17466105.11.1.36>
- Kantor-Pietraga, I., Krzysztofik, R., Runge, J., & Spórna, T. (2014). Problemy zarządzania miastem kurczącym się na przykładzie Bytomia [Problems of governance shrinking city for the example of Bytom]. In T. Markowski & D. Stawasz (Eds.), *Spoleczna odpowiedzialność w procesach zarządzania funkcjonalnymi obszarami miejskimi* [Social responsibility in the processes of governance functional urban areas] (pp. 162–175). Biuletyn KPZK PAN.
- Kazimierczak, J., & Szafrńska, E. (2019). Demographic and morphological shrinkage of urban neighbourhoods in a post-socialist city: The case of Łódź, Poland. *Geografiska Annaler: Series B, Human Geography*, 101(2), 138–163. <https://doi.org/10.1080/04353684.2019.1582304>

- Keil, A., & Wetterau, B. (2013). *Metropole Ruhr. Landeskundliche Betrachtung des neuen Ruhrgebiets*. Regionalverband Ruhr.
- Krzysztofik, R., Dulias, R., Kantor-Pietraga, I., Spórna, T., & Dragan, W. (2020). Paths of urban planning in a post-mining area: A case study of a former sandpit in southern Poland. *Land Use Policy*, 99, 104801. <https://doi.org/10.1016/j.landusepol.2020.104801>
- Krzysztofik, R., Kantor-Pietraga, I., & Kłosowski, F. (2019a). Between industrialism and postindustrialism – The case of small towns in a large urban region: The Katowice conurbation, Poland. *Urban Science*, 3(3), 68. <https://doi.org/10.3390/urbansci3030068>
- Krzysztofik, R., Kantor-Pietraga, I., Runge, A., & Spórna, T. (2017). Is the suburbanisation stage always important in the transformation of large urban agglomerations? The case of the Katowice conurbation. *Geographia Polonica*, 90(2), 5–24. <https://doi.org/10.7163/GPol.0082>
- Krzysztofik, R., Kantor-Pietraga, I., Spórna, T., Dragan, W., & Mihaylov, V. (2019b). Beyond 'logistics sprawl' and 'logistics anti-sprawl': Case of the Katowice region, Poland. *European Planning Studies*, 27(8), 1646–1660. <https://doi.org/10.1080/09654313.2019.1598940>
- Krzysztofik, R., Runge, J., & Kantor-Pietraga, I. (2011). *Paths of shrinkage in the Katowice conurbation: Case studies of Bytom and Sosnowiec cities*. Wydział Nauk o Ziemi Uniwersytetu Śląskiego.
- Krzysztofik, R., Runge, J., & Kantor-Pietraga, I. (2012a). Governance of urban shrinkage: A tale of two Polish cities, Bytom and Sosnowiec. In P. Churski (Ed.), *Contemporary issues in Polish geography* (pp. 201–224). Bogucki Wydawnictwo Naukowe.
- Krzysztofik, R., Runge, J., & Kantor-Pietraga, I. (2012b). *An introduction to governance of urban shrinkage: A case of two Polish cities: Bytom and Sosnowiec*. Wydział Nauk o Ziemi Uniwersytetu Śląskiego.
- Krzysztofik, R., Tkocz, M., Spórna, T., & Kantor-Pietraga, I. (2016). Some dilemmas of post-industrialism in a region of traditional industry: The case of the Katowice conurbation, Poland. *Moravian Geographical Reports*, 24(1), 42–54. <https://doi.org/10.1515/mgr-2016-0004>
- Kurek, S., Rachwał, T., & Wójtowicz, M. (2014). Industrial and commercial suburbanization in post-socialist city: The Kraków Metropolitan Area (Poland). *Annales Universitatis Paedagogicae Cracoviensis Studia Geographica*, 5, 55–76. <http://cejsh.icm.edu.pl/cejsh/element/bwmeta1.element.desklight-468b239e-02f4-4044-8406-5bad9138e0f7>
- Laze, A. (2009). Local government in post-socialist urban governance. In F. Eckardt & I. Elander (Eds.), *Urban governance in Europe* (pp. 297–314). Berliner Wissenschaftsverlag.
- Mallach, A., Haase, A., & Hattori, K. (2017). The shrinking city in comparative perspective: Contrasting dynamics and responses to urban shrinkage. *Cities*, 69, 102–108. <https://doi.org/10.1016/j.cities.2016.09.008>
- Martinez-Fernandez, C., Audirac, I., Fol, S., & Cunningham-Sabot, E. C. (2012). Shrinking cities: Urban challenges of globalization. *International Journal of Urban and Regional Research*, 36(2), 213–225. <https://doi.org/10.1111/j.1468-2427.2011.01092.x>
- Mladenov, C., Dimitrov, E., & Kazakov, B. (2008). Demographical development of Bulgaria during the transitional period. *Méditerranée*, 110(110), 117–123. <https://doi.org/10.4000/mediterranee.550>
- Mykhnenko, V., & Turok, I. (2008). East European cities – Patterns of growth and decline, 1960–2005. *International Planning Studies*, 13(4), 311–342. <https://doi.org/10.1080/13563470802518958>
- Nelle, A., Großmann, K., Haase, D., Kabisch, S., Rink, D., & Wolff, M. (2017). Urban shrinkage in Germany: An entangled web of conditions, debates and policies. *Cities*, 69, 116–123. <https://doi.org/10.1016/j.cities.2017.02.006>
- Oswalt, P., & Rieniets, T. (Eds.). (2006). *Atlas of shrinking cities*. Hatje-Canz.
- Pallagst, K. (2008). Shrinking cities: Planning challenges from an international perspective. In S. Rugare & T. Schwarz (Eds.), *Cities growing smaller* (pp. 5–16). Kent State University.
- Pallagst, K. (2019). From urban shrinkage to urban qualities? *Journal of Urban Design*, 24(1), 68–70. <https://doi.org/10.1080/13574809.2019.1553823>

- Peters, D. J., Hamideh, S., Zarecor, K. E., & Ghandour, M. (2018). Using entrepreneurial social infrastructure to understand smart shrinkage in small towns. *Journal of Rural Studies*, 64, 39–49. <https://doi.org/10.1016/j.jrurstud.2018.10.001>
- Pirisi, G., & Trócsányi, A. (2014). Shrinking small towns in Hungary: The factors behind the urban decline in small scale. *Acta Geographica Universitatis Comenianae*, 58(2), 131–147. [http://actageographica.sk/stiahnutie/58\\_2\\_02\\_Pirisi\\_a\\_Trocsanyi.pdf](http://actageographica.sk/stiahnutie/58_2_02_Pirisi_a_Trocsanyi.pdf)
- Potrykowska, A. (1995). Restructuralization, deindustrialization and unemployment in Poland. Case study of Warsaw. In A. Potrykowska & J. I. Clarke (Eds.), *Population and environment in industrialized regions* (pp. 19–36). IGiPZ PAN, Geographia Polonica 64. [https://rcin.org.pl/igipz/Content/4190/WA51\\_13385\\_r1995-t64\\_Geogr-Polonica.pdf#page=21](https://rcin.org.pl/igipz/Content/4190/WA51_13385_r1995-t64_Geogr-Polonica.pdf#page=21)
- Rachwał, T. (2011). Industrial restructuring in Poland and other European Union states in the era of economic globalization. *Procedia – Social and Behavioral Sciences*, 19, 1–10. <https://doi.org/10.1016/j.sbspro.2011.05.100>
- Radzinski, A. (2018). Involving small landlords as a regeneration strategy under shrinkage: Evidence from two East German cases. *European Planning Studies*, 26(3), 526–545. <https://doi.org/10.1080/09654313.2017.1391178>
- Reckien, D., & Martinez-Fernandez, C. (2011). Why do cities shrink? *European Planning Studies*, 19(8), 1375–1397. <https://doi.org/10.1080/09654313.2011.593333>
- Rhodes, J., & Russo, J. (2013). Shrinking ‘smart’?: Urban redevelopment and shrinkage in Youngstown, Ohio. *Urban Geography*, 34(3), 305–326. <https://doi.org/10.1080/02723638.2013.778672>
- Richardson, H. W., & Nam, C. W. (2014). *Shrinking cities: A global perspective*. Routledge. <https://doi.org/10.4324/9780203079768>
- Rieniets, T. (2009). Shrinking cities: Causes and effects of urban population losses in the twentieth century. *Nature and Culture*, 4(3), 231–254. <https://doi.org/10.3167/nc.2009.040302>
- Rink, D., Couch, C., Haase, A., Krzysztofik, R., Nadolu, B., & Rumpel, P. (2014). The governance of urban shrinkage in cities of post-socialist Europe: Policies, strategies and actors. *Urban Research and Practice*, 7(3), 258–277. <https://doi.org/10.1080/17535069.2014.966511>
- Ročak, M., Hoppers, G.-J., & Reverda, N. (2016). Searching for social sustainability: The case of the shrinking city of Heerlen, The Netherlands. *Sustainability*, 8(4), 382. <https://doi.org/10.3390/su8040382>
- Rumpel, P., & Slach, O. (2012). *Governance of shrinkage of the city of Ostrava*. European Science and Art Publishing Praha.
- Runge, A. (2010). Procesy i struktury ludnościowe w województwie śląskim [Population processes and structures in the Śląskie Voivodeship]. In J. Runge & I. Żurek (Eds.), *Procesy i struktury demograficzno-społeczne na obszarze województwa śląskiego w latach 1988–2008* [Demographic and social processes and structures in the Silesian Voivodeship in 1988–2008] (pp. 33–82). Urząd Statystyczny.
- Runge, A. (2015). Powiązania migracyjne miast średnich w konurbacji katowickiej w latach 1999–2011 [Migration relations of medium-size towns in the Katowice conurbation in the period 1999–2011]. *Studia Miejskie*, 18, 103–118. [http://www.studiamiejskie.uni.opole.pl/wp-content/uploads/2016/05/S\\_Miejskie\\_18\\_2015-Runge.pdf](http://www.studiamiejskie.uni.opole.pl/wp-content/uploads/2016/05/S_Miejskie_18_2015-Runge.pdf)
- Runge, J. (2008). Population transformations in traditional economic regions of Central Europe. *Structural Approach. Bulletin of Geography*, 10, 63–74. <https://doi.org/10.2478/v10089-008-0013-7>
- Runge, J. (2019). Tendencje depopulacji i starzenia demograficznego w województwie śląskim a model nowej urbanizacji regionu [Tendencies of depopulation and demographic aging in the Śląskie Voivodeship and the model of new urbanization in the region]. In K. Gasidło, A. Klasik, & R. Muster (Eds.), *Nowa urbanizacja na starym podłożu* [New urbanization on the old substrate] (pp. 102–112). Prace Naukowe Uniwersytetu Ekonomicznego.
- Runge, A., & Runge, J. (2017). Polityka lokalna i regionalna w świetle depopulacji – na przykładzie województwa śląskiego. In J. Szlachta & P. Legutko-Kobus (Eds.), *Wyzwania dla polityki rozwoju regionalnego* [Challenges for the regional development policy] (pp. 133–150). Studia KPZK PAN.

- Schetke, S., & Haase, D. (2008). Multi-criteria assessment of socio-environmental aspects in shrinking cities: Experiences from Eastern Germany. *Environmental Impact Assessment Review*, 28(7), 483–503. <https://doi.org/10.1016/j.eiar.2007.09.004>
- Šerý, O., Svobodová, H., Šilhan, Z., & Szczyrba, Z. (2018). Shrinking of cities in the Czech Republic and its reflection on society: Case study of Karviná city. *Geographica Pannonica*, 22(1), 68–80. <https://doi.org/10.5937/22-16622>
- Shetty, S., & Reid, N. (2014). Dealing with decline in old industrial cities in Europe and the United States: Problems and policies. *Built Environment*, 40(4), 458–474. <https://doi.org/10.2148/benv.40.4.458>
- Slach, O., Bosák, V., Krticka, L., Nováček, A., & Rumpel, P. (2019). Urban shrinkage and sustainability: Assessing the nexus between population density, urban structures and urban sustainability. *Sustainability*, 11(15), 4142. <https://doi.org/10.3390/su11154142>
- Slach, O., Ivan, I., Ženka, J., & Sopkuliak, A. (2015). Intra-urban patterns of creative industries in polycentric city. *GeoScape*, 9(1), 1–16. <https://doi.org/10.1515/geosc-2015-0001>
- Sousa, S., & Pinho, P. (2015). Planning for shrinkage: Paradox or paradigm. *European Planning Studies*, 23(1), 12–32. <https://doi.org/10.1080/09654313.2013.820082>
- Spórna, T. (2018). The suburbanisation process in a depopulation context in the Katowice conurbation, Poland. *Environmental & Socio-Economic Studies*, 6(1), 57–72. <https://doi.org/10.2478/environ-2018-0007>
- Spórna, T., Kantor-Pietraga, I., & Krzysztofik, R. (2016). Trajectories of depopulation and urban shrinkage in the Katowice Conurbation, Poland, *Espace Populations Sociétés*, 2015/3–2016/1: Espaces en dépeuplement. <https://doi.org/10.4000/eps.6102>
- Spórna, T., & Krzysztofik, R. (2020). 'Inner' suburbanisation – Background of the phenomenon in a polycentric, post-socialist and post-industrial region: Example from the Katowice conurbation, Poland. *Cities*, 104, 102789. <https://doi.org/10.1016/j.cities.2020.102789>
- Strategy for Development of the Town of Zawiercie. (2011). <https://www.zawiercie.eu/dokumenty/strategia-rozwoju-zawiercia-2025-plus.pdf>
- Stryjakiewicz, T. (2013). The process of urban shrinkage and its consequences. *Romanian Journal of Regional Science*, 7, 29–40. <http://www.rrsa.ro/tjrs/V7SP2.Tadeus.pdf>
- Stryjakiewicz, T. (Ed.). (2014). *Kurczenie się miast w Europie Środkowo-Wschodniej*. Bugucki Wydawnictwo Naukowe.
- Szafrńska, E., Coudroy de Lille, L., & Kazimierzczak, J. (2019). Urban shrinkage and housing in a post-socialist city: Relationship between the demographic evolution and housing development in Łódź, Poland. *Journal of Housing and the Built Environment*, 34(2), 441–464. <https://doi.org/10.1007/s10901-018-9633-2>
- Taylor, B. J. (2005). Factorial surveys: Using vignettes to study professional judgement. *British Journal of Social Work*, 36(7), 1187–1207. <https://doi.org/10.1093/bjsw/bch345>
- Verwest, F. (2011). *Demographic decline and local government strategies*. Eburon Publishing.
- Wang, Y., & Fukuda, H. (2019). Sustainable urban regeneration for shrinking cities: A case from Japan. *Sustainability*, 11(5), 1505. <https://doi.org/10.3390/su11051505>
- Wiechmann, T., & Bontje, M. (2015). Responding to tough times: Policy and planning strategies in shrinking cities. *European Planning Studies*, 23(1), 1–11. <https://doi.org/10.1080/09654313.2013.820077>
- Wiechmann, T., & Pallagst, K. M. (2012). Urban shrinkage in Germany and the USA: A comparison of transformation patterns and local strategies. *International Journal of Urban and Regional Research*, 36(2), 261–280. <https://doi.org/10.1111/j.1468-2427.2011.01095.x>
- Wolff, M., Fol, S., Roth, H., & Cunningham-Sabot, E. (2017). Is planning needed? Shrinking cities in the French urban system. *Town Planning Review*, 88(1), 131–145. <https://doi.org/10.3828/tpr.2017.10>
- Zhang, Y., Fu, Y., Kong, X., & Zhang, F. (2019). Prefecture-level city shrinkage on the regional dimension in China: Spatiotemporal change and internal relations. *Sustainable Cities and Society*, 47, 101490. <https://doi.org/10.1016/j.scs.2019.101490>