THE CHALLENGE OF URBAN TRANSFORMATION IN POST-SOCIALIST COUNTRIES

How can policymakers slow down the process of urban shrinking in Bulgaria?

HafenCity University

Master Thesis in Urban Planning

Evgenia Yosifova

March 2017

ACKNOWLEDGEMENTS

First of all, I would like to thank my thesis supervisor Prof. Dr. Irene Peters who was always willing to hear my ideas and offer her support whenever I had a question about my research or writing.

I would also like to acknowledge Galya Vladova as the second supervisor of this thesis. She provided me with helpful comments and contributed to this work with her valuable knowledge about the Bulgarian planning context.

Last, but not least, I would like to thank the experts who were involved in the interviews:
Assoc. Prof. Dr. Arch. Elena Dimitrova from the University for Architecture, Civil Engineering and Geodesy in Sofia,
Arch. Petko Evrev from the Bulgarian National Centre for Regional Development and
Lidiya Lecheva-Gospodinova from the Municipality of Rousse.
Their participation and dedication to the topic of urban shrinkage in Bulgaria truly enriched this thesis.

Author:
Evgenia Yosifova

TABLE OF CONTENTS

1. INTRODUCTION 7

1.1. Urban transformation in a globalizing world - a special challenge for post-socialist countries 7

1.2. Research goal and research question 7

2. METHODOLOGY AND STRUCTURE OF THE THESIS 9

2.1. Theoretical part 9

2.2. Analytical part 10

2.3. Conceptual part 11

3. URBAN GROWTH AND SHRINKAGE IN THE POST-SOCIALIST WORLD 12

3.1. Globalization and its diverse effects on local and regional development 12

3.2. The phenomenon of urban shrinkage 13

3.3. The challenges of post- socialist transformation in a globalizing world 16

3.4. Urban transformation in selected Central and Eastern European post-socialist countries 18

4. SHORT PORTRAIT OF BULGARIA 27

4.1. Location and topology 27

4.2. Population numbers and density 28

4.3. Spatial administrative structure 29

4.4. Economic profile 31

5. TRANSFORMATION PROCESSES IN BULGARIA 33

5.1. History of urban development in Bulgaria 33

5.2. Endogenous transformation processes triggering urban shrinkage 35

5.3. Changing administrative structures and planning policy 41

5.4. Fiscal decentralization 50

6. VULNERABILITY OF BULGARIAN MUNICIPALITIES TO SHRINKAGE 54

6.1. Statistical analysis of socio-economic and spatial factors with an expected impact on shrinking 54

6.2. Vulnerability criteria 65

7. COMPARATIVE STUDY OF THE MUNICIPALITIES ROUSSE AND VIDIN 68
7.1. The municipality of Rousse 71
7.2. The municipality of Vidin 81
7.3. Comparison of the two municipalities and summary of key features 89
8. SHAPING THE FUTURE OF VIDIN 91
8.1. Following the example of Rousse 91
8.2. A vision for Vidin 92
8.3. Development strategies 93
9. WHAT CAN BE DONE TO STABILIZE THE DEVELOPMENT OF SHRINKING MUNICIPALITIES? 101
9.1. Policy recommendations at the subnational level 101
9.2. Policy recommendations at the national level 105
9.3. Policy recommendations at the EU level 107
10. SUMMARY, CONCLUSIONS AND OUTLOOK 109

LIST OF ABBREVIATIONS

CMEA	Council for Mutual Economic Assistance
CoM	Council of Ministers
EC	European Commission
ERDF	European Regional Development Fund
ESF	European Social Fund
FDI	Foreign Direct Investments
FPI	Foreign Portfolio Investments
GDP	Gross Domestic Product
GDR	German Democratic Republic
GVA	Gross Value added
INSEKs	Integrierte Stadtentwicklungskonzepte
IPURD	Integrated Plan for Urban Regeneration and Development
MLSP	Ministry of Labour and Social Policy
MOEW	Ministry of Environment and Waters
MRDPW	Ministry of Regional Development and Public Works
NEDP	National Economic Development Plan
NGOs	Non-governmental organizations
NRDP	National Regional Development Plan
NSDD	National Strategy for Demographic Development
OP	Operational Programme
OPRD	Operational Programme for Regional Development
PPS	Purchasing power standards
RDA	Regional Development Act
RIS	River Information System
R&D	Research and Development
SCFs	Structural funds
SEZ	Special Economic Zones
SMEs	Small and medium-sized enterprises
UNDP	United Nations Development Program

LIST OF FIGURES

Figure 1. Structure of the thesis and selected research methods....9
Figure 2. Annual demographic development rates in Germany 1987-2000....19
Figure 3. Demographic development in Germany 2000-2013....21
Figure 4. Annual demographic development rate in Poland 2001-2011....22
Figure 5. Physical map of Bulgaria....27
Figure 6. Population density of Bulgaria (1961-2015)....28
Figure 7. Network of administrative cities at the district level....28
Figure 8. Population density at the district level in 2015....29
Figure 9. Bulgarian spatial administrative structure....30
Figure 10. Composition of the NUTS I regions....30
Figure 11. Structure of GDP by economic sector....31
Figure 12. Overview of the current Bulgarian planning system hierarchy....49
Figure 13. Scatterplot: Migration in % (2011-2015) & Unemployment in % (2011)....55
Figure 14. Scatterplot: Population change in % (2011-2015) & Unemployment in % (2011)....56
Figure 15. Scatterplot: Population change in % (1992-2015) & Number of cities....59
Figure 16. Scatterplot: Unemployment change in % (2011-2015) & Number of cities....60
Figure 17. Scatterplot: Unemployment in % (2011) & Population without high school degree in % (2011)....62
Figure 18. Scatterplot: Highly educated people in % (2011) & Population numbers (2011)....64
Figure 19. Municipalities with high vulnerability to shrinking....66
Figure 20. Vidin and Rousse – district administrative cities on the river of Danube....67
Figure 21. Vidin and Rousse on the map of Bulgaria....68
Figure 22. Vidin and Rousse within the network of Pan-European transport corridors....69
Figure 23. Danube Bridge 1 connecting Rousse and Giurgiu....69
Figure 24. Danube Bridge 2 connecting Vidin and Calafat....70

Figure 25. Aerial image of the municipality and the city of Rousse 71
Figure 26. Population age structure in the municipality of Rousse (2000-2015) 72
Figure 27. Comparison of the population structure by attained levels of education in Rousse and Bulgaria. 73
Figure 28. Unemployment rates in Rousse District and Rousse Municipality compared to Bulgarian average 73
Figure 29. Comparison of unemployment rates in Bulgaria, Rousse District, Rousse Municipality and the City of Rousse (2007-2011) 73
Figure 30. GVA by economic sectors in the District of Rousse (NUTS III) 74
Figure 31. GDP per capita in the District of Rousse 74
Figure 32. Demographic development of the city of Rousse: Population in absolute numbers (1934-2015) 75
Figure 33. Aerial image of the municipality and the city of Vidin 81
Figure 34. Population age structure in the municipality of Vidin (2000-2015) 82
Figure 35. Comparison of the population structure by levels of education in Vidin and Bulgaria 82
Figure 36. Unemployment rates in Vidin District and Vidin Municipality compared to Bulgarian average 83
Figure 37. GVA by economic sectors in the District of Vidin (NUTS III) 83
Figure 38. GDP per capita in the District of Vidin 84
Figure 39. Demographic development of the city of Vidin: Population in absolute numbers (1934-2015) 84
Figure 40. Logistic Park in Vidin 94

LIST OF TABLES

Table 1. GVA and GDP by regions 31

Table 2. Distribution of FDI to Bulgaria's NUTS II regions in 2015 32

Table 3. Key economic indicators before and after the introduction of the currency board in 1997 37

Table 4. Spatial planning related instruments in Bulgaria 1989-1997 42

Table 5. Spearman's correlation test: Unemployment in % (2011) & Migration in % (2011-2015) 56

Table 6. Spearman's correlation test: Unemployment in % (2011) & Population change in % (2011-2015) 56

Table 7. Independent samples T-test: Population change in % (2011-2015) & Unemployment in % (2011) 57

Table 8. Spearman's correlation test: Number of cities & Population change in % (1992-2015) 59

Table 9. Independent samples T-test: Population change in % (1992-2015) & Number of cities 60

Table 10. Spearman's correlation test: Unemployment change in % (2011-2015) & Number of cities 61

Table 11. Independent samples T-test: Unemployment change in % (2011-2015) & Number of cities 61

Table 12. Spearman's correlation test: Population without high school degree in % (2011) & Unemployment in % (2011) 63

Table 13. Share of population without high school degree in Bulgarian municipalities (2011) 63

Table 14. Independent samples T-test: Unemployment change in % (2011-2015) & Population without high school degree in % (2011) 63

Table 15. Spearman's correlation test: Highly educated people in % (2011) & Population numbers (2011) 64

Table 16. Spearman's correlation test: Number of educational facilities (2011) & Highly educated people in % (2011) 64

Table 17. Population change in % in Bulgarian municipalities between 1992 and 2015 65

Table 18. List of vulnerability criteria in regard to demographic shrinking 66

Table 19. Sectoral strategies of the Municipality of Rousse 79

Table 20. Comparison of the Municipality of Rousse and the Municipality of Vidin 90

1.INTRODUCTION

1.1. Urban transformation in a globalizing world - a special challenge for post-socialist countries

With globalization and the global mobility of capital comes a great divergence in the economic development of different regions of the world and within countries. While some regions are thriving, others are characterized by decreasing population, a non-competitive economy, social erosion and failing technical infrastructures. The reality of post-socialist countries is further complicated by the processes of political and economic transformation they had to go through after the fall of the Iron Curtain, marking a new beginning for their development. No longer isolated from the rest of the Western world, post-socialist countries had to start readjusting in order to fit into the network of countries functioning actively in the globalized world. However, the adjustment process is taking longer than it was hoped for and brings with it unexpected implications for the countries' regional development. Demographic decline, rapid out-migration, high unemployment and regional disparities have become the reality of post-socialist countries.

Bulgaria, located in the southeast of the European Union, has been struggling for a decade to catch up with the economic development of the other member states. After the demise of the socialist government in 1989, Bulgaria embarked upon political and economic transformation like the rest of its former Soviet comrades. Twenty-seven years later, the country has not completed its path towards democracy and a market economy yet. Moreover, the multifaceted transformation triggered an extensive and persisting process of demographic shrinking. Bulgaria has lost more than 15% of its inhabitants since 1992 (NSI, 2012: p. 14; NSI, 2016a). However, this population loss was not distributed evenly across the country's territory. While the municipalities containing the largest cities (e.g. the capital city of Sofia, Varna and Plovdiv) experienced some growth in population due to internal migration, others lost more than half of their population. These tendencies, coupled with the inadequate strategic planning policies over the transition period, resulted in severe discrepancies in the territorial development of the country. The consequences are now more alarming than ever and call for immediate actions.

1.2. Research goal and research question

Against this background, numerous questions emerge. First of all, what are the exact causes that triggered urban shrinkage in the special context of Bulgaria? What are its specific implications? Is the problematic of urban shrinkage put on the political agenda at all yet? Could Bulgaria use the experience of other post-socialist countries for the elaboration of its own action plan? What type of measures should be taken in order to effectively counteract the downturn in economic and demographic development and its consequences?

The country is not without resources, and its membership in the European Union, though partly responsible for out-migration, also harbors the chance to benefit from the Union's cohesion and regional development policy. Provided that a well-thought-

out and consistent strategy is adopted and implemented at all levels, the process of shrinking could eventually be slowed down.

That is the topic of the proposed thesis. Given the political, economic and demographic situation of Bulgaria, the exogenous and endogenous factors for development, national and EU planning and financial instruments, the thesis will explore

How can policymakers slow down the process of urban shrinking in Bulgaria?

To answer the research question, two municipalities are selected for case study analysis. The municipal level is chosen because it offers the most detailed view in regard to processes of demographic and economic shrinkage. Negative trends in some municipalities could get absorbed by other, better performing municipalities at the district and regional scale.

The municipality of Rousse and the municipality of Vidin are both located in the northern part of Bulgaria which is in a worse economic and demographic condition compared to the southern regions. Another common trait is that they both border the river of Danube, a valuable natural and economic resource, and have the opportunity to benefit from a trans-border cooperation with Romania due to the built and functioning Danube bridges 1 and 2. With this in view, it shall be examined whether and why municipalities with similar local potentials differ in their overall economic and demographic development. The comparative study should allow to gain an insight as to how strategic planning policies and urban governance influence the process of shrinking at the municipal level and whether it is meaningful for local authorities to adopt strategies developed by other municipalities.

The goal of this thesis is to contribute to the understanding of the phenomenon of urban shrinkage in the spatial context of Bulgaria – still a rather unexplored field of research – and to provide concrete policy recommendations at the subnational, national and EU levels, to counteract the negative consequences of urban shrinkage, and possibly, in some measure, the shrinking process itself.

2.METHODOLOGY AND STRUCTURE OF THE THESIS

To obtain the data necessary for answering the research question, it is of high importance to outline a clear research concept from the very beginning. This concept is based on the use of scientifically grounded research methods so that the generated results can be regarded as robust and reliable. Figure 1 provides an overview of the thesis' structure and the research methods chosen for each chapter.

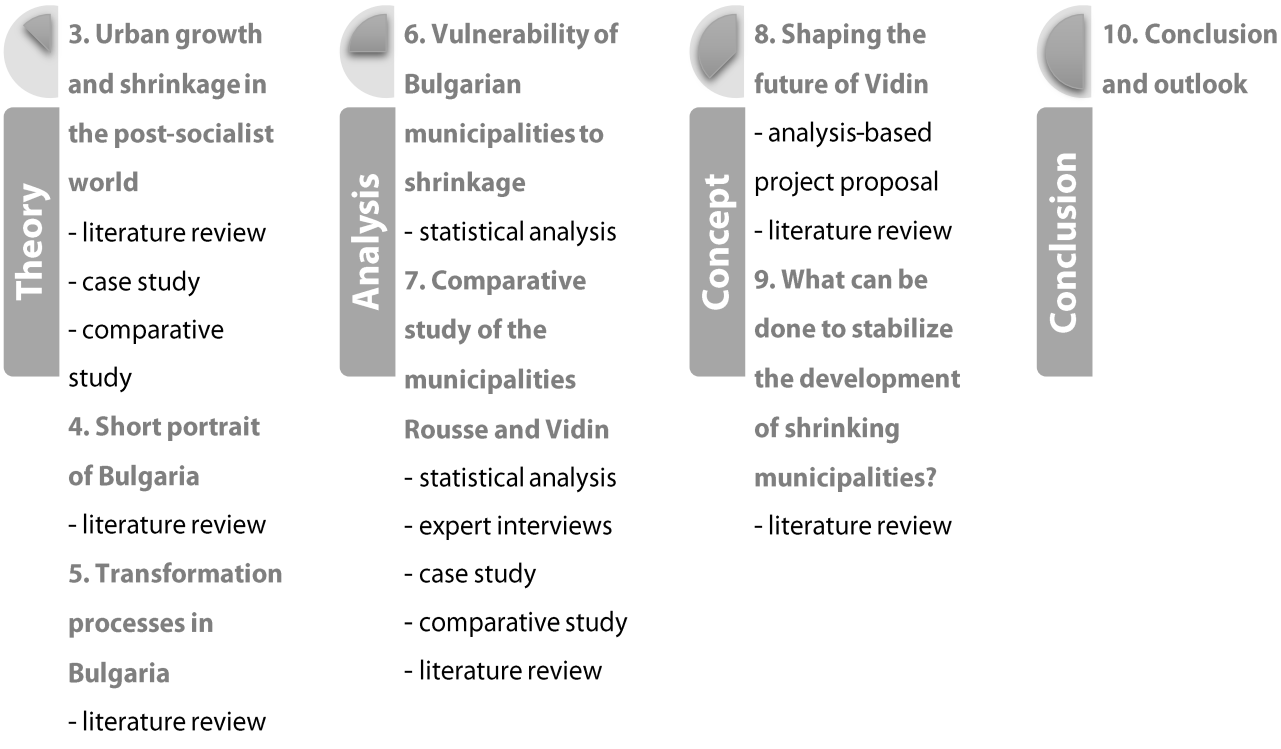
The thesis is divided into three main parts – theory, analysis and concept – and each one of them consists of two to three chapters.

2.1.Theoretical part

The theoretical part starts with the chapter "Urban growth and shrinkage in the post-socialist world" which aims to set the scene and provide context about the topic of urban transformation in post-socialist countries. Furthermore, the process of urban transformation is examined against the background of globalization with its diverse effects on local and regional development. Eventually, the specific challenges of post-socialist transformation in a globalizing world are identified.

To this end, a number of research methods were used. First, an extensive literature review was carried out. It allowed to include the perspectives of various scholars as to what are the causes and implications of urban shrinking in particular, since this is the focus of the thesis, and the role that globalization plays in

Figure 1. Structure of the thesis and selected research methods (Own visualization).



this regard. Next, both the case study and the comparative study approaches were implemented in order to gain an insight into the experiences of other post-socialist countries with the process of urban transformation triggered after the fall of the Iron Curtain. The cases of East Germany and Poland were selected in an effort to identify how the problematic of urban shrinkage was put on the political agenda and what kind of strategies for dealing with its implications were adopted. Finally, the information obtained from the two case studies was compared in regard to the explored aspects of agenda setting and strategic policies against urban shrinkage.

Further on, the thesis introduces the specific example of Bulgaria in the fourth chapter "Short portrait of Bulgaria". It aims to provide some background information about the country to allow a better understanding of the transformation processes studied in the next chapter. For this purpose, literature review was carried out, and quantitative data was obtained in order to produce maps and graphics for the visual overview of the most important characteristics of the country.

Chapter 5. "Transformation processes in Bulgaria" starts with a brief overview of the country's urban development history from the beginning of the Third Bulgarian State up to the breakdown of socialism. Then, the focus is set on the processes of political, economic and administrative transformation which were initiated after the change of the political doctrine. Special attention is given to the changes in the institutional structures and planning policies and the impact that the accession in the European Union had on them. Last, but not least, the process of fiscal decentralization is examined as well. To that end, the research was again based on the review of scientific papers.

2.2.Analytical part

The sixth chapter "Vulnerability of Bulgarian municipalities to shrinkage" constitutes the first part of the analysis and it is based on both quantitative and qualitative methods. It aims to identify the municipalities which are most vulnerable to experiencing urban shrinkage in the spatial context of Bulgaria.

For this purpose, a list of vulnerability criteria was created. It is compiled from factors which have either a direct or an indirect influence on demographic and economic decline. To this end, a number of hypotheses were formulated and statistically tested. Depending on the results it was decided whether to include the given factor in the design of the vulnerability criteria. For the investigation of the hypotheses, statistical analyses (e.g. linear regression, Pearson's and Spearman's tests of correlation) and independent samples T-tests were carried out. They were used in order to estimate to what extent there is a correlation between different variables like demographic decline and unemployment for example. Finally, after all of the hypotheses were examined, the list of vulnerability criteria was created and on its basis the municipalities were spatially identified on the map of Bulgaria. This was achieved by the combined use of Microsoft Excel, SPSS and ArcGIS.

The main source of raw quantitative data was the National Statistical Institute which publishes Census data and other, periodic data, online. For the purpose of organising and analysing the obtained data, Microsoft Excel and IBM's SPSS were used. A database with data about all Bulgarian municipalities was created both in SPSS and in ArcGIS. This allowed

for the results generated in SPSS to be eventually transferred in ArcGIS and thus create a spatial visualisation of where the municipalities with highest vulnerability to shrinkage are located. The generated results provide a statistical justification for the choice of Vidin and Rousse as case studies of the thesis within the Bulgarian context.

A detailed analysis of the two selected municipalities is to be found in chapter 7. "Comparative study of the municipalities Rousse and Vidin". Like the title suggests, both a case study and a comparative study approach were used in order to explore the development of Rousse and Vidin which have both been exposed to the process of urban shrinkage. The two cases are investigated one after the other, following the exact same structure: geographic and socio-economic make-up, demographic shrinkage and review of planning policies. Finally, all of the examined aspects are presented in a table for a better overview and compared.

Both quantitative and qualitative methods were used for the case study analysis. On the one hand, quantitative data about the economic performance and the demographic development was obtained and presented with tables and graphs for a better visualisation and comprehension. On the other hand, expert interviews with the local authorities were conducted to gather insight into the elaborated strategies and the implemented policies for dealing with the consequences of shrinkage. Last, but not least, analysis of the existing strategic documents of both municipalities was carried out.

2.3.Conceptual part

The conceptual part of the thesis starts with the chapter "Shaping the future of Vidin" which is related to the specific context of urban shrinking in Vidin. It proposes a new vision for the future development of the municipality and a number of development strategies. The experience of Rousse serves as a starting point for the formulation of a coherent vision and a model for the outlining of concrete strategies. Finally, an impulse project for the future development of the municipality derived from the conclusions of the analysis about its current condition and specific local deficiencies is suggested. It aims to present a real-life project which could be pursued by local authorities. A literature review was conducted to identify possible funding mechanisms for the implementation of the proposed project. Both national and EU alternatives were explored and summarized.

The next chapter "What can be done to stabilize the development of shrinking municipalities?" aims to deliver policy recommendations which should complement the impulse project proposal. However, these are also intended to contribute to shaping the future development of all shrinking municipalities in Bulgaria in general. To support the process of generating ideas for policy recommendations at the subnational, national and EU levels in regard to governing the process of urban shrinking and identifying possible ways to slow it down, scientific papers and EU-funded research projects were studied and their findings were integrated in the proposed measures.

The thesis concludes with a summary of the results and outlook on future research needed in the field of urban transformation in post-socialist countries.

3.URBAN GROWTH AND SHRINKAGE IN THE POST-SOCIALIST WORLD

The complex process of transformation that post-socialist countries have to go through in order to adjust to the changed reality of a democratic political system and a market economy is the subject for discussion in this chapter. Urban growth and shrinkage are two different spatial manifestations of the implications resulting from this multifaceted transformation. They are going to be studied against the background of globalization – the force at the supranational level which has been influencing the development of cities for decades: "Since the 1970s factors like globalization […] have activated a restructuring of the urban fabric, producing both growing and declining urban areas and city regions" (Laursen, 2012: p. 79).

Can post-socialist cities become economically and demographically stable only by pursuing pro-growth strategies? Are cities which fail to do so, doomed to shrink? Are there strategies different from the ones promoting growth that are worth following at all? And how does urban shrinkage get recognized as an issue to be put on the political and planning agenda? These are all questions which will be discussed in the following sections.

3.1. Globalization and its diverse effects on local and regional development

Globalization is a term widely used by scholars and yet finding a commonly accepted definition is a difficult task. For the scope of this thesis the following definition is chosen: "Globalization is the growth, or more precisely the accelerated growth, of economic activity across national and regional political boundaries. It finds expression in the increased movement of tangible and intangible goods and services, […] via trade and investment, and often of people, via migration. It can be and often is facilitated by a lowering of government impediments to that movement, and/or by technological progress, notably in transportation and communications" (Oman, 1996: p. 5). While globalization has obvious and inevitable repercussions on national economies, its exact impact on local and regional development has to be examined in more detail.

Over the decades of its existence, globalization has changed the way people communicate, work, travel and trade. The wide use of information and communication technologies combined with the fall of transportation costs has significantly diminished the importance of physical distance in the location of productive activities (Ascani, Crescenzi & Iammarino, 2012: p. 4). This, in turn, triggered the process of redistribution of production at an international scale (Cunningham-Sabot & Fol, 2009: p. 19) which proved that "economic development may virtually occur everywhere without any role being played by local [or] spatial factors" (Ascani, Crescenzi & Iammarino, 2012: p. 4). Therefore, it can be argued that locations, or in other words cities and regions,

have to some extent been emptied of their own particular characteristics (Ascani, Crescenzi & Iammarino, 2012: p. 4) making it even harder for them to be economically competitive. The increased global mobility of capital and jobs has therefore resulted in growing inequalities between the cities which manage to "attract investments and the most qualified workers, [and] others [which] lose their economic base, their jobs and thereby their population" (Roth & Cunningham-Sabot, 2012: p. 59). The most severely affected urban areas are former industrial cities which have been focused on a single branch of economic activity. Such cities struggle the most as they have to completely re-establish their economic profile in order to offer enough new jobs to their citizens. Otherwise, a process of work-related out-migration is likely to emerge.

Yet, to reposition their economies in the reality of the globalized world, cities have to rely on different potentials than those developed in the past. Nowadays knowledge, innovations and networking are identified as the key factors of economic performance (ibid.). The rapid exchange of information which is undisputedly an advantage of the globalized world facilitates the accumulation of knowledge and thus fosters innovations. In this regard, the term *glocal cities* emerges. It describes cities which managed to successfully combine global advantages with local assets (Cunningham-Sabot et al., 2014: p. 24). However, they are not to be mistaken for *global cities* which can be described as "significant production point[s] of specialized financial and producer services that make the globalized economy run" (Renn, 2012). While it is important for cities to be open to networking with other cities (and states) and re-establish themselves in the new conditions of a knowledge-based economy, cities do not necessarily have to be regarded as *global* in order to be attractive to people. Instead, what is necessary to keep cities demographically stable, is the balance between a diverse economy and a clean and safe living environment.

Still, the "access [to] global networks" is considered to have an important influence on cities' development because without it "some of them can be temporarily or structurally cut off from the 'space of flows'" (Castells, 2000). Therefore, such cities would be put in the position of functioning at the fringe of the global social and economic arena. However, to continue functioning, they still have to compete with other, *connected* cities in order to keep their jobs and inhabitants. If they fail to do so, they start to shrink. They shrink both in terms of demography and economic activity/productivity. In this context, Cunningham-Sabot et al. (2014) argue that the "multidimensional causes deeply interrelated and anchored in the globalization process are at the root of urban shrinkage" (p. 14). Yet, what exactly is urban shrinkage and how is it manifested?

3.2. The phenomenon of urban shrinkage

According to Laursen (2012), the notion of shrinking cities originates from Germany: "One of the first contributions to the debate about shrinking cities can be found in the book "Neue Urbanität" from 1987 by Hartmut Häußermann and Walter Siebel. […] they elaborate on the declining cities discussing the relation between growing, stagnating and shrinking cities" (p. 74). Shrinking cities are generally referred to as cities with both a declining demography and a declining economy, which are to be attributed to

various causes. These include de-industrialization, change of urban structures (de-centralization and suburbanization), demographic changes (such as declining birth rates) and political changes (post-socialism) (ibid., p. 75). Urban shrinkage is a widely known phenomenon which occurred in cities in North America and Western Europe. However, since 1990 (after the fall of the Iron Curtain), there has been an increase in the number of shrinking cities in post-socialist countries in Central and Eastern Europe (ibid.).

In the case of post-socialist countries, the main causes for urban shrinkage are to be sought in the continuous processes of political and economic transformation. Among the most serious implications of the transition to democracy and a market economy are the political instability (which still persists in countries like Bulgaria) and the continuous process of de-industrialization. The shutdown of many previously state-owned industrial enterprises led to dramatic unemployment rates in the highly industrialized cities. Changing their economic profile and adjusting to the new reality took a long time and some of them have not managed to complete this transformation yet. Thus, a process of out-migration was triggered in most of these cities. Birth rates dropped as well because people felt insecure about their future in the condition of a complete political and economic transformation at a national level. In East Germany, for example, most cities lost up to 20% of their inhabitants due to labour-oriented migration to the western federal states combined with a dramatic decline in birth rates and a process of "catch-up suburbanization". Both population numbers and jobs were continuously decreasing which led to persistently high unemployment rates (17-20% on average), constantly high rate of people depending on social welfare, rapidly ageing population, decreasing house rents, decreasing land prices, reduced purchasing power and reduced local tax revenues (Jessen, 2012: p. 45).

Gatzweiler & Milbert (2009) identify decrease of population, decline of industrial branches, reduction in jobs, dwindling spending power and fiscal revenue and shutdown of public infrastructure because of a shortfall in demand as the main aspects portraying the phenomenon of urban shrinkage (p. 443).

The decrease of population is to be attributed to the combination of factors such as ageing, mortality surplus and emigration rates exceeding immigration rates. To write it down more systematically,

1) when Births < Deaths **and** In-migration < Out-migration, the population is shrinking,
2) when Births > Deaths **and** In-migration > Out-migration, the population is growing.

Naturally, it is possible that these relations are not always as straightforward, but they represent the main components of demographic development and determine its direction towards either growth or shrinkage.

Arch. Dimitrova (Associate Professor at the University of Architecture, Civil Engineering and Geodesy in Sofia, Department of Urban Planning) (2017), considers demographic shrinking in Bulgaria as a problem with multiple negative consequences whose solution is vital: "Depopulation has multi-layered effects – low efficiency of a number of social, cultural and transport infrastructure elements (e.g. closing schools, cancelling or reducing the number of bus and train routes, difficult functioning of multifamily

residential buildings) leads to the decreasing of the standard of life and the marginalization of the population in different parts of the country" (pers. comm.). Thus, whole Bulgarian regions are losing their attractiveness as they are associated with isolation, unemployment, poverty, lack of good quality public services such as education, healthcare, etc.

Decline in the demand for absorbing additional territory, however, is not usually among the symptoms of shrinking cities. On the contrary, urban sprawl often occurs against the background of overall population loss (e.g. East Germany, Poland, Bulgaria): "The paradox lies in the fact that there are abandoned industrial areas (with built up infrastructure) in our [Bulgarian] cities and still new production sites emerge outside of the urban area, "on a green lawn". Numerous commercial companies choose to settle on "a green lawn" as well. Even new residential areas pop up outside the city borders. This way urban territory grows. Population is shrinking, but the territory is growing" (Evrev, 2017, pers. comm.). Thus, by the physical relocation of urban functions from the city core to the outskirts, cities become perforated: "The term "perforated city" was created to describe a new era of cities characterized by simultaneous demographic decline and urban sprawl" (Florentin, 2010: p. 83).

As a result of demographic and economic shrinking coupled with urban sprawl, cities „experience a surplus of built structures, which can contribute to further fragmentation and decay" (Laursen, 2012: p. 74). Jessen (2012) illustrates the physical manifestations of urban shrinkage in more detail: „spacious brownfields, abandoned factories, vacant housing, derelict railway stations and boarded-up schools" (p. 46).

Arch. Evrev (Senior expert in the Department of Regional analyses, Urban planning, Spatial planning and Tourism at the Bulgarian National Centre for Regional Development) (2017) attempts to summarize the notion of urban shrinkage in the Bulgarian context as an interplay of processes in three different domains – demographic, functional and spatial: "Demographic shrinking is the reality of all Bulgarian cities except the few big ones. Severe urban shrinkage is manifested and observed in the decay of urban functions in most cities […] – economic, educational, social and cultural. However, spatial shrinkage is not observed. It may be manifested in the decay and partial abandonment of some urban areas, but at the same time it is coupled with the absorption of new territories. This seemingly paradoxical phenomenon is to some extent legitimate. It is typical for living organisms – some cells die and others emerge. The city is like a living organism. There is always something changing inside of it" (pers. comm.).

Even if urban shrinkage is, indeed, a natural process in the development of cities, its implications should still be addressed by policymakers and planners. Otherwise, the living conditions of the remaining local population would continuously decline over time. Against this background, the question of funding emerges because urban regeneration measures cannot be implemented without financial resources.

While local authorities are faced with decreasing revenues (population decline leads to lower tax revenues), their costs increase for various reasons. Urban technical infrastructure systems such as district heating, water supply and sewage start to malfunction because of the decreased demand, the vacant building stock is more prone to physical decay

and thus in need of renovation, the shutdown of factories leads to increasing number of brownfields in need of urban regeneration measures, ageing of the population often requires the conversion of social facilities (e.g. increased demand of nursing homes at the expense of kindergartens and schools). Private investors are rarely tempted to invest in shrinking cities because they are regarded as more risky (malfunctioning infrastructure systems, decreasing population and thus difficulties in finding high-qualified labour force, etc.). This makes the situation extremely complex because local authorities are put in the position to rely mainly on public funding in the form of national subsidies and EU funds and programmes.

Regions and municipalities with a prevailing rural character are especially vulnerable to experiencing shrinkage because jobs and basic services such as education and healthcare are concentrated in towns and cities. Furthermore, their overall revenues from taxes are lower as well. Therefore, urban settlements should be regarded as having a stabilizing role and being potentially able to slow down the process of shrinkage at the municipal/regional level if they manage to offer enough opportunities for development of the local population.

With this in view, to stay competitive, cities and other settlements within the same regions have to collaborate and make better use of their existing potentials. The strengthening of urban-rural partnerships could be part of the strategy for governing the process of shrinkage because it has the potential to stabilize regional economies. This, on the other hand, should contribute to diminishing unemployment rates and slowing down the process of labour-oriented out-migration.

Before proceeding to the examination of possible development strategies, however, there is a necessity to clarify the multidimensional causes for urban transformation in each specific context. While globalization, as a supranational factor, certainly plays a significant role as it creates the need for cities to re-establish themselves in a new reality of enhanced international competition, national processes such as political and economic transformation accompanied by diverse institutional reforms prove equally, if not more important, for directing urban transformation towards either growth or shrinkage. Especially in the case of post-socialist countries in Central and Eastern Europe these transitions at the national level deserve special attention since they are assumed to be the main cause for unleashing the process of a profound and diverse urban transformation.

3.3. The challenges of post-socialist transformation in a globalizing world

Since the fall of the Iron Curtain in 1989-1990, post-socialist countries have been experiencing severe social, economic and political changes. While this process of transformation might be heading towards a successful ending in some Central European countries, others, such as Bulgaria, are still struggling to catch up with the development of their former Soviet comrades.

The transformations that have been taking place in many Central and Eastern European countries are primarily linked to three aspects of the transition process: political – from a totalitarian regime to democracy, economic – from a planning to a market

economy, and institutional – shifting to decentralized systems of local democratic government (Tsenkova, 2012: p. 21). The starting point and the progress of transition differ between countries. This multifaceted complexity of the post-socialist experience has direct consequences for cities and regions and presents planning and urban policy with unique challenges (ibid., p. 20).

Local responses to the intensified global competition for markets combined with policy reforms at the national level such as the privatization of industrial enterprises and the de-regulation of real estate markets have determined the transformation framework of the economic, social, institutional and spatial structure of post-socialist cities. Tsenkova (2008) argues that spatial change happened in three "interrelated domains": "economic change (globalization, de-industrialization, growth vs. decline); social change (demographic transition, income polarization, poverty) and changes in urban governance (new central-local relationships, provision of services, urban planning)" (p. 292). Furthermore, she believes that "the last aspect of the transition, labelled *the quiet revolution* of decentralization and devolution of power to local governments, significantly affects the performance of post-socialist cities" (ibid.). The reason why this particular aspect is so important for the future development of post-socialist cities is linked to the idea of spatial adaptation and re-establishment of the cities in order to gain access to the global network that they have been cut off from: "It is argued that the urban system serves as the primary channel linking the national economy to the system of global cities" (Beaverstock, Smith & Taylor, 2000). Yet, what exactly have been the implications of globalization for post-socialist cities?

After the breakdown of socialism national economies in the post-socialist world started to gradually integrate themselves within the global system of production and trade: "The transition from a centrally planned industrialized system of mass production to a system of flexible accumulation has been accompanied by restructuring of the welfare state and a transition to pluralist, democratic governance" (Tsenkova, 2008: p. 293). Globalization is considered to have a deep impact on the restructuring of cities and localities involved in the process. Moreover, the performance of cities and regions is seen as becoming increasingly dependent on processes and forces external to their geographical areas, and even to the boundaries of their national states (ibid.).

Still, the way urban economies of post-socialist countries responded to the changes of macroeconomic conditions differs. Against the background of a general transition to a market economy and therefore an expansive process of adjusting industries, services and other economic activities, some cities gained and others lost economic attractiveness. Capital cities and large urban areas found themselves in a favoured position for numerous reasons. First of all, they managed to accumulate the larger share of foreign and national investments. Second, while over-industrialization was one of the major characteristics of socialist cities, after 1990 there was a shift in the focus. The service sector experienced the fastest development and since it was predominantly situated in big cities, they benefited from this the most. Last, but not least, capital cities have been profiting from the immigration of high-skilled and well-educated people from smaller de-industrialized cities which suffered a dramatic loss of jobs:

"Over-industrialized cities were hit badly by the massive closures of unproductive state enterprises. Unemployment and poverty escalated" (Tsenkova 2008: p. 296). Thus, capital cities and their metropolitan regions were able to sustain a more stable labour market with relatively low unemployment rates at the expense of smaller cities which experienced severe out-migration (ibid., pp. 293-294). As a result, a new spatial hierarchy emerged in post-socialist countries. It is based on the juxtaposition of core urban areas of rapid development (mainly capital cities and their metropolitan regions) and peripheries (cities located far from the fast-developing cores).

Against this background, while there are numerous challenges related to the post-socialist transformation in a globalizing world, there are two "clusters of issues" which seem to be especially important. The first one has to do with economic competitiveness and growth. In this particular context, there is a need of appropriate policies and strategies to foster the economic stabilization of post-socialist cities which have experienced a lengthy process of economic recession. The second cluster relates to urban transformation caused by the combination of economic, demographic and social decline (ibid., p. 307). This will be the primary subject of the following chapters.

3.4. Urban transformation in selected Central and Eastern European post-socialist countries

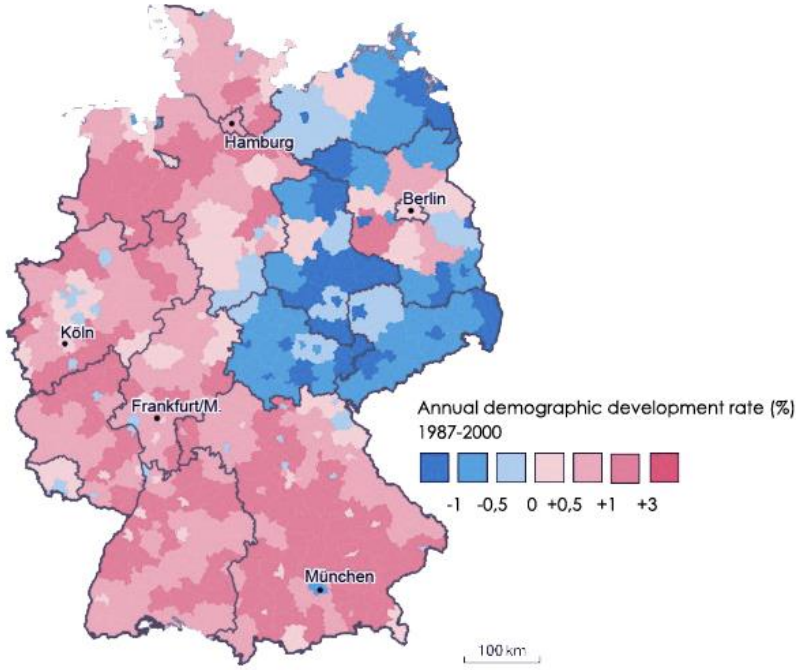
The next few paragraphs are going to shed light on the process of urban transformation in East Germany and Poland and how they dealt with the consequences of decline in economic, demographic and social terms.

3.4.1. The case of East Germany

After the German reunification in 1990, cities in the former German Democratic Republic (GDR) were faced with various challenges resulting from the continuous emigration process triggered by this significant political event. Despite being a long-desired and much celebrated moment in the history of Germany, this sudden change left the local authorities within the new federal states unprepared for the developments to come.

Although population loss and high vacancy rates were present in numerous municipalities in the former GDR after 1990 (fig. 2), "population losses were something of a taboo in German urban politics until the late 1990s. Until that time, the expectations — even for most eastern German cities, which were experiencing a dramatic transformation — were for growth" (Bernt et al., 2014: p. 1754). Therefore, in the early 1990s various funding instruments and tax incentives were introduced and the housing market was eager to benefit from these favourable conditions. As a result, over 693.000 new residential dwellings were built in East Germany and another 83.000 were renovated and added to the market (BMVBS, 2012: p. 7).

Figure 2. Annual demographic development rates in Germany 1987-2000 (Edited by author. Source: BBSR, 2015: p. 7).



However, the expectations for population growth in East German cities after the reunification remained in vain. Due to decades of negligence of the need for constructional, technical and functional renovation of residential buildings and urban infrastructure, numerous cities in East Germany started to be perceived as unattractive places to live. High emigration rates and therefore vacant residential buildings led to malfunctioning of technical urban infrastructure such as district heating, water supply and sewage systems. Thus, they were often failing to comply with technical and legal standards. Not only was this an economic burden for the utility companies operating technical infrastructure systems, but in the case of water supply, for instance, it posed a danger to human health as well.

Economic conditions also worsened as a result of the rapid de-industrialization that started after the reunification. Rise in unemployment made especially young people believe that in order to gain a high-quality professional experience they had to move to one of the old federal states. This aspect further sharpened the situation of demographic decline. Not only did the population continue to decrease over the years but also the age structure began to change unfavourably. Thus, a disproportion between young people in working age and elderly people gradually came into being. Eventually, many East German cities and municipalities started to be associated with rapid emigration, high residential vacancy rates, un(der)used technical and social urban infrastructure in need of modernization and adjustment measures, economic decline, unemployment, low purchasing power and lack of competitiveness in general. By the end of the decade more than one million residential dwellings were vacant (BMVBS, 2012: p. 7). Therefore, with the approaching millennium there was a pressing need for taking measures to counteract these negative tendencies in East Germany.

The "vacancy problem" was, indeed, recognized as the single most important impact of urban shrinkage and therefore entered the public debate in various cities across East Germany: "For [the large municipal and cooperative housing] companies, rising vacancies were an enormous problem, as these led to decreasing revenues at a time when these companies were already burdened with high expenses for debt service (resulting from both renovations and debts they 'inherited' from the socialist state)" (Bernt et al., 2014: p. 1754).

In response, the Bundesministerium für Verkehr, Bau- und Wohnungswesen (*Federal Ministry of*

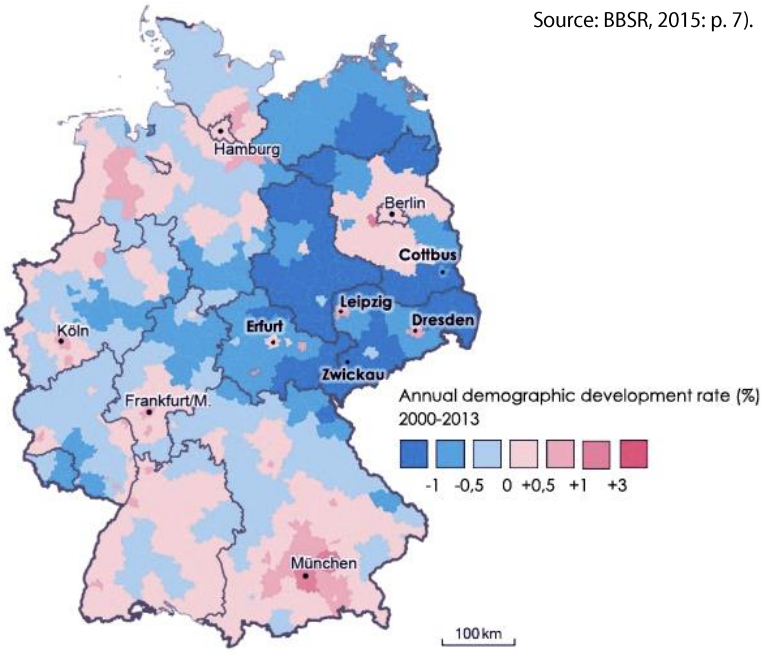
Transport, Building and Housing) appointed the Commission *Wohnungswirtschaftlicher Strukturwandel in den neuen Bundesländern* (*Structural change in the real estate sector of the new federal states*). In this regard, Bernt et al. (2014) argue that: "while there were earlier attempts by scientists to make population losses an issue (for example, Häußermann and Siebel, 1987; Döhler and Rink, 1996), it was only against the background of dramatically rising housing vacancies and through intensive lobbying by large housing companies that shrinkage was finally brought to the public attention. […] This process of 'lobbying' led to the problem being acknowledged at the federal level and finally resulted in a federal expert commission being established" (pp. 1754-1755). The Commission's objectives were to examine current prognoses about future demographic development, housing market prospects, acquisition of assets and budgetary development and to evaluate the effectiveness of existing assistance measures. Based on the results, the Commission had to provide East German communities with concrete recommendations for action. These were published in November 2000 and represented the first step towards the establishment of the funding programme *Stadtumbau Ost* (*Urban Restructuring in the New Federal States*) (BMVBS, 2012: p. 7).

Since then, all urban regeneration measures taking place in German cities have been planned and realized based on the INSEKs – *Integrierte Stadtentwicklungskonzepte* (*Integrated Urban Development Concepts*) which are prepared by the municipalities themselves. These aim at improving the quality of housing conditions and urban infrastructure systems, thus ensuring adequate living and economic environment in shrinking cities. The INSEKs set concrete goals and objectives for urban regeneration and define the so-called *Fördergebiete* (*development areas*) for the implementation of specific measures. In order to facilitate this process and ensure a robust base for the actual realization of the concepts for urban regeneration, the programme *Stadtumbau Ost* was established in 2002 (BMUB, 2016a). It provides grants to the municipalities for the preparation and the regular update of the INSEKs, for the involvement of the public and for the implementation of the outlined projects. Since this is a Federal-State-programme, the financial aid granted to East German municipalities comes both from the German federal government and the new federal states themselves. In some cases the municipalities have to contribute with a co-payment as well. (BMUB, 2016b).

Within the scope of the programme *Stadtumbau Ost* there are both spatial and thematic fields of action. Spatial focus areas include: residential areas dating from GDR times, urban neighbourhoods dating from the Wilhelminian period and other historical (pre-GDR) districts. Thematic fields of action and specific types of measures are assigned to the spatial focus areas stated above. For instance, when residential areas are the subject of urban renewal, housing companies are the leading actors and two particular thematic fields of action prevail: district renewal (e.g. extensive demolition of long-term vacant residential dwellings, reutilization of the cleared space, adaptation of social and technical urban infrastructure) and object-related renewal (e.g. partial demolition, restructuring and refurbishment of the building stock, adaptation and when possible conversion of social infrastructure). (ibid.).

Next to these fields of action, there are some cross-cutting issues which are also part of the programme *Stadtumbau Ost*. These include actor networking (e.g. moderation, owner site communities, temporary use, etc.), public participation and activities (e.g. image improvement, events, cultural activities, citizen-initiated open space design, etc.) as well as upgrading of open public spaces and the living environment by the local authorities, the housing industry and/or the citizens (e.g. through self-formed associations) (BMUB, 2016b).

Figure 3. Demographic development in Germany 2000-2013 (Edited by author. Source: BBSR, 2015: p. 7).



With the establishing of the funding programme *Stadtumbau Ost*, urban shrinkage was clearly identified as an issue and put on the policy agenda. Furthermore, there are already some examples of cities that experienced a dramatic demographic loss but managed to get back on their feet over the past decades by benefiting from this funding programme. Such examples include Leipzig, Dresden and Erfurt (fig. 3). These are, however, predominantly cities which have always had a particular importance as core cities within their regions. Therefore, it might be argued that they possessed a certain advantage over other, smaller cities such as Cottbus and Zwickau for example (with ca. 100.000 inhabitants).

While it cannot be denied that East Germany has indeed been making an effort to tackle the consequences of urban shrinkage, there are scholars (Bernt et al., 2014; Bratfisch, 2007) who share a more critical view of the adopted approach: "[…] shrinkage was clearly and directly placed on the policy agenda — but mainly as a housing problem and as an issue to be tackled only through agreement between public planning, real estate and banking interests. As a consequence, the federal programme was substantially designed around the needs of these actors and focused on large housing estates in which these companies owned the majority of their properties" (Bernt et al., 2014: p. 1755).

Against this background, it is only logical to question whether the policies designed for dealing with urban shrinkage in East Germany were meaningfully aligned with local peculiarities or whether a set of tools was deliberately developed in order for housing companies to get funding and avoid bankruptcy. While it is difficult to address this issue within the scope of this thesis, it is essential to remember the case of East Germany as an example of what was necessary for the problem of urban shrinkage to gain political importance and create some actual dynamics: "[…] any attempt to tackle shrinkage must be brought in line with the interests and intentions of powerful actors (the political stream) in order to be successful" (ibid., p. 1763).

3.4.2. The case of Poland

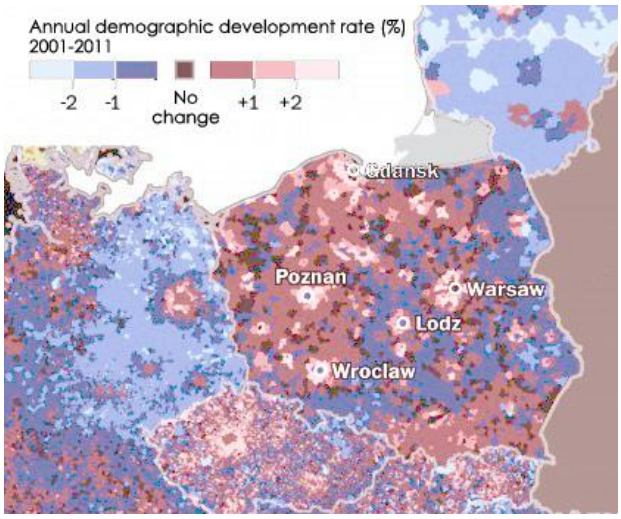
Urban shrinkage emerged as a phenomenon in some Polish cities already before the end of the socialist regime. Mainly old industrial cities (e.g. in Upper Silesia) started losing population already in the 1970s. This had to do with the stagnation in the textile and the heavy industry (e.g. mining) which constituted the prevailing economic activity in these cities. At the same time, birth rates in Polish cities were dropping already in the 1980s. This brought with itself a slowdown in the overall growth of urban population. Last, but not least, the decrease in rural-urban migrations in the 1980s contributed to the further stagnation of population numbers in urban areas. (Haase, 2011: p. 4).

However, severe demographic decline started to be the reality of numerous big cities only after the breakdown of socialism when this tendency was accelerated. The post-socialist transformation led not only to demographic but to economic shrinkage as well. This was recognized by some immediate symptoms – job losses, increasing number of brownfields and suburbanization (ibid., p. 2). Furthermore, it resulted in the polarized development of Polish cities (fig. 4). While some metropolitan areas with diversified economic profiles continued to thrive (Warsaw, Gdansk, Poznan, Wroclaw, etc.), others, mainly the peripheral and monofunctional ones (Katowice, Sosnowiec, etc.) experienced severe depopulation and economic collapse (Stryjakiewicz, Ciesiółka & Jaroszewska, 2011: p. 11). This is how the pattern of urban shrinkage in Poland evolved after the end of socialism.

According to Haase (2011), between 1990 and 2009, Polish cities with more than 100.000 inhabitants lost around 4% of their population on average (p. 3). Old industrial cities were hit the hardest. Within this period of almost twenty years some of them lost between 12% (Lodz) and 21% (Bytom). The main reasons for these severe population losses are to be sought in work-related out-migration and urban-rural migration on the one hand, and the drop of birth rates and rise of death rates on the other (ibid., p. 3). The easier access to the labour market of Western European countries especially after Poland's EU accession in 2004 also had an impact on work-related migration trends. Still, suburbanization is regarded as the main factor contributing to urban shrinkage after the millennium. In spite of the demographic and economic shrinking of cities, there has always been a demand for new residential territories due to persisting suburbanization trends (ibid., p. 4). With this in view, it is interesting to explore how the issue of urban shrinkage was addressed by Polish policymakers.

In the first decades after the political changes of 1989, shrinking population was perceived as a relief due to the existing pressure on the Polish real estate

Figure 4. Annual demographic development rate in Poland 2001-2011 (Edits by author. Source: The Washington Post, 2015).



market. Meanwhile, mainly due to age distortion and the disappearance of entire economic sectors within cities, urban shrinkage started to be perceived as an actual problem for the future development of Polish cities. In some cities, physical decay and high vacancy rates were some alarming signals as well. According to Haase (2011), there is not a base for comparison with East German cities regarding the impact on the real estate market though. Residential vacancy rates are barely an issue for Polish cities where buildings are being demolished only in cases of severe structural or technical deficiencies (p. 3).

Putting this aspect aside, finding new functionalities for the consistently increasing number of brownfields becomes a more difficult task for planners and local authorities. In addition, the underuse of public technical and social infrastructure represents a serious financial burden for municipalities. Taking all these aspects into consideration, the elaboration of strategies for coping with the implications of urban shrinkage is currently a task for politicians and urban planners (ibid., p. 2).

Against this background, the question why shrinkage was not a topic on the political and planning agenda of Poland until some years ago arises. Like in East Germany, also in Poland there was the prevalent expectation for urban growth due to modernization measures aimed at catching up with Western European countries in the post-socialist period. The withdrawal of state actors as a result of liberalization coupled with the weak position of planning representatives and the lacking financial stability of municipalities are regarded as the main reasons for the inability of Polish cities to take a timely control over the unexpected reality (ibid., p. 7). According to Bernt et al. (2014), the future development of cities was imagined by local authorities only in the direction of growth and therefore left in the hands of investors pursuing their own interests: "[…] policies towards urban shrinkage focused on attracting new investors at a regional level and thus hardly included any local interaction at all, at least not on a noteworthy scale" (p. 1761). This orientation solely towards economic growth and the recovery of the typical for the cities experiencing shrinkage heavy industry sectors is interpreted by scholars as a "mental lock-in" of local policymakers who are unwilling to take responsibility and develop their own strategy aligned with the current strengths and weaknesses of the cities. Furthermore, it is seen as an indicator that: "[…] raising the issue of shrinkage becomes politically very problematic: it would potentially increase the burden of issues on which local voters would make the municipal government responsible, without opening up financial and legal resources that would be necessary for implementing any meaningful course of action" (ibid., p. 1760).

The way that government officials, local authorities and even scientists perceived the development processes in Polish cities postponed the gaining of awareness of the urban shrinkage problem. Suburbanization was accepted as a natural process and a logical consequence of social liberalisation rather than a land use problem. While dropping birth rates were a matter of public discussion, their potential impact on the real estate market and the utilization of urban infrastructure was hardly considered. Vacancy rates did not (yet) appear to be an issue and the decommissioning of technical urban infrastruc-

ture was viewed as a future consequence of economic rather than demographic decline (Haase, 2011: p. 7).

In this context, it could be argued that Polish policymakers failed to adopt a holistic approach to dealing with the consequences of urban shrinkage. This model of political action, especially at the local level, is still difficult to emerge in post-socialist countries due to the decades of making decisions at the national level and the role of municipalities consisting in simply channelling them down. In this regard, Stryjakiewicz, Ciesiółka & Jaroszewska (2011) argue that there still is "a strong reliance upon policies formulated by the central government and weakness of local programmes and strategies" (p. 14). Therefore, at present "[…] non-decisions and purposeful ignorance or tabooing of shrinkage and the problems it causes become a rational option for local policymakers, at least in terms of public discourse. In reality, this option leads to a vicious circle of constant decline. This situation, coupled with a weak opposition, indicates that raising awareness of shrinkage is a political rather than a cognitive challenge" (Bernt et al., 2014: p. 1760).

Eventually, civil protests managed to raise awareness of the problem of urban shrinkage particularly in old industrial cities. This happened as a result of the public discontent and rejection of local political action aimed only at encouraging investment activities. An example in this regard is the case of Bytom where "the eviction of 600 households from the Karb district (to facilitate the expansion of mining) and the demolition of a historically valuable residential building in the Rozbark district […] received national media coverage" (ibid., pp. 1759-1760). So far, this is how, on an ad hoc basis, the attention in Poland is drawn to the lack of an integrated approach to dealing with urban shrinkage.

Despite missing a coherent strategy addressing this issue, there are some measures taken at the local level to counteract the negative implications of urban shrinkage. These include the renewal of housing quarters marked by physical decay, the revitalization of brownfields and post-military areas by changing their functions, the revitalization of elements of the cultural heritage which is regarded as possible impulse for the development of tourism, the creation of office space for small and medium-sized enterprises (SMEs), IT services and research and development (R&D), the construction and expansion of university facilities, etc. (Stryjakiewicz, Ciesiółka & Jaroszewska, 2011: p. 16). Their implementation, however, is mostly dependent on European funding in form of subsidies from the European Regional Development Fund (ERDF) and the European Social Fund (ESF) or loans from European initiatives like JESSICA (ibid., p. 15).

Against this background, some progress owed to the use of European expertise and financial support has already been made. First, specific criteria for choosing urban areas in need of assistance have been designed. Second, measures necessary for fostering economic development have been identified and ways of dealing with social problems have been proposed. Third, multi-year financial plans and institutional framework (e.g. local revitalisation programmes) for the revitalization of cities were created. Last, but not least, a forum for exchange of knowledge and experience has been established (ibid., p. 17).

The introduction of the so-called Special Economic Zones (SEZ) is another coping mechanism of Poland designed to foster the future development of urban areas hit the hardest by the transformation to a free market economy. It is explicitly aimed at accelerating the economic growth of cities by redeveloping post-industrial property and infrastructure, thus creating new jobs and attracting investors (Stryjakiewicz, Ciesiółka & Jaroszewska, 2011: p. 20). These zones represent spatially "delimited parts of [the] country's territory in which economic activity can be conducted on preferential terms, involving […] tax exemptions, provision of infrastructure and legal assistance" (ibid., p. 19). Next to the offered assistance during the investment process, further advantages of the SEZ include the clustering of companies with a similar profile and the adjustment of curricula at schools and universities to the needs of investors (ibid.).

On the whole, the case study analysis indicated that Polish municipalities are mainly interested in fostering economic growth which is viewed as a panacea for all negative impacts of urban shrinkage. Moreover, it appears that there is still a missing understanding of the complexity of the process of transformation that cities have been going through. Therefore, integrated and coherent strategies for their future development are currently not being developed by local authorities. Raising awareness of other problems, unrelated to the economic performance of cities, is left in the hands of citizens. With this in view, the following questions arise: Even if Poland manages to attract enough investors to accelerate the economic development of the old industrial cities, will this be a sufficient prerequisite for them to become attractive to people? Would economic growth guarantee a persisting slowdown of negative demographic trends?

3.4.3. Summary of the main findings

Comparing the cases of East Germany and Poland allowed to gain insight into the process of acknowledging shrinkage as an issue and formulating policies for dealing with it and implementing them at the municipal and (sometimes) regional levels.

First, the lack of an integrated, holistic approach is pointed out by scholars as a weakness of current local policies. However, East Germany seems to be ahead of Poland in this regard, as they have been developing their Integrated Urban Development Concepts for more than 15 years as a necessary prerequisite to get funding from *Stadtumbau Ost*. Nevertheless, the German way of tackling urban shrinkage is criticized by some scholars because the issue was taken up by a particular policy field rather than by urban development policy as such (Bernt et al., 2014: p. 1762).

Second, the process of getting shrinkage on to the policy and planning agenda appears to be a very complex and difficult process. In this regard, both in the cases of East Germany and Poland, it can be argued that shrinkage has barely become a guiding issue for more than one policy field at a time: "Thus, instead of a general acceptance or rejection of shrinkage, we found alterations in the fields of urban renewal, changes in infrastructure provision, modification in economic development policies, and so forth" (ibid., p. 1763).

Last, but not least, neither in Germany, nor in Poland was globalization explicitly taken into account as an additional factor that has an impact on cities. While

it cannot be influenced by national, regional or local actions, it still has to be addressed in the process of elaborating a vision for future development. Therefore, this could be regarded as a mutual weakness of the political and planning response to urban shrinkage both in Germany and Poland.

4.SHORT PORTRAIT OF BULGARIA

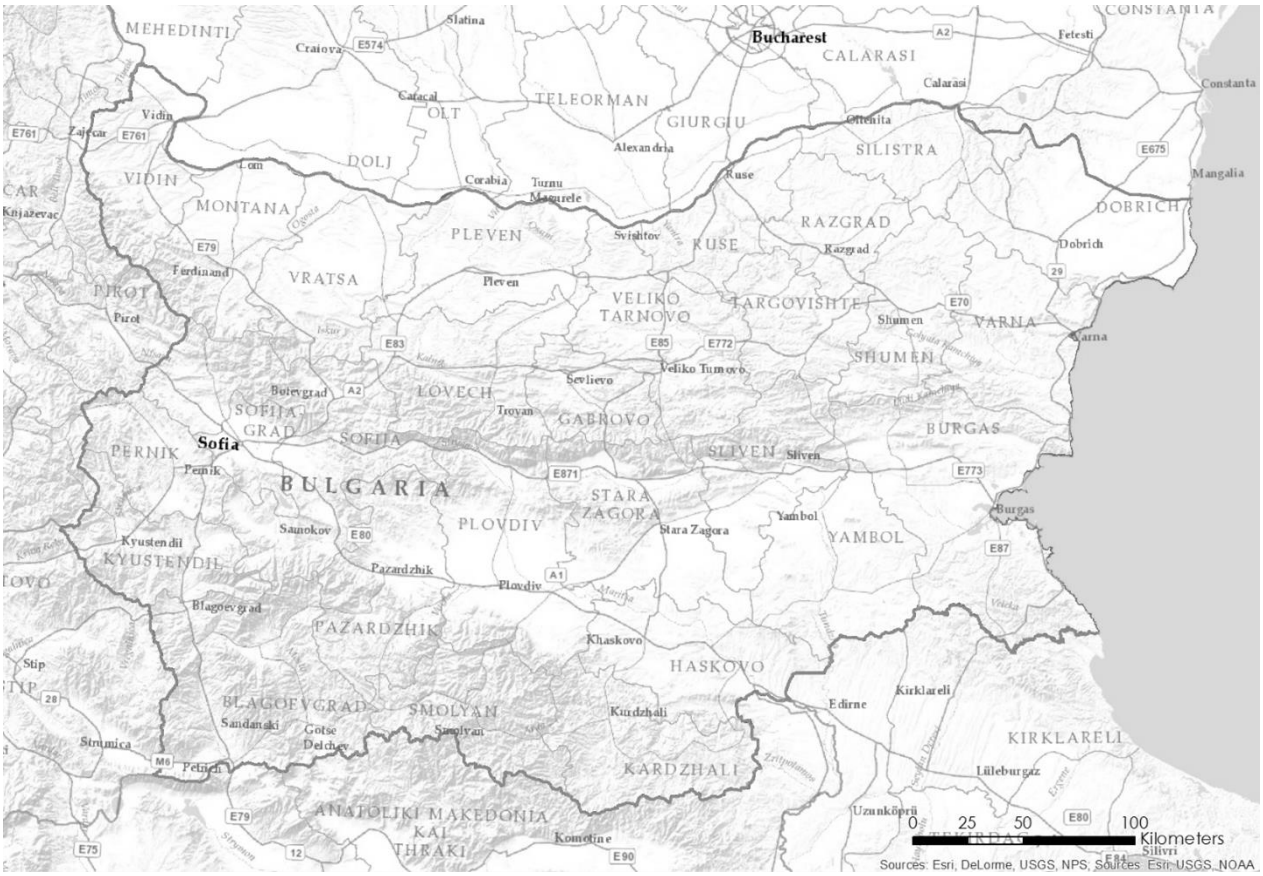
The next few paragraphs will provide general information about the location and topology, the demography, the spatial administrative structure and the economy of Bulgaria. This will ensure a better understanding of the processes of political, economic and administrative transformation which are going to be studied in more detail in the following chapter.

4.1.Location and topology

Bulgaria is located in the southeastern part of Europe. It borders Romania and the river of Danube to the north, Serbia and Macedonia to the west, Greece and Turkey to the south and the Black Sea to the east (fig. 5). The country has an overall territory of 111.000 square kilometres and a total population of approximately 7.2 million people (NSI, 2016a).

In terms of topology, the most notable features of Bulgaria are the Danubian Plain, the Balkan Mountains, the Thracian Plain, and the Rhodope, Rila and Pirin Mountains. The Balkan Mountains cross the entire territory of the country in its middle from West to East and thus separate it in two distinct parts – Northern and Southern Bulgaria. While the northern part is mostly plane, the southern part is predominantly mountainous with the exception of the Thracian Plain beginning southeast of Sofia and spreading itself to the Black Sea coast. The country has a dense network of around 540 rivers, which, however, are relatively small and with low water levels (Wikipedia, 2017a).

Figure 5. Physical map of Bulgaria (Own visualization. Source: ESRI ArcGIS World Terrain Base).



4.2. Population numbers and density

Bulgaria reached its population peak of almost 9 million people in the 1980s (NSI, 2009: p. 6). Since then, the country has been experiencing constant demographic decline. In the end of 2015 its total population was estimated at approximately 7.2 million people (NSI, 2016a). This accounts for a population loss of nearly 20% over a period of 35 years.

In 2015, the population density of Bulgaria was 64 people per square kilometre of land area (NSI, 2016b: p. 19). Figure 6 illustrates how it has been changing over the years between 1961 and 2015 according to data of the World Bank.

However, the population is not evenly distributed across the territory of the country. On the contrary, there is a concentration of people in the capital of Sofia and the big administrative cities at the district level. The network of administrative cities is illustrated in figure 7. According to data from 2015, the biggest city is the capital of Sofia (1.2 million inhabitants), followed by the city of Plovdiv (341.000 inhabitants) located in the southern part of the country, in the Thracian Plain. Other big cities include

Figure 6. Population density of Bulgaria (1961-2015) (Own visualization. Source: The World Bank, 2016).

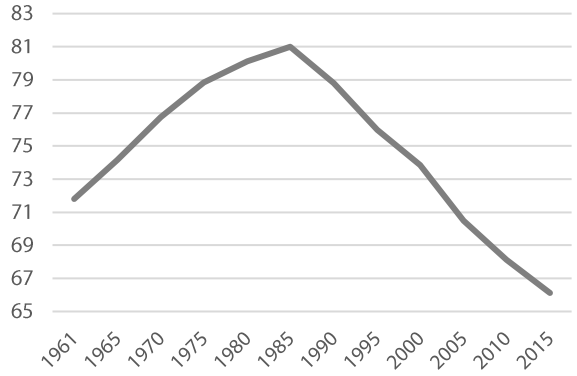
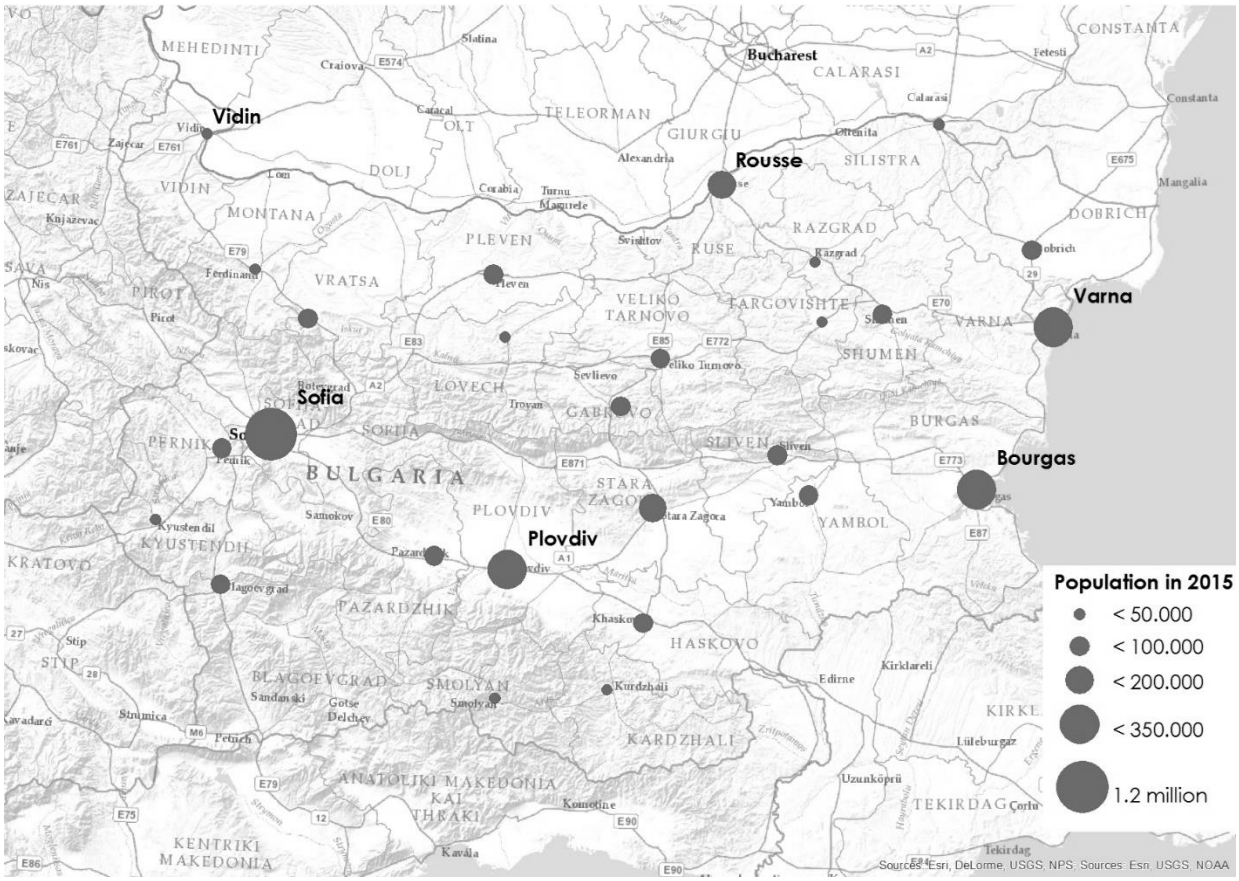


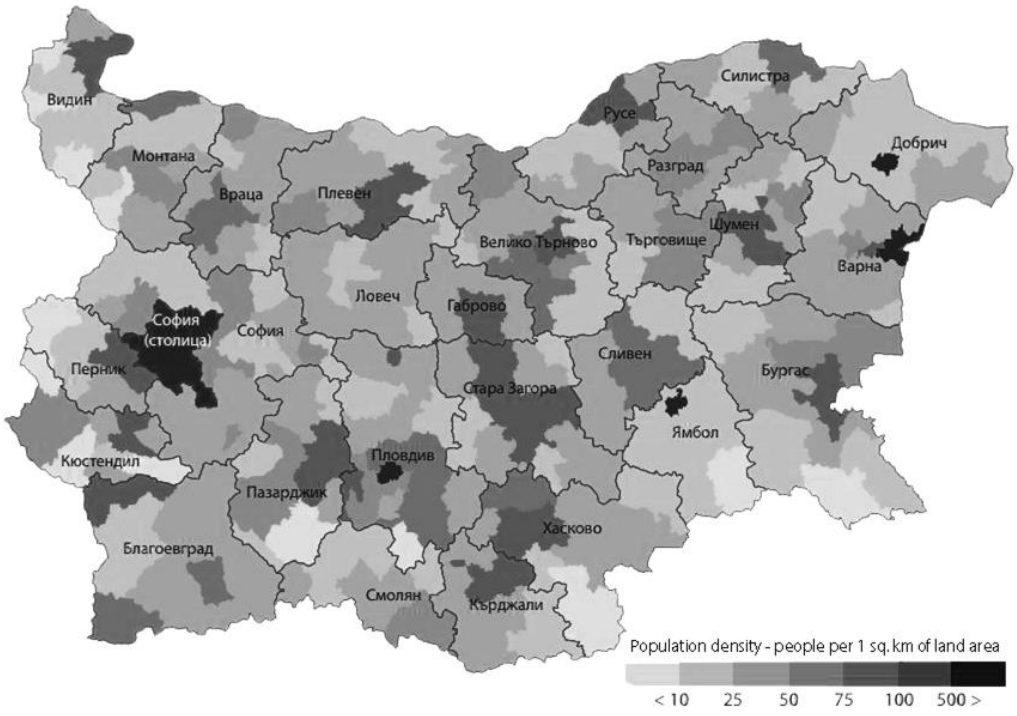
Figure 7. Network of administrative cities at the district level (Own visualization. Source: NSI, 2017a, OpenStreetMap).



Varna (334.000 inhabitants) and Bourgas (203.000 inhabitants), both located on the Black Sea coast. The only city with more than 100.000 people in northern Bulgaria is the city of Rousse. With its 145.000 inhabitants, Rousse is the fifth largest city in Bulgaria. (NSI, 2017a).

Population density at the district level is presented in figure 8. A visual inspection of the map allows to conclude that the most populated districts are those which contain cities with more than 100.000 inhabitants (cf. fig. 7). Furthermore, except for the Black Sea coast, districts located in the periphery of the country are less densely populated than the others.

Figure 8. Population density at the district level in 2015 (Edits by author. Source: NSI, 2016b: p. 28).



The urbanization rate in Bulgaria has been constantly increasing over the years. The most dramatic rise was during the socialist time, when the population living in cities increased from 33,6% in 1950s to 64,8% in the mid-1980s. This is to be attributed to the rapid industrialization which led to an increased need of labour force in the cities. Since the breakdown of socialism, the share of people living in urban areas has been further increasing, yet with a much slower pace – from 67,2% in 1992 to 73,1% in 2015. (NSI, 2016b: p. 19).

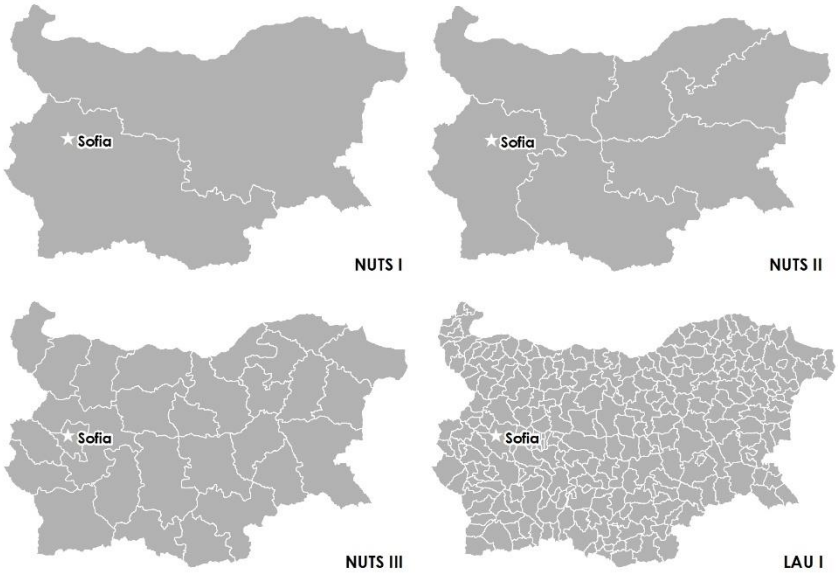
4.3. Spatial administrative structure

Bulgaria's spatial administrative structure is presented in figure 9. The country is administratively divided in regions (NUTS I and NUTS II), districts (NUTS III) and municipalities (LAU I[1]). The power of local governance is generally delegated to the municipal level. However, the district level has important control functions of its own. While the division in districts and municipalities is traditional for the Bulgarian spatial context because it dates back to the socialist time, the regional level was introduced rather recently following EU-recommendations during the accession period of Bulgaria. Therefore, the NUTS I and NUTS II levels mostly serve the objective of obtaining statistical data for comparison with the other member

[1] "To meet the demand for statistics at local level, Eurostat has set up a system of Local Administrative Units (LAUs) compatible with NUTS" (Eurostat, 2017).

states. More detail on the responsibilities of the different levels of administration will be provided in the next chapter.

Figure 9. Bulgarian spatial administrative structure (Own visualization. Source: Eurostat, 2011: pp. 19-23).



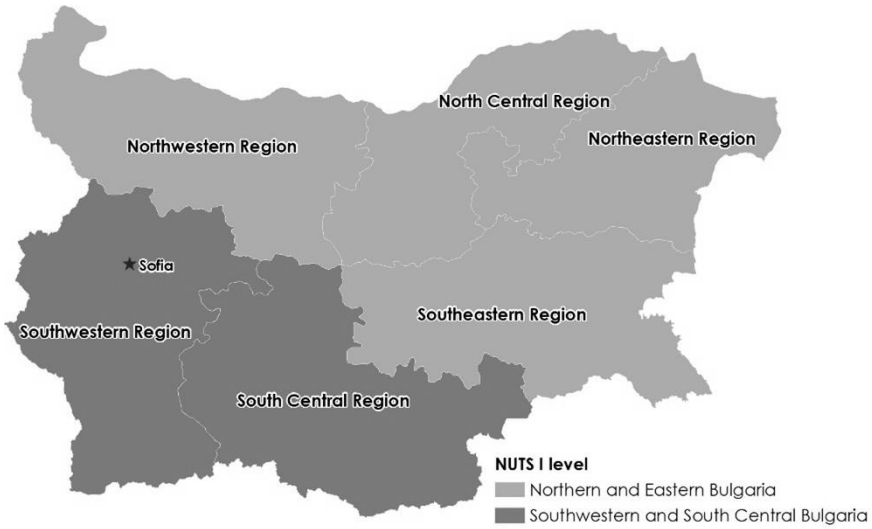
The following paragraphs aim to deliver background information about the different administrative levels and their spatial composition.

There is a total of 264 municipalities in Bulgaria and each one has its own administrative city that they are usually named after. Within one municipality there is generally more than one settlement. These could either be cities or villages depending on whether they have an urban or a rural character and functions. The number of inhabitants also plays a role as to whether a settlement is administratively defined as a city or a village.

One level higher than the municipalities are the 28 districts. Except for the district of Sofia City, each district is composed of numerous municipalities. However, the number of municipalities within one district can vary significantly among districts (from 4 to 22). Each district has its administrative city which is also the administrative city of the most populous municipality within the district. The capital of Sofia is the administrative city of two districts – the district of Sofia City and the district of Sofia Province. (Wikipedia, 2016a).

At the regional level there are six NUTS II regions which are comprised of four to five districts. The NUTS I regions, on the other hand, are only two and they are composed of the NUTS II regions (fig. 10). However, the NUTS I Region of Southwestern and South Central Bulgaria is comprised of two NUTS II regions and the NUTS I Region of Northern and Eastern Bulgaria encompasses the territory of four NUTS II regions.

Figure 10. Composition of the NUTS I regions (Own visualization. Source: Eurostat, 2011: pp. 19-23).



The decision for this spatial division at the NUTS I level intended to offset the difference between the economic development of northern and southern Bulgaria. The strong influence of Sofia on the overall economic performance of the Southwestern region was supposed to be neutralized by the inclusion of the well-performing Southeastern region to the NUTS I Region of Northern and Eastern Bulgaria (table 1).

Table 1. GVA and GDP by regions (Source: NSI, 2017b).

		GVA by economic sector, Million BGN			GDP, Million BGN	GDP per capita, BGN
		Agriculture	Industry	Services		
Bulgaria		**3 664**	**21 335**	**51 547**	**88 571**	**12 339**
NUTS I Regions	NUTS II Regions					
Northern and Eastern Bulgaria		2 351	10 100	16 563	33 572	9 290
	Northwestern	625	1 723	2 848	6 013	7 606
	North Central	587	2 055	3 475	7 078	8 627
	Northeastern	605	2 418	5 321	9 655	10 193
	Southeastern	534	3 903	4 919	10 826	10 256
Southwestern and South Central Bulgaria		1 313	11 236	34 984	54 999	15 431
	Southwestern	549	7 119	29 001	42 430	19 984
	South Central	763	4 117	5 983	12 569	8 722

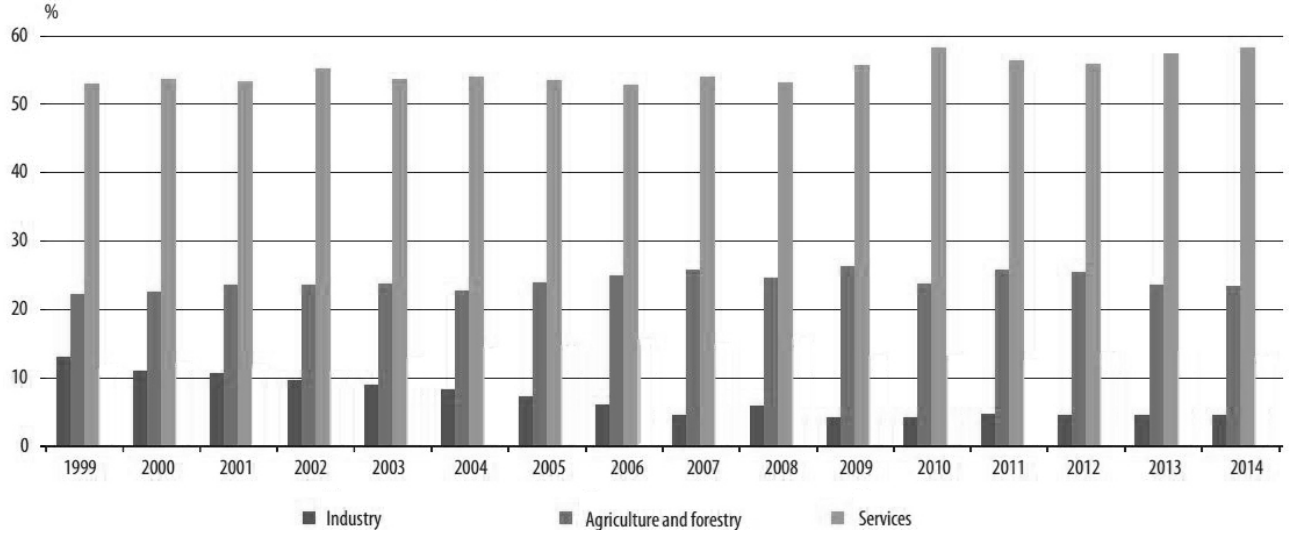
Thus, intraregional disparities between northern and southern Bulgaria have been artificially softened at least to some extent.

4.4.Economic profile

After the breakdown of the socialist regime, the economy of Bulgaria underwent a profound transformation. This process is going to be explored in more detail in chapter 5. The next few paragraphs, on the other hand, aim to deliver some general information about the economic situation in post-socialist Bulgaria.

Figure 11 offers an overview of how the GDP structure by economic sectors evolved between 1999 and 2014. The service sector has been generating the largest share of Bulgaria's GDP during the whole period. Furthermore, it has experienced some growth from approximately 53% in 1999 to nearly 60% in 2014. The contribution of the industrial sector, however, has been continuously declining. While in 1999 it accounted for more than 10% of the total GDP, in 2014 its share barely reached 5%. The share of agriculture, on the other hand, has been

Figure 11. Structure of GDP by economic sector (Edits by author. Source: NSI, 2014: p. 22).



constantly increasing until 2011 when it reached more than 25% of the total GDP. Since then, there has been a slight decline in its contribution.

According to an analysis carried out by the Bulgarian Industrial Association (2016), within a period of 15 years (2001-2015), exports of Bulgaria, measured in US dollars, increased 4 times (p. 1). Drop was recorded only between 2009 and 2015 as a result of the belated implications of the global financial crisis in the Bulgarian context. The main markets for Bulgarian goods are Germany and Italy, followed by Turkey, Romania and Greece. There has been a strong growth in Bulgarian exports to China, Poland, Czech Republic and Egypt and a noticeable retreat in exports to the United States and Macedonia (ibid.). Leading product groups for export include: mineral fuels, copper and copper products, iron and steel, electrical and electronic equipment, machinery, pharmaceutical products, clothing, knitwear, tobacco, corn, oilseeds, etc. (BIA, 2013: pp. 1-2).

In regard to foreign direct investments (FDI), the Southwestern region manages to attract more FDI than all the other regions combined (table 2). This is to be attributed to the strong presence of the capital city of Sofia. In 2015, the Southwestern region accumulated more than 14 billion EUR. The Southeastern region comes second with nearly 3 billion EUR, followed by the South Central region with approximately 2.4 billion EUR and the Northeastern region with 2.2 billion EUR.

Table 2. Distribution of FDI to Bulgaria's NUTS II regions in 2015 (Source: NSI, 2016c).

NUTS II regions	FDI in thousand EUR
Northwestern region	620 794.8
North Central region	876 758.0
Northeastern region	2 271 913.7
Southwestern region	14 053 146.8
South Central region	2 443 603.8
Southeastern region	2 897 055.6

It can be concluded that the distribution of FDI in Bulgaria is strongly related to the presence of big cities and touristic potential because the cities of Plovdiv, Bourgas and Varna are all located in the three NUTS II regions (besides the Southwestern region) which manage to accumulate somewhat bigger shares of FDI. The Black Sea coast and the Rhodope Mountains represent much of the touristic potential of Bulgaria and they are concentrated in these three regions as well. The Northwestern and North Central regions, on the other hand, are seriously lagging behind which is mainly to be attributed to the lack of core urban areas with strong economic presence.

5.TRANSFORMATION PROCESSES IN BULGARIA

To study the causes for the complex and continuous process of urban transformation in post-socialist Bulgaria, an overview of its urban development history will be provided first. Exploring the main patterns of spatial transformation over the years aims to provide an understanding of how the socialist spatial order was formed. Second, the nature of the political, economic and administrative structural changes after the fall of the Iron Curtain will be explored. In parallel, their impact on the country's spatial development is going to be closely examined. Planning instruments and policies elaborated during the period of transition (which continues until present day) will be analysed as well. As a result, the weaknesses in the current administrative architecture and policy design which have been impeding the elaboration of strategies for diminishing regional disparities and therefore fostering the future development of shrinking cities will be identified. The process of fiscal decentralization is also going to be explored in order to estimate to what extent are Bulgarian municipalities financially independent and thus capable of implementing their strategies.

5.1. History of urban development in Bulgaria[2]

The Liberation of Bulgaria from the Ottoman Empire in 1878 marks the beginning of the Third Bulgarian State. In terms of territorial changes there are some major events which occurred in the years immediately after the Russo-Turkish War and led to alterations of Bulgaria's borders. These include the *San-Stefano Treaty* in March 1878, the *Berlin Treaty* in July 1878, the *Treaty of Neuilly-sur-Seine* in 1919 and the *Treaty of Craiova* in 1940. Besides these territorial changes which were the result of foreign policy interests and could not have been prevented by the Bulgarian government whose political position was still very weak, there were radical changes in the administrative structure which abolished almost completely any legacies left from the Ottoman governance. (Yanchev, 2012: p. 26).

The *Human Settlements Public Work in the Kingdom of Bulgaria Act* from 1882 constitutes the first step towards the institutionalization of spatial planning. It regulated the development of territories within human settlements. (ibid., pp. 26-27).

In the beginning of the 20th century the Balkan Peninsula remained an arena of continuous wars which caused the migration of a vast amount of population towards Bulgaria. Some years later, the industrialization of Bulgarian cities began and, among other things, resulted in creating more job opportunities. Thus, cities became more attractive and started to grow. On the one hand, they were growing due to continuous immigration and on the other, due to urbanization. As a result, spatial planning was faced with the challenge of providing additional space for urban development and therefore "new territories were continuously annexed to the building limits of the towns and [the] surrounding them villages" (ibid., p. 27). Sofia is an example for extreme urban growth during the first 30 years of the existence of

[2] Third Bulgarian State (1878 – present)

the Third Bulgarian State: "[…] the city of Sofia […] managed to grow in population from 20.000 to 105.000 people for the period 1879-1910" (ibid.).

The next significant change in planning legislation consists in updating *The Human Settlements Public Work Act* in 1941. The alteration of the document aimed to introduce a certain division of planning instruments into different categories: street structure, land use, etc. Furthermore, it led to the establishing of building standards and required the adherence of construction activities initiated in urban settlements. The Act remained valid until 1949 (Kovachev, 2009).

After the Second World War, a "strong shift in territorial values" occurred in Bulgaria as the country became a member of the Soviet Bloc together with Yugoslavia, Romania, Poland, Czechoslovakia, Hungary and East Germany (Yanchev, 2012: p. 28). The adoption of the single-party communist governmental system combined with the centrally planned economy had an inevitable impact on spatial planning as well: "[spatial planning] proceeded within the institutional and ideological framework of a single-party system; [there was a] limited local autonomy, which implied that local governments simply channelled down state decisions to the local level; and almost full state ownership of land, property and means of production" (Hirt, 2005).

The course of direction of the economic development was determined at the national level and implemented via the so-called "five-year plans" which were thus dictating the development of regions and cities as well. New economic, industrial and agricultural activities were spread throughout the territory of the country solely on the basis of political decisions. Thus, a rigid, top-down planning approach was established: "Lack of private initiative and the totalitarian governance manner guaranteed no involvement in the planning process of citizen groups or other actors whatsoever" (Yanchev, 2012: p. 28). In this regard, Hirt (2005) argues that "technocracy was the most defining characteristic of communist planning". Indeed, the technocracy of planning was yet another mechanism to exclude the public from the decision-making process: "Plans were projected predominantly by planning professionals and experts, the language of the plans [was] not understandable enough to be understood by the wider public" (Yanchev, 2012: pp. 28-29).

One of the consequences of the socialist planning policies was the further growth of Sofia. This was the result of the continuous favouring of the capital city in terms of economic development in the 1950s and 1960s (ibid., p. 29). However, in the late 1960s and the beginning of the 1970s another approach emerged. Large industrial enterprises started to be relocated to small and medium-sized towns in remote areas of the country as a way of precaution against potential "issues of peripheral backwardness" as well as in an effort to counteract continuous urbanization trends that were causing housing shortages in larger cities (Monastiriotis, 2008: p. 11). In this regard, it has to be noted that after attaining a higher level of education people were provided with jobs corresponding to their qualification and allocated to work in different cities on the basis of decisions taken by the state. The attempt to ensure equal opportunities for development to everyone was part of the dominating ideology at that time

and this ideology was in a way expressed in the allocation of economic activities and people in different parts of the country.

An important legislative Act was introduced in 1973. Its purpose was to address the whole territory of the country instead of only regulating urban settlements like the acts before. It introduced two major planning zones which aimed to control city growth – urban and countryside zones. Furthermore, a hierarchy of spatial planning instruments was set up so that big-scale visions for the future development of the whole country could be elaborated and implemented in a structured way. However, while there was a hierarchy in the implementation of the planning documents, there was at no point in time an attempt to introduce a hierarchy in the process of their creation: "No competences or responsibilities for planning were delegated to the lower levels – regions or municipalities" (Yanchev, 2012: p. 29). Instead, large planning state-owned companies were in charge of delivering plans for the spatial development at all scales: national, regional, municipal and local. The guiding principles during the elaboration process consisted in segregating the different functions of urban areas. Thus, cities were divided into the so-called *zones*: for labour, habitation, leisure, public services, etc. (ibid.). This segregation proved to be dysfunctional in the long term because it led to the creation of entirely monofunctional areas (e.g. residential neighbourhoods were referred to as *bedrooms*) and therefore excluded any chance of liveliness, unpredictableness and spontaneous interactions which could foster creativity or innovation. It was only after the breakdown of socialism when multi-functionality slowly started to emerge within urban neighbourhoods.

All in all, it can be argued that the socialist regime which lasted for more than 40 years created a very specific spatial environment which then served as an arena for the political and economic changes in Bulgaria after 1989. Perhaps one of its most important effects, however, is that it created a spirit of opposition among people. The rigidity of planning led to the reverse effect of rejecting any attempt for regulation of building or other activities related to spatial development in the early years of democracy: "The repressive experience of the state-driven planning of the territory was still fresh in the collective memory. Spatial (similar to economic) planning was totally overthrown and abandoned as limiting the entrepreneurship and economic freedom" (ibid., p. 30). This practically put planning on *standby* which eventually resulted in a delay of the elaboration of a strategy for diminishing regional disparities and thus slowing down the process of urban shrinkage which was shaped and continuously sharpened by the process of a simultaneous political and economic transformation.

5.2. Endogenous transformation processes triggering urban shrinkage

The next paragraphs are focused on exploring the endogenous factors which triggered urban shrinkage within the Bulgarian spatial context. First, the process of political transformation from a single-party socialist system to a multi-party democracy is going to be examined. Second, the transition from a centrally planned to a market economy together with its impacts on spatial planning is going to be analysed.

5.2.1. Political transformation

In December 1984, the leader of the Bulgarian Communist Party, Todor Zhivkov, began a campaign of forcible assimilation of Bulgaria's Turkish minority. His intention was all Turks to take Bulgarian names. By 1989, resistance to this policy led to riots, which resulted in multiple deaths. Pressured by senior members of the Bulgarian Communist Party, Zhivkov resigned his position on November 10th 1989. (Wikipedia, 2017b). This event marks the beginning of the demise of socialism in Bulgaria.

In the following years there was a continuous political battle between former socialists and newly formed democrats. This political instability led to numerous public protests, devaluation of the Bulgarian currency, rising unemployment rates and inflation. Another side effect consisted in the unprecedented emigration of around 1 million Bulgarians to North America and Western Europe (Yanchev, 2012: p. 30).

Years after the official fall of socialism, the successors of the Bulgarian Communist Party (who founded the Bulgarian Socialist Party) were making constant efforts to steer the Bulgarian foreign policy in the direction of Russia by encouraging Russian investments, project cooperation, etc. There were, however, also pro-European actors, mainly those from the democratic and liberal parties who declared themselves as an opposition to the attempts to bring back reminders of the socialist regime. Yet, these politicians did not share a common perspective regarding future interactions between Bulgaria and Western Europe. Instead, two main groups emerged – the first focused on values and discourses of the EU and were ready to accept, follow and furthermore contribute to the elaboration of politics at the supranational level, while the second believed in simply substituting the former leadership of the Soviet Union with the one of the European Union and regarded Bulgaria as nothing more than a satellite country to another mighty political force (ibid., p. 31). Against the background of different political beliefs, in September 1990, Bulgaria entered the PHARE programme for financial aid for political reform and preparation for EU membership (ibid., p. 33).

The attempts of the government of the Bulgarian Socialist Party headed by Zhan Videnov (1995-1997), to preserve jobs by keeping unprofitable industrial enterprises function, to repay foreign debt and to control exchange rates led the country to a deep economic crisis. Thus, the government was faced with the prospect of suspending the payments on the foreign debt. This, in turn, caused a political crisis which led to mass protests across the country and the government's resignation in December 1996. Because of the systemic failure of the Bulgarian governments to effectively manage public finances, the International Monetary Fund agreed to assist the government only on the condition of introducing a currency board. (Wikipedia, 2016b).

After the period of severe economic crisis in 1996-1997, Bulgaria elected a democratic government, headed by Ivan Kostov, which for the first time after the breakdown of socialism managed to complete its 4-year schedule (Yanchev, 2012: p. 31). It is remembered for the introduction of the currency board in July 1997 which led to the recovery of the country from the deep financial and economic crisis. The exchange rate of the Bulgarian Lev was fixed to the German mark (1000 BGN = 1 DEM). Later, when Germany introduced the euro in 1999, the exchange

rate changed to 1955.83 BGN for 1 EUR. After the denomination of the Bulgarian Lev on the 5th of July the same year, the exchange rate became 1.95 BGN = 1 EUR and it is still the same in 2017. (Wikipedia, 2016b).

With the introduction of the currency board, Bulgaria began to attract foreign portfolio investments (FPI) which led to serious economic growth. Some key indicators before and after the introduction of the currency board are summarized in table 3.

Table 3. Key economic indicators before and after the introduction of the currency board in 1997 (Source: Wikipedia, 2016b).

Indicators (annual average)	**1990-1997**	**1998-2002**
Inflation	210%	5,7%
GDP growth	-4,6%	4,1%
Investments growth	-8,8%	20%
Budget deficit	-6,3%	-0,1%
Government debt / GDP	168%	75%

Besides the highlighted indicators, the base interest rate of the Bulgarian National Bank changed as well. From 200% at peak times of the economic crisis in 1996-1997, it decreased to 5,2% by the end of 1998. Thus, the banking system was stabilized as well (ibid.).

Another important action taken by the government of Ivan Kostov (1997-2001) was issuing the candidacy of Bulgaria for EU membership in 1998.

The accession period was marked by active aligning of the country's legal framework with this of the EU. The government was complying with EU directives in different sectors and therefore started implementing some planning instruments for the first time (e.g. strategic development documents) (Yanchev, 2012: p. 31).

In 2004 Bulgaria became a member of NATO and 3 years later, in 2007, officially entered the European Union together with Romania. The country started to absorb European funding through the different Operational Programmes and was thus able to implement its planning policies more actively with a project-based approach.

During these 10 years of EU membership Bulgaria managed to achieve some progress in its development as a whole. However, political instability remained and had its escalations during the years (e.g. the protests in the summer of 2013). Furthermore, corruption at all levels of the public administration impeded significantly the efficient and quick development in all sectors. Numerous schemes with EU funds regarding illegal construction were revealed: "In the first years, there have been identified abuses of power and frauds with adoption of EU funds. The problems were created mainly because of the unclear management of European money" (ibid., p. 55). However, after the EU froze some of the funds as a counteractive measure, "an administration reform was passed and a new Ministry of European Funds had been created, responsible especially for auditing and supervising all spending practices connected to EU funds" (ibid.). Thus, cooperation and partnership between Bulgarian institutions and EU authorities were eventually strengthened. Still, corruption continues to be one of the main issues of Bulgarian public administration today.

Currently, Bulgaria is on the verge of yet another political crisis. After the government resigned at its own will because the candidate nominated for president by the leading political party "GERB" (*from Bulgarian: Citizens for European development of Bulgaria*) was defeated in the elections of November 2016, the

country is currently operating with a caretaker government and awaits elections for a new government in the spring of 2017.

In light of these events, issues such as the demographic crisis and regional disparities, let alone urban shrinkage which is barely recognized as an existing phenomenon within the spatial reality of Bulgaria, are currently not drawing enough attention and are therefore left somewhere at the bottom of the priority list of policymakers.

5.2.2. Economic transformation

To make the process of economic transformation easier to understand, a short summary of the economic processes in Bulgaria in the years behind the Iron Curtain will be provided first.

During the socialist regime free market mechanisms from the capitalist time were exchanged with a centrally planned economy. In December 1948, a strategy for building the foundations of socialism in Bulgaria was outlined. It consisted in the industrialization of the country and the collectivization and mechanisation of agriculture. Industrialization was proclaimed as the main goal of the economic policy of the Socialist Party during the first years of the regime. It was considered as the way to provide the material and technical base for the socialist doctrine and thus ensure its influence on other economic sectors as well. Thus, the emphasis was put on the rapid development of heavy industry with a specific focus on electricity production, extractive industry, metallurgy, mechanical engineering and chemical industry. (Ivanov, 2007: pp. 119-120). Agricultural land, on the other hand, was forcibly nationalized after 1944 and grouped into collective farms (Yanchev, 2012: p. 33).

The path of the country's socio-economic development was outlined in the so-called 5-year-plans. These were based on the strictly defined directives of the regular party conventions. As a result of the implementation of the first two 5-year-plans, Bulgaria turned into an industrial-agrarian country with a developed industry and a mechanised agriculture. The ratio between industry and agriculture was changed to 68:32 in 1957. (Ivanov, 2007: pp. 121-122).

Further on, with the implementation of next 5-year-plans, the economic development was fostered by a process of modernization of all economic sectors, raising labour productivity and efficiency. Electrification of production processes, introduction of complex mechanisation, modernization of the technical base, expansion of automatization and the use of chemicals aimed to further develop the different agricultural sectors. In 1975, the ratio between industry and agriculture was already 83:17. (ibid., p. 123). The energy sector, the iron and steel metallurgy, the machinery construction, metalworking and the chemical industry were the leading industrial sectors and significantly increased their shares in the overall industrial production from 18,4% in 1952 to 42,9% in 1979. (ibid., p. 132).

The largest share of exported goods during the socialist time was from machinery production – agricultural machinery, ships, carriages, etc. The country also exported ferrous metals, cigarettes and agricultural production. Bulgaria imported mostly machinery equipment, fuels, mineral resources and metals. For decades, Bulgarian foreign trade was developed under the conditions of a constantly evolving and intensifying economic integration with the member states of the Council for Mutual Economic Assistance

(CMEA)[3]. The economic relations with these countries accounted for 75% of the import and 78% of the export of Bulgaria in 1976 (Ivanov, 2007: pp. 145-146).

With this in view, after the political changes in 1989, post-socialist Bulgaria went through a profound transformation from a centrally planned to a market economy. Due to the political repression over the last decades, the new slogan was "less government control and more freedom for private economic activities" (Yanchev, 2012: p. 30). Following this vision, economic growth and welfare was supposed to be achieved.

Perhaps one of the most significant aspects of the economic transformation was the process of land restitution which started right away after the political changes in 1989: "Land restitution and privatization might be assumed as one of the most significant spatial transformations, not only in Bulgaria, but equally in the whole former Soviet bloc" (ibid., p. 33). First, the agricultural land which was previously nationalized, was given back either in its real borders or compensated with the same quantity and quality in another nearby location. The next step was the privatization of around 700.000 residential dwellings in social housing blocks in favour of their present inhabitants. By the end of 1999 all land including a significant number of large state-owned industrial enterprises were already in the hands of private owners. (ibid.). This is how people gained the right to invest and develop their land. Eventually, this process resulted in the uncontrolled development of the territory, especially in big cities, mountainous areas, and settlements on the Black Sea coast.

The common belief among Bulgarians is that during the process of privatization there were numerous schemes and land speculations. Many state-owned industrial enterprises, for example, were literally sold for a token amount under the pretext that they are highly unprofitable and even indebted. In reality, the people who were in charge of the sale were interested to seal such deals because they were getting money under the table from the private buyers. Thus, within less than a decade, the state lost millions.

According to Altrock et al. (2006) "the divestiture of the socialist production units […] also effectively ended the dominant influence of socialist industrial policy on settlement systems" (p. 3). The distributive character of population within the country's territory based solely on workforce demand had stopped. This, however, was one of the factors which reinforced regional disparities in the long term. Monastiriotis (2008) argues that while "in terms of GDP per capita, inter-district disparities [NUTS III level] have been reasonably low and increased only marginally since 1995, […] disparities for the whole of the country, including the top-five districts, have been widening rather fast, almost doubling since 1998, suggesting a clear pattern of polarization between the most dynamic regions and the rest of the country" (pp. 7-8). The causes for this trend can be sought in the fact that after 1997 "the economic take-off nationally favoured particularly the main ur-

[3] These included: the Soviet Union, Czechoslovakia, Hungary, Poland, Romania, East Germany, Albania (1949-1961), Mongolia (since 1962), Cuba (since 1972) and Vietnam (since 1978) (Wikipedia, 2017c).

ban areas (Sofia, Stara Zagora, Bourgas, Varna)" (Monastiriotis, 2008: p. 7) which, in turn, encouraged internal migration towards these urban cores of national and regional development. FDI were mainly concentrated in the Southwestern region (NUTS II), which in per capita terms managed to attract "up to ten times more cumulative FDI flows than the South Central region – the second, in absolute terms, FDI location" (ibid.). Therefore, the domination of the capital city of Sofia and its region was further reinforced.

Yet, Spiridonova (2002) argues that disparities across NUTS II regions remained rather low by international and European standards (p. 17). It is at the district (NUTS III) and municipal (LAU I) level where discrepancies in the development were more obvious: "around 75% of disparities are intra-NUTS III, with almost every top-5 district (NUTS III) having at least one bottom-10% municipality" (Monastiriotis, 2008: p. 9).

The strong reforms after 1997 managed to foster the economic development of Bulgaria and in the period 2002-2007 the annual growth of the economy was between 4,1% and 6,6%. Furthermore, GDP almost doubled, unemployment rates decreased significantly from 20% to 5,6% and FDI increased 4,5 times. According to Yanchev (2012), this period "was marked with rise of real estate crediting and building production resulting in wave of new development of settlements – in bigger cities as well as in the mountain and sea coastal resorts" (p. 31).

Since more than a third of all FDI in Bulgaria were concentrated in the real estate market, this was the sector which was hit the hardest by the global financial crisis in the end of 2008. The government took severe austerity measures in order to revert the direction of slowing economy (ibid., p. 32). After the crisis, small-scale real estate development was substituted mainly by large-scale rail and road infrastructure projects, renewable energy solar and wind power plants as well as agricultural development. All these sectors were subsidized by the EU and were therefore supposed to guarantee sustainability (ibid., p. 54).

The main critique regarding the impact of Bulgarian economic transformation on spatial development is that it fostered regional disparities and thus became one of the main factors which triggered urban shrinkage. In this regard, Monastiriotis (2008) argues that "the lack of economic connectivity across space […] appears to mask two very opposite trends: a pattern of absorption or competition between the main urban centres and their hinterlands (evidenced as strong localised negative dependence for cities) and some evidence of locational path-dependence (spatial heterogeneity) and localised clustering outside these centres (evidenced as strong localised positive dependence outside the main urban areas which turns negative at very long distances)" (p. 10). Therefore, it can be concluded, that urban settlements located far from the cores of diverse and dynamic economic activity found themselves in a very unfavoured position. They could, indeed, be referred to as the unconnected "black holes" (Castells, 2000) within the Bulgarian spatial context.

5.3. Changing administrative structures and planning policy

The following paragraphs are going to shed light on the changes which occurred within the administrative structure of planning institutions. In addition, the alterations in the approach to elaborating planning policies against the background of the accession of Bulgaria in the EU are going to be investigated.

The temporal development of planning policy in Bulgaria is divided into different phases by scholars. According to Monastiriotis (2008), who focuses on the emergence of regional policy, there are four phases that could be distinguished in the development of Bulgarian regional planning policy so far: "*the late central planning period*, where some territorial policies were incorporated in the wider planning of sectoral and industrial policies; *the transition period*, where policy developments were slow and largely dictated by national needs and internal constraints; *the accession period*, where the role of the EU became more central and policy design and implementation started becoming 'Europeanised'; and *the post-accession period*, where regional policy obtains a clear European form and structure" (p. 22).

Yanchev (2012), on the other hand, whose research is centred on the *Europeanisation* of the Bulgarian spatial planning system, divides the development of Bulgarian spatial planning policy in four phases as well. However, he regards the early transition years (1989-1997) as the first phase and refers to them as a period marked by the *search of political identity*. The next three periods are: *the Reformation period* (1998-2001), *the period marked by the rise of real estate mortgage loans* (2002-2007) and *the period of officially being a member state of the EU* (after 2007). (p. 30).

Given the fact that during the time Bulgaria was part of the Soviet bloc everything was centrally planned and therefore lacking any flexibility in the approach whatsoever, the breakdown of socialism should, indeed, be regarded as the starting point of the development of a new and democratic planning policy of the country. For the purpose of this thesis which aims to investigate both spatial and regional planning policies and the way they evolved after the end of the socialist regime, three phases are going to be temporally distinguished: *Early transition years (1989-1997), EU accession period (1998-2007)* and *EU post-accession period (2007-present).*

5.3.1. Early transition years (1989-1997)

The first years after the demise of the socialist political system were predominantly marked by slow and inconsistent reforms shaped by national interests and taking little notice to regional disparities. Still, an important first step was made. The new, democratic governments adopted the approach towards decentralization: "a strong reform towards devolution of administrative power was introduced by the approval of the *Local Self-Government and Local Administration Act* in 1991. By the power of that document the local level of the administration, the municipalities and settlements, received exclusive rights to manage and develop their territory. Bulgaria was divided in 264 municipalities that could elect their local mayor and council and respectively […] approve spatial and strategic plans" (ibid., p. 33).

While municipal administrations were given more responsibilities, the regional level remained poorly represented as it was missing administrative functions and its objectives were vague and abstract (table 4). During this period, policy responses to polarization and disrupted spatial connectedness at the regional level are described by scholars as "slow and fragmented", missing consistency: "[…] until 1996 regional policy was largely conducted at an ad hoc basis" (Kamenova, 1999).

Table 4. Spatial planning related instruments in Bulgaria 1989-1997 (Own representation. Source: Yanchev, 2012: p. 34).

	ECONOMIC DEVELOPMENT PLANNING	REGIONAL DEVELOPMENT PLANNING	SPATIAL (TERRITORIAL STRUCTURE) PLANNING
National Level (Elected council of Ministers; Ministry of Regional Development)	National Economic Development Strategy (Councils of Ministers)		National Spatial Scheme (Councils of Ministers)
Regional Level: NUTS II (Non-elected development council)			Regional Spatial Schemes Sectoral Regional Spatial Schemes
District Level: NUTS III (Non-elected district government; Non-elected development council)			
Municipal Level: LAU I (Elected Mayor; Elected Municipal council)	Municipal Sectoral Strategies (Municipal councils)		General Spatial (Master) Plans
Settlements Level: LAU II (Elected mayor)			General Spatial (Master) Plans Detailed Spatial (Structure) Plans
Single Land Lots			Building Permissions

The focus was set on interventions initiated by the municipalities and therefore taking place at the local level. These mainly included projects in the field of transport, environment and employment which were financed directly from the State budget, "but without a clear design of regional allocation formula and […] without regional identification of the allocation of funds (Monastiriotis, 2008: p. 13). Hence, also in terms of distribution of subsidies for planning purposes, the regional level barely had any significance during this period.

Planning instruments from socialist Bulgaria continued to be implemented during this initial phase. These can generally be divided in two main groups – spatial schemes and spatial plans. While schemes referred to a larger scale – national and regional, plans were prepared for municipalities, settlements and neighbourhoods. Plans can be further divided in general (Master plans) and detailed plans. (Yanchev, 2012: p. 35). Master plans had to regulate the development of municipalities and larger settlements, while detailed plans were prepared for smaller settlements and neighbourhoods. Another legacy from the socialist regime was the National Economic Development Plan (NEDP) which still played a significant role for Bulgaria's spatial development: "Similar to the principles of the communist planning, the National Spatial Scheme was subordinated to the National Economic Development Plan. All other spatial documents were subordinated to the National Spatial Scheme" (ibid.).

Besides the remaining dependencies from the socialist time, an important step was made in the environmental sector of spatial planning policy during this phase. In October 1991, the *Environment Preservation Act* was approved. The main consequence was the implementation of the *Environment Impact Assessment* instrument which was obligatory for

every newly developed spatial plan. This innovation for the Bulgarian spatial planning context had to guarantee a multidisciplinary evaluation of the plans by 30 to 40 professionals. Furthermore, it was meant to serve as a base for discussion and thus involvement of the public in the preparation of spatial plans (Yanchev, 2012: p. 36).

On the whole, although there were some efforts for decentralization of power mainly to the municipal level, during the early transition period spatial planning remained very much tied to previous planning instruments which made it difficult to respond adequately to the changed reality of a market economy and private investments. The introduction of the *Environment Impact Assessment* instrument should, however, be regarded as a first attempt to pursue a sustainable, democratic and transparent spatial planning.

5.3.2. EU accession period (1998-2007)

Bulgarian planning policy entered its next phase of development when the country started preparing for its accession in the European Union. This period was predominantly marked by the process of regionalization, the adoption of various new acts, the establishing of an environmental consciousness and the preparation of strategic documents for the first time.

The main legislative changes consisted in the adoption of the *Regional Development Act* (RDA) in 1999 which signifies the beginning of the process of regionalization in the country as well as in the cancellation of the *Territorial and Settlement Act* from 1973 and its substitution with the new *Spatial Planning Act* of 2001.

New approach to regional policy

The *Regional Development Act* brought a new approach to regional policy "with the introduction of important changes in the regional administrative structure, the institutions of regional policy, and the planning of regional interventions" (Monastiriotis, 2008: p. 15). New set of planning and strategic documents following the recommendations of the EU had to be produced in order to get access to funds. Another requirement to gain this access was to develop and implement a *Strategic Environmental Impact Assessment* instrument for the evaluation of all regional and local priorities defined in the prepared strategic planning documents (Yanchev, 2012: p. 42).

According to Monastiriotis (2008), "the new policy legislation created a thick (and complicated) institutional administrative structure that assumed responsibility of regional policy in the country" (p. 15). The Council of Ministers (CoM) and the Ministry for Regional Development and Public Works (MRDPW) shared the responsibility for regional development policy. The CoM was in charge of adopting the NEDP and therefore also the National Regional Development Plan (NRDP) which, among other things, determined assisted areas and areas of priority. The MRDPW, on the other hand, was the authority which had to prepare the NEDP and NRDP as well as to come up with the design and implementation of regional policy. (ibid., pp. 15-16).

Another administrative step towards regionalization was the introduction of the NUTS system (Nomenclature of Territorial Units for Statistics). As a consequence, plans had to be produced for all NUTS levels: NUTS I (two large regions), NUTS II (six regions),

NUTS III (28 districts) and LAU I (264 municipalities) (cf. fig. 9) (Yanchev, 2012: p. 42).

Only at the LAU I level residents of the territorial units have the right to elect their local government officials (mayors). At the NUTS III level, governors are appointed by the CoM and have the responsibility to design and implement the district development programmes (Monastiriotis, 2008: p. 16). At the NUTS II and NUTS I levels Regional Development Councils consisting of district governors and local mayors are established (Yanchev, 2012: p. 42). Apart from the coordination of regional policies, these councils also have to develop policy proposals under the NRDP (Monastiriotis, 2008: p. 16). Next to the administrative structures referring to the newly introduced NUTS levels, "a Commission for Economic and Social Cohesion was also established (with six offices, one in each macro-region), with participation from all stakeholders (including central and district government officials as well as NGOs and employee and employer associations) and with a more consultative role but also some shared responsibilities with regards to policy implementation" (ibid., pp. 16-17).

Yet, the actual preparation of the required strategic documents began only after 2004. This delay was rooted in the failure of the requesting authority, the MRDPW, to clarify their purpose. Further constraints of the *Regional Development Act* which impeded the quick and efficient regionalization as envisioned by the EU, were the missing link between strategic documents and financial resources as well as the lack of created "connections between the different sectors (financial, environmental, transport and local institutions) that had to cooperate in a quite complex process of setting priorities, planning and approving projects and financing and implementing them" (Yanchev, 2012: p. 42).

Apart from these weaknesses, Monastiriotis (2008) argues that "[…] the institutional changes of the 1999 Act […] allowed a more integrated policy approach to emerge, and policy emphasis to shift from ad hoc redistribution to enhancing administrative capacities at the regional and local levels" (p. 17). The development of the first Integrated Regional Programmes that led to the initiating of the first Operational Programme for Regional Development (OPRD) in 2000, could be regarded as an important and very positive output of the regionalization reforms.

Marinov (2006) considers the OPRD as "the main link between regional development planning and the programming of the SCFs [structural funds]" (p. 8). Against the background of different opinions and interpretations as to what its purpose is, finally "it was accepted that the OPRD should contribute to the achievement of part of the objectives of the National Strategy for Territorial Development […] but that at the same time it should have its own philosophy, strategy and intervention logic and a relatively narrow scope, clearly distinguished from the scope of the other (sectoral) operational programmes" (ibid., p. 9). Furthermore, Marinov (2006) argues that the OPRD was designed to meet the powers and resources of local authorities and put a strong emphasis on integrated local development, therefore encouraging the bottom-up approach and the formation of local partnerships with different actors. Nevertheless, the OPRD sought "balance between the selective focus on urban centres as an "engine" of development and an opportunity to address successfully regional disparities on the one hand, and

the granting small municipalities access to programme resources to help solve their specific local problems and overcome inter-municipal inequalities on the other" (Marinov, 2006: p. 9).

Yet, the design of the OPRD was aligned with the NUTS II and to a lesser extent with the NUTS III planning levels since they were regarded as the basis for the programming of pre-accession funding and later on of the Structural Funds (Monastiriotis, 2008: p. 17). However, the designation of the so-called *areas for purposeful intervention* (areas for growth, areas for development, areas of industrial decline, backward rural areas and areas for cross-border cooperation) was being carried out at the municipal level. This incoherence caused a mixture of a top-down and bottom-up approach since programmes were elaborated and initiated by the local authorities but the allocation of funding resources for their actual implementation was based on the NUTS II regions (ibid., pp. 17-18). This, in turn, led to institutional confusion and therefore poor efficiency.

Furthermore, in accordance with the NRDP, area designation seemed to serve mainly national interests. This statement is supported by the fact that the bulk of the available European funds was allocated to *areas for growth*. On that account, rural, developing and shrinking areas altogether received less than 25% of the funds. This trend further sharpened already existing regional discrepancies (ibid., p. 18).

All in all, it can be argued that regional policy developed during the accession phase not only remained incapable of addressing the main regional issues such as "backwardness, polarisation and spatial unconnectedness" (ibid., p. 21) but was partly responsible for their further catalysing. The key reasons for this negative outcome have been rooted in the "over-commitment to EU-like structures [which did not correspond to the specific local reality], combined with a notably thick and complex institutional architecture, poor national finances to support an effective regional policy, and an emphasis on national growth over the aim of tackling disparities" (ibid., p. 21).

Spatial planning policy changes

As a consequence of the *Spatial Planning Act*, introduced in 2001, all territories were given the same regime and therefore the same development possibilities. All opportunities and restrictions were outlined in the General and Detailed spatial plans. Thus, land-use power was completely transferred to these plans which gave them the status of a law (Yanchev, 2012: p. 39). There were, however, no significant changes in the planning methods: "The plans kept unchanged their rigidity and technocracy towards private or public interventions" (ibid., p. 39). This is partly to be attributed to the fact that the *Spatial Planning Act* did not change the nature and hierarchy of planning documents. Another weakness of this Act consisted in its failure to set explicit timeframes for the elaboration and the consistent update of already existing schemes and plans. This, in turn, resulted in the postponement of the National Spatial Scheme and Regional spatial schemes and plans. Many local authorities used the lack of planning documents at these higher levels as an excuse for their delay to produce new General spatial plans addressing current economic and other processes because of missing guidelines (ibid., p. 40).

Within a period of three years (1998-2001) the *Protected Areas Act*, the *Water Act*, the *Clean Air Act* and

the *Energy Efficiency Act* were introduced for the first time. They all constituted a "shift in the strengthening of the environmental and sustainability concerns in the spatial planning field" (ibid., p. 43). The decision to adopt these innovative for the Bulgarian context legislative documents was in coherence with the Local Agenda 21 and resulted from the cooperation between the UN and the Ministry of Environment and Waters (MOEW) of Bulgaria (ibid., pp. 43-44).

However, the adoption of these new legal documents which aimed to align Bulgarian planning framework to the one of the EU, did not address other, very important issues such as the missing link between strategic documents for regional development and spatial plans at the local level which regulated private interests: "Two independent sets of planning instruments in the spatial planning system were […] shaped – the regional and the spatial. The regional ended up steering the public investments while the spatial regulated the private. Besides the critiques this segregation of functions receives from scholars and professionals, the government has shown no signs so far that the two planning practices might be bound together" (ibid., p. 53).

At the turn of the century Bulgaria experienced an unprecedented increase of FDI in the real estate sector, which, combined with the rise of mortgage loans, led to a dynamic process of mass construction after 2002. The investments were concentrated mainly in Sofia, at the Black Sea coast as well as in mountain and mineral springs resorts. As a result, Bulgarian tourism began to prosper and employment rates in the construction and tourism sectors increased. Yet, the unexpected and very turbulent growth of these settlements coupled with the lack of up-to-date Master plans had some negative consequences as well. Building permits were often issued on the basis of Detailed spatial plans for single land plots instead of complying with the coherent vision of a Master plan. Thus, construction was guided solely by private investment interests since planning authorities had forgotten to think about the need of a balanced development of settlements: "The incapacity of the spatial plans to manage the private investment process in real estate, could be felt later in the years, when the municipalities lagged behind with providing adequate infrastructure for the growing settlements" (ibid., pp. 45-46). As a result, problems with water treatment, waste management and energy consumption emerged during high seasons in beach and mountain resorts.

Still, according to reports of the United Nations Development Programme (UNDP) (2004; 2006), Bulgarian municipalities managed to gain some experience and awareness about the need of setting strategic priorities and implementing them with a project-based approach. Their capacity to cooperate with neighbouring municipalities, upper level institutions, non-governmental organizations (NGOs) and local business actors was also positively evaluated (ibid., p. 46).

Nevertheless, some scholars share a less enthusiastic point of view. Marinov (2006), for example, regards the content quality of the elaborated strategic documents as insufficient. The consultants who were in charge of developing the planning strategies were mainly private subcontractors since the low financial capacities led to the withdrawal of experts from the local administration. The lack of requirement for a specific certification of the hired consultants was

among the reasons which contributed for the superficiality of the planning process and the poor quality of the plans submitted and approved. Furthermore, Marinov (2006) expresses the concern that the strategies developed to fulfil EU requirements might, indeed, never be actually implemented and draws the attention towards the dangerous tendency of "planning for the sake of planning" (p. 8). In this regard, Monastiriotis (2008) argues that "[…] the Bulgarian authorities (as with all other accession countries) were encouraged [by the EU] to develop a(ny) framework for regional policy. But the lack of specific conditions and guidelines […] meant that the response of the 'policy receivers' was a rather mechanical adoption of the EU regional policy framework" (p. 28). Maier (2012), on the other hand, considers the desire of absorbing EU funds as yet another factor that led to the implementation of ad hoc instruments which were copied from the European planning context and proved to be inadequate for the domestic reality in the long term.

5.3.3. Post-accession period (after 2007)

After a new *Regional Development Act* was enacted in 2004 and a new N*ational Strategy for Regional Development* was elaborated, an OPRD was developed in 2005 for Bulgaria's first post-accession planning period 2007-2013. While the administrative structure of regional policy practically remained unchanged under the new RDA and OPRD, the relation between the strategic development plans at the different levels (national, regional, district and municipal) became easier to comprehend and instruments for monitoring and evaluation were more efficiently implemented. Moreover, the OPRD (2007-2013) "(i) identifies for a first time so explicitly the importance and nature of intra-regional disparities in the country; (ii) relates, again for the first time, explicitly to a number of EU documents and processes […]; (iii) identifies five thematic priority areas (urban regeneration and development; local and regional connectivity; sustainable tourism development; encouraging regional and local development; and technical assistance (MRDPW, 2005)); and above all (iv) introduces for a first time a National Spatial Urban Model, based on a polycentric development approach in line with EU's Spatial Development Plan" (Monastiriotis, 2008: pp. 30-31).

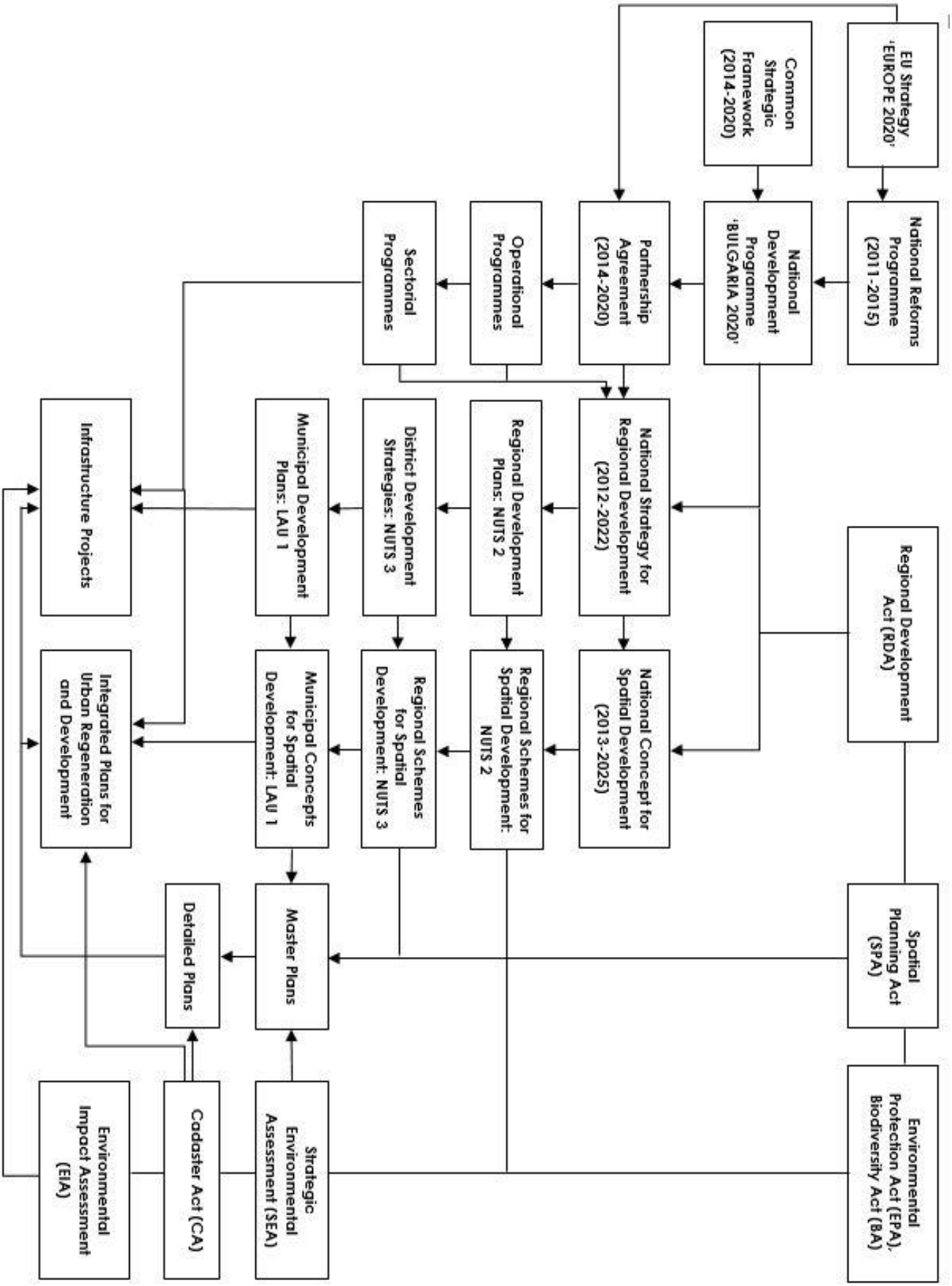
At the local level there were some planning innovations as well: "In 2010-2011 the MRDPW decided to implement a new planning tool in order to integrate the different sectors in the urban development in some 36 agglomerations of settlements all over Bulgaria" (Yanchev, 2012: p. 57). In other words, the Integrated Plans for Urban Renewal and Development (IPURDs) were introduced in the Bulgarian spatial planning context. They are following the discourses of the Leipzig Chart (2007), The Toledo Declaration (2010) and the EU Territorial Agenda 2020 and are to be elaborated and implemented at the local level. While land-use plans remain the base for issuing building permits, the IPURDs are aimed at delineating areas within the settlements which are in need of urban regeneration measures and suggesting specific project ideas: "[…] the integrated plans are giving field for discussion and participation of different sectors like mobility, environment, waste management and water cycle into implementing new territorial policies" (ibid.).

The insufficient clearness of the methodological guidelines for elaborating the IPURDs, the lack of re-

quirement for certification of the companies preparing them, as well as the suspicion that "these plans may become the next public scheme where strategic documents are done because their existence is requested but there is no political will to be followed and put into action" (ibid.) are some of the main critiques of the IPURDs. According to the Ex-Deputy Chairman of the Sofia City Council Zaimov, however, the IPURDs should become "a more effective platform for the lacking urban debate" than "the old General Spatial Plans [which] are not at all sensitive towards the urban fabric" (ibid., p. 60). Obviously, there are polarized opinions about what the effect of the implementation of the IPURDs is going to be. Therefore, a certain period of time has to pass by in order for a thorough assessment to be made.

An overview of the current hierarchy of legislative documents and planning instruments regulating the regional and spatial development of Bulgaria is presented in figure 12.

Figure 12. Overview of the current Bulgarian planning system hierarchy (Own representation. Source: NCRD, 2015: p. 39).



5.3.4. Main findings

Finally, the weaknesses in the current administrative structure and policy shaping approach which have been impeding the elaboration and implementation of efficient strategies for diminishing regional disparities are going to be summarized.

First, the instant decision to adhere to EU traditional regional planning instruments instead of making an effort to elaborate an own set of planning tools aligned to the Bulgarian spatial and institutional context and then adjust it to EU requirements had (and still does have) a significant impact on the process of regional and spatial development in Bulgaria. On the one hand, the adopted macro-geographic perspective, based predominantly on the NUTS II level, barely corresponds to the actual scale of spatial inequalities within the country's borders. On the other hand, the regional institutional framework which was again designed merely by following EU recommendations is too complex, with too many authorities sharing more or less the same responsibilities for elaboration and adoption of strategic documents. As a result, difficult coordination often leads to slow and inefficient procedures.

Second, the identified policy priorities at the national level were not always representative of the actual needs in order to overcome disparities. Locating structural funds mainly in the capital city in order to foster nationwide growth, largely contributed to the sharpening of inequalities and the triggering of urban shrinkage which was mainly caused by internal migrations between the regions as well as emigration abroad.

Last, but not least, the limited know-how and institutional capacity at the municipal level, which was basically deprived of any kind of power and responsibility over a period of 40 years and therefore has a long way of gaining experience, is not in the position of successfully implementing strategies for stabilizing the development of shrinking urban areas yet. These current deficiencies of municipalities, coupled with the weak administrative power of the NUTS II level impedes the cooperation between municipalities and districts which could potentially have positive effects on slowing down the process of urban shrinkage.

5.4.Fiscal decentralization

To ensure the actual implementation of elaborated strategies, local authorities need financial resources. While Bulgarian municipalities are legally declared as autonomous, complete fiscal autonomy has not been achieved yet. This significantly impedes the efficiency of the local level in regard to dealing with the implications of urban shrinkage. With this in view, the next paragraphs are going to examine the process of fiscal decentralization in Bulgaria.

Devolution of responsibilities to local governments started already in the beginning of the 1990s. However, districts were not given any financial autonomy. Thus, the municipal level became the only tier of subnational government in post-socialist Bulgaria. While numerous laws were enacted in an effort to clearly identify the responsibilities at the different levels, "almost no action was concurrently taken to increase local government own revenue base and municipalities continued to rely heavily on intergovernmental transfers and shared tax" (Nenkova, 2014: p. 342).

In 2002, a Concept paper on fiscal decentralization and an actual plan for its implementation were adopted by the government. The paper aimed to determine the responsibilities of municipalities and to link them to concrete sources of financing as well as to make the system of intergovernmental transfers transparent and based on rules. For the first time, the municipal budget for funding local services was divided into two categories – local and delegated by the State. This signified the actual beginning of fiscal decentralization in Bulgaria. (ibid., pp. 342-344).

The responsibilities of Bulgarian local authorities are defined in the *Local Self-Governance and Local Authorities Act*. Their scope includes territorial planning and development, education, healthcare, culture, social services, public works and utilities, sports, recreation and tourism. The range of activities delegated by the State is determined annually by the CoM. Local activities are generally centred in the fields of municipal housing, public works and utility and economic services. These are financed with own revenues of the local authorities and the general equalizing grant transferred by the State. Delegated activities, on the other hand, are mostly in the sectors of education, healthcare, social assistance and culture. The financial provision for these services is transferred to municipalities through a separate conditional grant. (ibid., p. 344).

It is necessary to point out that central financing of delegated services only covers current expenses and its amount is estimated on the basis of uniform standards: "delegated activities standards ensure an equal financial opportunity for local governments to provide a minimum level of basic public goods for the population, regardless where one lives" (ibid.). Still, municipal councils could take a decision to provide additional funding for delegated services from own municipal revenues. Capital expenditure, both for local and delegated services, are also to be covered by own revenue of the local authorities and the specific capital expenditure grant. (ibid.). Hence, the level of own revenues is vital for the adequate level of services provided by municipalities because transferred national subsidies are usually not enough.

In 2003, all types of shared tax revenues or local surcharges on national taxes were abolished. Thus, municipalities started to generate tax revenue only from local taxes – property tax, inheritance tax, property transaction tax, vehicle tax, patent tax and tourist tax[4]. Three years later, in 2006, local authorities were given the responsibility to collect taxes themselves. Later on, in 2008, municipalities already had the power to set local tax rates in up and down limits, stipulated by law. As a result of the combination of these reforms, there was a substantial increase in municipal revenues. (ibid., p. 347).

Yet, in terms of public sector investments, the role of local authorities and the level of municipal investment differs significantly from the general EU pattern: "Over a significant period of time local government expenditure were treated as a low priority and current expenditure had the highest share in the municipal budgets" (ibid., p. 345). This tendency is to be attributed to the relatively low revenues of most Bulgarian municipalities. In the last years, a number

[4] Approximately 95% of the total local tax revenues are from property tax, property transactions tax and vehicle tax (Nenkova, 2014: p. 347).

of capital investment projects were only realized because local authorities were beneficiaries of different Operational Programmes financed by EU Structural and Cohesion Funds: " […] in 2012, funds absorbed enabled municipalities to spend BGN 615.2 million for capital expenditure, accounting for more than 40% of all local level investment" (ibid., p. 346).

Why is it that although several reforms aimed at increasing the fiscal autonomy of Bulgarian municipalities were enacted, they still do not have enough financial resource capacity?

The reason for the limited financial margin of local authorities, is that currently "municipal budgets do not receive any revenue from taxes with high yields potential as those levied on household incomes, corporate profits or consumption" (ibid., p. 348). Hence, the share of local tax revenue equals around 2,9% of the total public sector tax revenue. Although municipalities have the right to raise tax rates, they rarely set these to the maximum ones permitted because "raising local tax rates is largely regarded as an unpopular political decision" (ibid.).

With this in view, Bulgarian municipalities are still highly reliant on intergovernmental fiscal transfers. Before the reform in 2003 which resulted in the introduction of a new system of intergovernmental transfers, "decisions on the total amount of grants […] were taken by the central government on a discretionary basis. The non-transparent manner in which the total pool of grants were being determined and distributed […] has left the impression of the existence of a group of 'favoured' municipalities, producing negative incentives for revenue mobilization" (ibid., p. 349). To eliminate the lack of transparency, a new system for the allocation of intergovernmental fiscal transfers was implemented. It combines three main elements – general grant for delegated activities, general equalizing grant and targeted capital expenditure grant. The first one aims to cover expenditure for the activities delegated by the State and its amount is calculated on the basis of established costing standards and natural indicators (e.g. personnel, population size, number of students, etc.). (ibid.). This immediately puts municipalities with shrinking population in a worse position because it means that their fiscal transfers are going to continuously decrease over time.

The general equalizing grant has the purpose of ensuring that each municipality manages to provide a *minimum level* of local services. Its amount "cannot be lower than 10% of the figure shown in the report on own revenues of all municipalities for the previous year" (ibid.). Municipalities have the full right to decide how to spend this grant.

The least regulated grant is the targeted grant for capital expenditures[5]. First of all, the total pool of funds is not strictly determined. Second, the decision about its amount is taken by the state on an annual basis. In 2007, the allocation formula was regulated for the first time. It depends on three natural indicators: size of population (40%), number of agglomerations (40%) and territory (20%): "the total amount of the grant is distributed on the basis of the relative share of the municipality to the country total in terms of the three elements" (Nenkova, 2014: pp.

[5] The targeted grant for capital expenditures can be disbursed both on delegated and local activities

349-350). Therefore, municipalities with shrinking population are in an unfavoured position in regard to this type of grant as well.

On the whole, during the decades after the end of the socialist regime, there have been several reforms which aimed to achieve fiscal decentralization of Bulgarian municipalities. As a result, expenditure responsibilities have been assigned to the different levels of government, the system of intergovernmental fiscal transfers has become more transparent and local authorities gained the power of determining tax rates in up and down limits stipulated by national law. This factors combined, led to the strengthening of fiscal positions of Bulgarian municipalities and increased their overall role in the economy.

However, some deficiencies remain and significantly hinder the bottom-up approach to the development at the local level. While local authorities were given greater revenue autonomy, the decentralization of revenue sources is still problematic. This does not allow for the expansion of the local financial resources on the basis of public tax generation. Furthermore, municipalities do not have the security of non-fluctuating intergovernmental fiscal transfers because their amount and allocation is decided on an annual basis. Thus, long term projects are difficult for implementation. In addition, municipalities being responsible for covering capital expenditures both for delegated and local activities significantly impedes capital investments because local authorities are rarely in the position to even cover operational expenses. Moreover, the formula allocation of the targeted grant for capital expenditures practically decreases the "bargaining power" of smaller municipalities with shrinking population. Thus, they are put in the position of relying on FDI and EU-projects which do not require co-payment.

6.VULNERABILITY OF BULGARIAN MUNICIPALITIES TO SHRINKAGE

Against the background of multifaceted transformation processes Bulgaria has been going through during the last three decades, this chapter aims to determine concrete socio-economic and spatial factors which have so far been contributing to the acceleration of the shrinking process and thus discover the most vulnerable Bulgarian municipalities in this regard. To that end, statistical analysis at the municipal level[6] is going to be carried out, to detect correlations between shrinking and factors such as unemployment, education levels of the local population, number of urban settlements within a municipality, etc. The statistical analysis will be carried out in the form of hypothesis testing. As a result, shrinking vulnerability criteria will be compiled based on the factors that exhibit a correlation with shrinking. Thus, the municipalities which are most prone to further demographic decline will be identified.

6.1. Statistical analysis of socio-economic and spatial factors with an expected impact on shrinking

A dataset with quantitative data for all the 264 Bulgarian municipalities was created in SPSS. Most of the available variables were obtained from the online database of the National Statistical Institute and date from the years 2001 and 2011 (Census data) and 2015 (periodic data collection). These include: population change, migration rates, age structure, unemployment rates, shares of economically active and inactive population, shares of population in regard to attained levels of education, number of educational facilities, number of urban settlements within municipalities, etc. Furthermore, there is data about population numbers in the years 1992, 2001, 2011 and 2015. This allows for a continuous monitoring of the Bulgarian demographic development over a period of more than 20 years.

6.1.1. Hypothesis 1: High unemployment rates sharpen negative population development trends.

This hypothesis is formulated because unemployment is believed to be among the driving forces of out-migration. As already pointed in chapter 3, emigration rates exceeding immigration rates together with surplus of mortalities, constitute the main causes for demographic decline. Therefore, the first

[6] Sufficient amount of quantitative data is currently available only for the regional (NUTS II), district (NUTS III) and municipal (LAU I) levels. The municipal level is therefore most suitable for a detailed analysis.

step towards investigating the formulated hypothesis is to examine whether there is a correlation between the variables *unemployment (2011)* and *migration (2011-2015)*. This will allow to determine whether high unemployment rates in 2011 triggered a process of out-migration over the next four years.

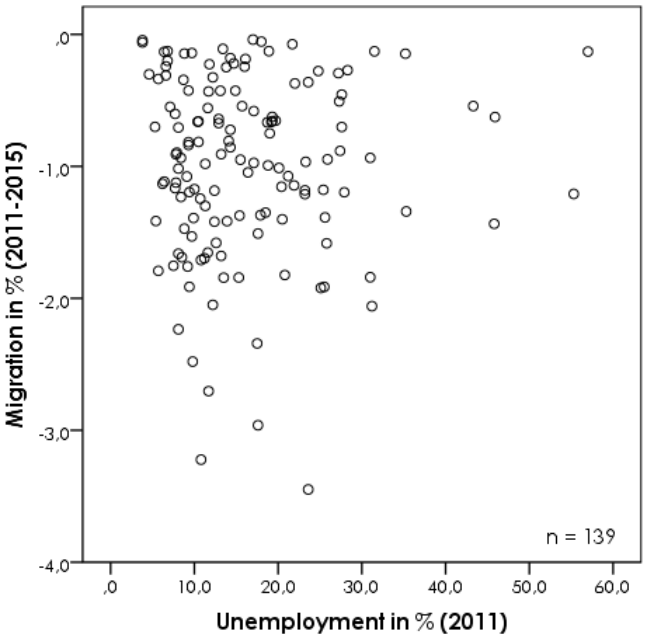
For the identification of a possible correlation, first an appropriate statistical test has to be selected. Since these are both continuous variables, it can generally be chosen between Pearson's correlation test and linear regression. Yet, for these tests to generate valid results, certain assumptions regarding the variables have to be met.

In the case of Pearson's correlation test, next to the requirement for two continuous variables being paired, there has to be a linear relationship between them and no outliers as well. Furthermore, to test the null hypothesis[7], the variables have to exhibit a normal distribution. If one of these assumptions is not met, Pearson's correlation test should not be used as the generated results would be invalid (Laerd Statistics, 2015a).

To carry out a linear regression, besides the requirement for two continuous variables - one dependent and one independent, there are five more assumptions which have to be met: a linear relationship between the two variables; independence of the observations; homoscedasticity; no significant outliers; approximately normal distribution of the residuals (errors) of the regression line (Laerd Statistics, 2015b).

Since there is the common requirement for a linear relationship between the two variables, this is the first assumption which is going to be investigated by a visual inspection of a scatterplot of the dependent variable (*migration*) against the independent variable (*unemployment*) (fig. 13). To avoid any possible distortions of the results, only the 139 municipalities which have experienced out-migration are going to be taken into consideration[8]. These represent around a half of all 264 Bulgarian municipalities.

Figure 13. Scatterplot: Migration in % (2011-2015) & Unemployment in % (2011) (Own visualization. Source: NSI, 2011a, 2016d).



The visual inspection of the scatterplot leads to the conclusion that there is no linear relationship between the two variables. Therefore, both Pearson's

[7] The null hypothesis suggests no correlation between unemployment and migration.

[8] If all municipalities are considered, the variable *migration* will have positive as well as negative values since some Bulgarian municipalities have not only experienced out-migration, but in-migration as well. The variable *unemployment*, on the other hand, has only positive values.

correlation test and linear regression are not suitable. Alternatively, Spearman's correlation test could be carried out since it does not require a linear relationship between the variables. It does, however, require a "monotonic relationship […] that does one of the following: (a) as the value of one variable increases, so does the value of the other variable; or (b) as the value of one variable increases, the other variable value decreases" (Laerd Statistics, 2015c). While this is not exactly the case, Spearman's test is going to be carried out to get at least some idea about whether there could be any correlation at all (tab. 5).

As a result, the test confirmed that there is no significant correlation between unemployment rates registered in 2011 and migration trends over the period 2011-2015. Therefore, the next step towards determining whether the first hypothesis is to be rejected, is to examine whether unemployment in 2011 had any influence on the overall population change over the next four years.

Since the scatterplot (fig. 14) does not indicate for the presence of a linear relationship between the two variables, again the Spearman's correlation test is going to be used.

The result of Spearman's correlation test (tab. 6) indicates a weak negative correlation between the two variables (= -0,2) (Weir, 2016) which means that

Figure 14. Scatterplot: Population change in % (2011-2015) & Unemployment in % (2011) (Own visualization. Source: NSI, 2011, 2015).

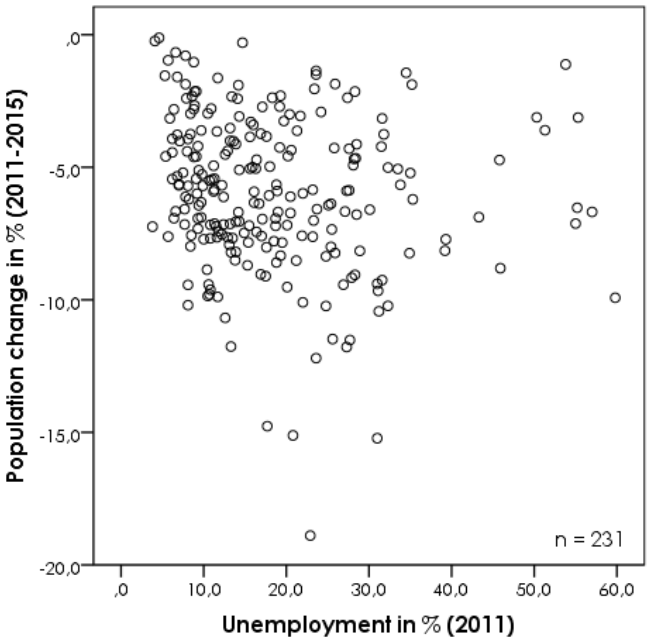


Table 5. Spearman's correlation test: Unemployment in % (2011) & Migration in % (2011-2015) (Own calculations. Source: NSI, 2011a, 2016d).

Correlations				
			Migration in % (2011-2015)	Unemployment in % (2011)
Spearman's rho	Migration in % (2011-2015)	Correlation Coefficient	1,000	**-,020**
		Sig. (2-tailed)	.	**,814**
		N	139	139
	Unemployment in % (2011)	Correlation Coefficient	**-,020**	1,000
		Sig. (2-tailed)	**,814**	.
		N	139	139

Table 6. Spearman's correlation test: Unemployment in % (2011) & Population change in % (2011-2015) (Own calculations. Source: NSI, 2011a, 2016a).

Correlations				
			Unemployment in % (2011)	Population change in % (2011-2015)
Spearman-Rho	Unemployment in % (2011)	Correlation Coefficient	1,000	**-,198****
		Sig. (2-tailed)	.	**,002**
		N	231	231
	Population change in % (2011-2015)	Correlation Coefficient	**-,198****	1,000
		Sig. (2-tailed)	**,002**	.
		N	231	231
**. Correlation is significant at the 0,01 level (2-tailed).				

the higher the unemployment rates were in 2011, the stronger was the population decline over the next four years. However, caution is needed here, since it is generally considered that a correlation coefficient between 0,0 and 0,2 indicates, indeed, only a weak correlation. Furthermore, the assumption of an existing monotonic relationship between the two variables necessary for carrying out Spearman's correlation test is not completely met. Therefore, jumping to the conclusion that unemployment rates in 2011 were the single most important factor determining the direction of population development in the next four years is not statistically justified.

To further investigate the dependence of population change on unemployment, an independent samples T-test is going to be carried out as well. It "is used to determine if a difference exists between the means of two independent groups on a continuous dependent variable" and "whether the difference between these two groups is statistically significant" (Laerd Statistics, 2015d). In this particular case the goal is to examine whether there is a statistically significant difference between population change rates in municipalities with unemployment rates higher or lower than the national average unemployment rate of 11,3% in 2011 (NSI, 2011a).

According to the results (tab. 7), unemployment rates below the national average were registered in approximately one third of all municipalities. While municipalities in both categories experienced demographic shrinkage, those of them where unemployed people constituted more than 11,3% of all inhabitants, shrank by -5,4% on average, while municipalities in the other group experienced a shrinkage of -2,9%. Moreover, it has to be noted that the T-test regards the difference between the two means as statistically significant ($p < 0,001$).

Taking into account the carried out statistical tests, it can be concluded that unemployment did have, at least to some extent, a certain impact on demographic shrinking within the spatial context of Bulgarian municipalities. Still, no correlation was indicated between unemployment and migration trends and the estimated correlation between unemployment and overall population change was weak. Also, the correlation between unemployment and migration trends in the early years after the breakdown of socialism could not be explored as there is no available data about unemployment rates before 2011. Therefore, a rather short period which represented only recent trends was investi-

Table 7. Independent samples T-test: Population change in % (2011-2015) & Unemployment in % (2011): Breakdown value = 11,3 %
(Own calculations. Source: NSI, 2011a, 2016a).

Group Statistics						
	Unemployment in % (2011)	N	Mean	Std. Deviation	Std. Error Mean	
Population change in % (2011-2015)	>= 11,3	176	-5,397	4,2090	,3173	
	< 11,3	88	-2,944	6,7103	,7153	

Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Population change in % (2011-2015)	**Equal variances assumed**	2,949	**,087**	-3,630	262	**,000**	-2,4530	,6757	-3,7835	-1,1225
	Equal variances not assumed			-3,135	122,244	,002	-2,4530	,7825	-4,0020	-,9039

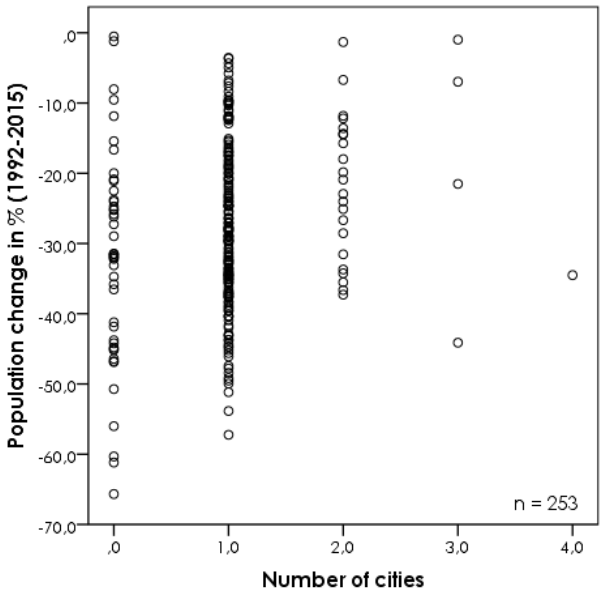
gated in order to address the formulated hypothesis. With this in view, unemployment should not be interpreted as the single most important factor shaping the process of urban shrinkage, but rather as one of the many aspects which play a certain role for determining the direction of population change.

6.1.2. Hypothesis 2: The existence of urban settlements within municipalities has a positive or at least a stabilizing impact on negative demographic development.

Urban areas are spatial clusters of economic and social activities. They provide access to different kinds of services such as healthcare, education, culture, commerce, etc. Some small and rapidly shrinking Bulgarian settlements, with a rural character, lack any kind of social infrastructure. Shutdown of educational and healthcare facilities is often exercised there as a measure aimed at loosening the pressure on the already thin municipal budget. This is why the National Strategy for Regional Development (2012-2022) points out the proximity of urban settlements to rural areas as a factor which has to be utilized well in the future as it creates an opportunity for strengthening the link "urban-rural" and turning small cities into core centres providing a wider range of public services within the network of rural settlements (MRDPW, 2012: p. 45). Yet, without a city or a town in the vicinity of small rural municipalities, the threat of accelerated shrinking increases. On the one hand, the bigger the distance to healthcare facilities, the higher the chance of increasing mortality rates (especially when the predominant share of the population consists of elderly people which is very common in Bulgaria since young people usually emigrate in search of better education and professional prospects). On the other hand, poor access to educational and other types of services might be one of the reasons for young families with children to consider out-migration. Also, there are generally more job opportunities in cities than in rural areas, which is yet another factor worth taking into account when deciding to change the place of residence. Last, but not least, cities contribute to the municipal budget more than rural settlements because municipalities generate large share of revenues from local taxes (e.g. property tax, property transactions tax, vehicle tax, etc.). Since generally there is a concentration of people in cities, local taxes generated from cities constitute a larger amount than those from villages. Furthermore, municipalities receive intergovernmental fiscal transfers for delegated activities which are mainly related to education, healthcare, social care and culture. These are all functions concentrated in urban areas. Thus, municipalities with more cities generally have larger financial capacity which gives them more leverage for securing EU-funding since they are capable to pay their co-payment. Therefore, it might be assumed that the higher the number of urban settlements within municipalities, the more likely it is for them to grow and prosper rather than shrink and decay. At the same time, municipalities with only one or no urban settlements whatsoever are probably in a much worse position and therefore more vulnerable to shrinkage.

To determine whether there is a statistically significant correlation between the number of urban settlements[9] and the rate of population change, first an appropriate statistical test has to be selected. Although both variables are continuous and therefore Pearson's correlation test and linear regression could generally be considered for inspecting a possible dependency between them, the characteristic attributes of the variable *number of cities* are only integers in the range of 0 to 4. This is why this variable resembles more an ordinal variable rather than a continuous one. Therefore, Spearman's test of correlation is more suitable for the estimation of correlation between population change and number of cities within municipalities. However, before proceeding to the test it has to be determined whether there is a monotonic relationship between the two variables. For this purpose a scatterplot is generated (fig. 15).

Figure 15. Scatterplot: Population change in % (1992-2015) & Number of cities (Own visualization. Source: NSI, 2016a, 2017a).



The chosen timeframe of population change covers the period between 1992 and 2015 because 1992 is the year closest to the end of the socialist regime (1989) for which there is available data about population numbers. Only municipalities which experienced demographic shrinkage over this period are going to be taken into consideration in order to avoid distortions of the results due to a mixture of positive and negative values. This is why the number of examined municipalities equals 253. After a visual inspection of the scatterplot, a monotonic relationship could be registered – as the number of cities increases, population decline in municipalities decreases. Hence, it can be further proceeded with Spearman's correlation test.

According to the results (tab. 8), there is a significant, yet very weak positive correlation between the two variables (=0,2). Therefore, it could be assumed that the number of urban settlements has had a slight

Table 8. Spearman's correlation test: Number of cities & Population change in % (1992-2015) (Own calculations. Source: NSI, 2016a, 2017a).

Correlations				
			Population change in % (1992-2015)	Number of cities
Spearman's rho	Population change in % (1992-2015)	Correlation Coefficient	1,000	**,181****
		Sig. (2-tailed)	.	**,004**
		N	253	253
	Number of cities	Correlation Coefficient	**,181****	1,000
		Sig. (2-tailed)	**,004**	.
		N	253	253
**. Correlation is significant at the 0.01 level (2-tailed).				

[9] No differentiation between the types of urban settlements is made. The number of cities and towns is important and not their size as it is presumed that the more the urban settlements, the easier (quicker) the access to social and healthcare facilities is.

positive effect on the demographic development of Bulgarian municipalities.

With the assistance of an independent samples T-test, the average population change rate of municipalities with only one or no urban settlements and municipalities with two or more urban settlements can be estimated and compared (tab. 9).

The T-test indicates a statistically significant difference between the means of the two categories (p = 0,003). While municipalities with two urban settlements or more experienced an average shrinkage of -15% over the period 1992-2015, municipalities falling into the other category shrank by -28% which is almost twice as much.

Against this background, the number of urban settlements within municipalities presumably has an influence on unemployment as well. Since it was already proven that unemployment rates make a certain contribution to the sharpening of negative demographic development trends, it is interesting to investigate whether there is a correlation between unemployment and the number of cities and towns within municipalities. Only municipalities where unemployment rates increased over this period are going to be taken into account to avoid distortions. The scatterplot of the dependent variable *unemployment change (2011-2015)* and the independent variable *number of cities* shows that there is a monotonic relationship between the two variables indicating that with the increasing number of urban settlements within municipalities, the rise in unemployment over the examined timeframe decreases (fig. 16).

Figure 16. Scatterplot: Unemployment change in % (2011-2015) & Number of cities (Own visualization. Source: NSI, 2011a, 2015, 2017a)..

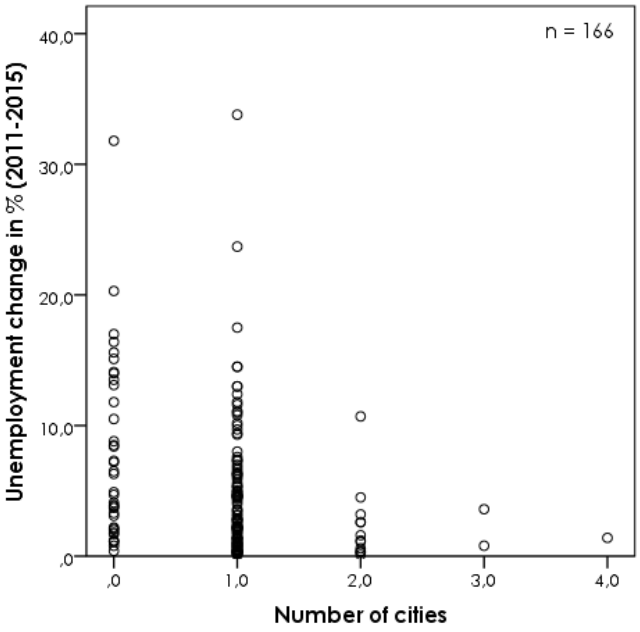


Table 9. Independent samples T-test: Population change in % (1992-2015) & Number of cities: Breakdown value = 2 (Own calculations. Source: NSI, 2016a, 2017a).

Group Statistics					
	Number of cities	N	Mean	Std. Deviation	Std. Error Mean
Population change in % (1992-2015)	>= 2	31	-15,200	21,8464	3,9237
	< 2	230	-28,177	13,2895	,8763

Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Population change in % (1992-2015)	Equal variances assumed	7,436	**,007**	4,665	259	,000	12,9769	2,7821	7,4986	18,4553
	Equal variances not assumed			3,228	33,056	**,003**	12,9769	4,0204	4,7979	21,1560

Since all assumptions necessary for carrying out Spearman's test of correlation are met, it can be proceeded with the interpretation of its results (tab. 10).

The test shows that there is a statistically significant, but weak negative correlation (=-0,3) between the two variables. Therefore, the conclusion that cities contribute to the decreasing of unemployment, should be considered as valid at least to some extent. The T-test allows to compare by how much percent has unemployment changed on average depending on the number of urban settlements in municipalities (tab. 11). According to the results, the difference between the two means can be regarded as statistically significant (p = 0,004). Given the fact that unemployment decreased by almost 0,4% in the case of municipalities with more than one city and increased by approximately 2,9% in the other case, it can be concluded that cities do, indeed, play a role for the stabilizing of unemployment rates.

On the whole, the examination of the second hypothesis showed that the number of urban settlements has a positive influence on the demographic development of municipalities. While the exact importance cannot be estimated, this aspect still shall be regarded as a necessary component in the design of the vulnerability index.

Table 10. Spearman's correlation test: Unemployment change in % (2011-2015) & Number of cities (Own calculations. Source: NSI, 2011a, 2015, 2017a).

Correlations				
			Number of cities	Unemployment change in % (2011-2015)
Spearman's rho	Number of cities	Correlation Coefficient	1,000	**-,314****
		Sig. (2-tailed)	.	**,000**
		N	166	166
	Unemployment change in % (2011-2015)	Correlation Coefficient	**-,314****	1,000
		Sig. (2-tailed)	**,000**	.
		N	166	166
**. Correlation is significant at the 0.01 level (2-tailed).				

Table 11. Independent samples T-test: Unemployment change in % (2011-2015) & Number of cities: Breakdown value = 2 (Own calculations. Source: NSI, 2011a, 2015, 2017a).

Group Statistics					
	Number of cities	N	Mean	Std. Deviation	Std. Error Mean
Unemployment change in % (2011-2015)	>= 2	31	-,387	6,4667	1,1615
	< 2	233	2,884	5,8934	,3861

Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Unemployment change in % (2011-2015)	**Equal variances assumed**	3,163	**,076**	-2,870	262	**,004**	-3,2712	1,1398	-5,5155	-1,0269
	Equal variances not assumed			-2,673	36,938	,011	-3,2712	1,2239	-5,7513	-,7911

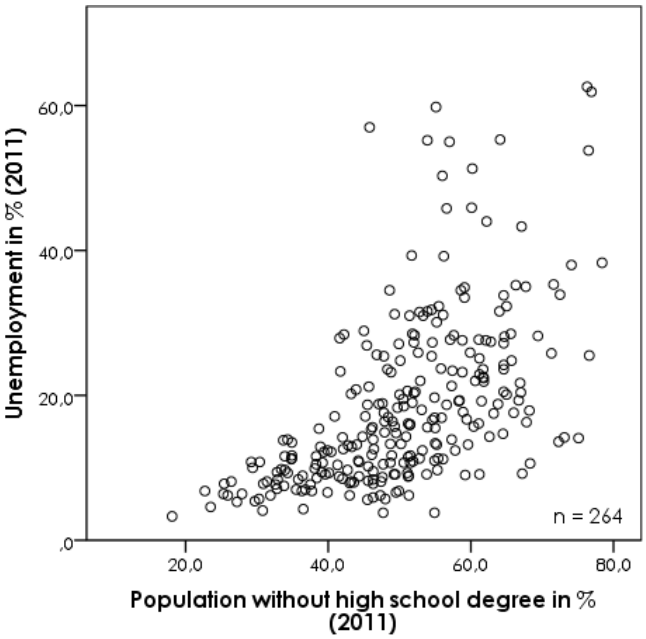
6.1.3. Hypothesis 3: Education levels of the local population influence the vulnerability of municipalities to shrinking.

According to national statistics (NSI, 2015), only 17,8% of the people with higher level of education were faced with the risk of poverty and/or social exclusion in 2015. On the contrary, 70,3% of the people without completed secondary education were exposed to the same risks. Therefore, municipalities where people with low education levels prevail, should be more prone to high unemployment and a lower living standard as a whole. At the same time, highly educated people generally have better professional prospects and are thus more flexible in regard to changing their place of residence. This means that people with a university degree are more likely to emigrate if the local economic situation does not appeal to them. Against this background, a vicious circle emerges. While highly educated people are probably concentrated in already prosperous urban areas which offer them better opportunities for career development, municipalities with large shares of poorly educated people are likely to experience higher unemployment rates. This, as already indicated by the carried out statistical tests, is among the factors which make them more vulnerable to shrinkage. Therefore, an obvious lack of balance in the development of municipalities comes to existence due to differences in the education levels of the local population.

To examine the formulated hypothesis, first the correlation between the share of people without high school degree and unemployment rates will be tested. Since both variables are continuous, they will be tested for a linear relationship to establish whether it is suitable to carry out Pearson's test of correlation or a linear regression.

After a visual inspection of the generated scatterplot (fig. 17) no linear relationship could be registered. There is, however, a monotonic relationship between the two variables – while the share of people without a high school degree increases, the unemployment rates are rising as well. Therefore, Spearman's test is an appropriate alternative to estimate whether there is, indeed, a statistically significant correlation.

Figure 17. Scatterplot: Unemployment in % (2011) & Population without high school degree in % (2011) (Own visualization. Source: NSI, 2011a, 2011b).



The results indicate a strong positive correlation (=0,65) between the two variables (tab. 12). Therefore, the above statement that municipalities with larger shares of poorly educated people are more prone to high unemployment can be considered as correct.

Table 12. Spearman's correlation test: Population without high school degree in % (2011) & Unemployment in % (2011) (Own calculations. Source: NSI, 2011a, 2011b).

Correlations				
			Population without high school in % (2011)	Unemployment in % (2011)
Spearman's rho	Population without high school degree in % (2011)	Correlation Coefficient	1,000	**,653****
		Sig. (2-tailed)	.	**,000**
		N	264	264
	Unemployment in % (2011)	Correlation Coefficient	**,653****	1,000
		Sig. (2-tailed)	**,000**	.
		N	264	264
**. Correlation is significant at the 0.01 level (2-tailed).				

After a closer look at the statistics regarding the share of population without high school degree in Bulgarian municipalities, it can be concluded that most municipalities are in an unfavourable position – half of them have an average share of people without completed secondary education of 50,8% (tab. 13). To compare how unemployment rates changed over the period 2011-2015 depending on the share of population without high school degree in Bulgarian municipalities, an independent samples T-test is going to be carried out. The chosen breakdown value is 42,9% (25% Percentile).

Table 13. Share of population without high school degree in Bulgarian municipalities (2011) (Source: NSI, 2011b).

Statistics		
Population without high school in % 2011		
N	Valid	264
	Missing	0
Mean		50,363
Median		**50,750**
Mode		46,3[a]
Percentiles	**25**	**42,850**
	50	50,750
	75	58,750
a. Multiple modes exist. The smallest value is shown		

According to the results of the carried out T-test (tab. 14), municipalities where the share of poorly educated people was less than 42,9% in 2011 have had the capacity to decrease unemployment rates by -0,1% on average as opposed to municipalities with higher share of people without completed secondary education where unemployment rates rose by another 3,4% between 2011 and 2015. The test confirmed that the difference between the two means is statistically significant ($p < 0,001$).

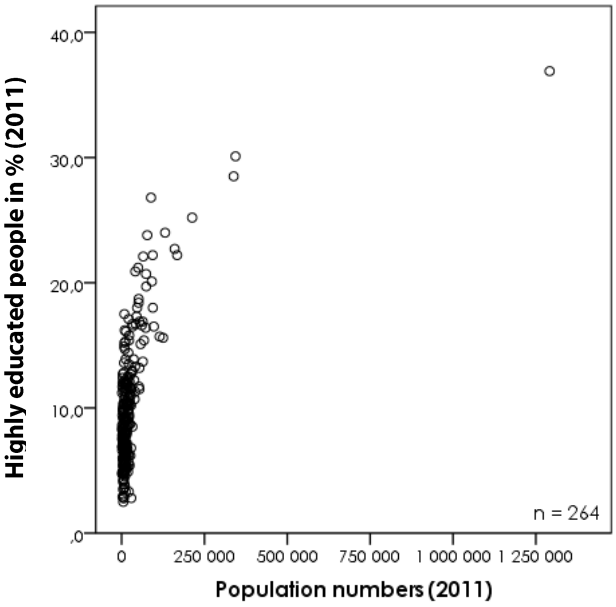
Table 14. Independent samples T-test: Unemployment change in % (2011-2015) & Population without high school degree in % (2011): Breakdown value = 42,9% (Own calculations. Source: NSI, 2011a, 2011b, 2015).

Group Statistics					
	Population without high school degree in % (2011)	N	Mean	Std. Deviation	Std. Error Mean
Unemployment change in % (2011-2015)	>= 42,9	198	3,381	6,6826	,4749
	< 42,9	66	-,144	1,7215	,2119

Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Unemployment change in % (2011-2015)	Equal variances assumed	30,038	**,000**	4,234	262	,000	3,5253	,8326	1,8858	5,1647
	Equal variances not assumed			6,779	252,874	**,000**	3,5253	,5200	2,5011	4,5494

Next, it shall be examined whether highly educated people are, indeed, concentrated in more populous municipalities as it was suggested above. After a scatterplot was created to check for a linear relationship between the two variables (fig. 18), Spearman's test of correlation was carried out because such was not registered.

Figure 18. Scatterplot: Highly educated people in % (2011) & Population numbers (2011) (Own visualization. Source: NSI, 2011b, 2016a).



According to the correlation coefficient (tab. 15), there is a moderate positive correlation (=0,5) between the two variables *highly educated people in % (2011)* and *population numbers (2011)*. Therefore, it can be argued that more populous municipalities do, indeed, have larger shares of highly educated people. This is only natural given the fact that these municipalities generally offer better employment opportunities and an easier access as well as a larger variety to social services including educational facilities.

Against this background, the correlation between the number of educational facilities and the share of highly educated people was examined as well (tab. 16). According to the result, there is a moderate positive correlation (= 0,5) between the number of educational facilities and the share of people with an attained level of higher education.

Table 15. Spearman's correlation test: Highly educated people in % (2011) & Population numbers (2011) (Own calculations. Source: NSI, 2011b, 2016a).

Correlations

			Highly educated people in % (2011)	Population numbers (2011)
Spearman's rho	Highly educated people in % (2011)	Correlation Coefficient	1,000	**,543****
		Sig. (2-tailed)	.	**,000**
		N	264	264
	Population numbers (2011)	Correlation Coefficient	**,543****	1,000
		Sig. (2-tailed)	**,000**	.
		N	264	264
**. Correlation is significant at the 0.01 level (2-tailed).				

Table 16. Spearman's correlation test: Number of educational facilities (2011) & Highly educated people in % (2011) (Own calculations. Source: NSI, 2011b).

Correlations

			Number of educational facilities	Highly educated people in % (2011)
Spearman's rho	Number of educational facilities (2011)	Correlation Coefficient	1,000	**,475****
		Sig. (2-tailed)	.	**,000**
		N	264	264
	Highly educated people in % (2011)	Correlation Coefficient	**,475****	1,000
		Sig. (2-tailed)	**,000**	.
		N	264	264
**. Correlation is significant at the 0.01 level (2-tailed).				

The carried out statistical tests indicate that education levels of the local population have a direct impact on unemployment and thus could indirectly affect the vulnerability of municipalities to shrinkage. On the whole, municipalities with low educated population are more vulnerable to experiencing high unemployment rates which, as already suggested by the carried out tests, play a contributing role to shrinkage. Highly educated people, on the other hand, are clustered in the most populous municipalities, or likely to emigrate due to the flexibility their better professional qualification gives them. These tendencies further deprive small and depopulated municipalities of a chance to stabilize their economic development and thus slow down demographic shrinking at least to a certain extent.

6.2.Vulnerability criteria

Based on the results of the statistical analysis, a number of vulnerability criteria are going to be compiled in order to spatially identify which are the municipalities in need of immediate actions to counteract the process of shrinking.

The first criterion to be incorporated in the vulnerability index is, however, selected independently from the carried out analyses since it concerns the population change itself and no other factors that may or may not have had an influence on it. The period 1992-2015 is taken as a reference since 1992 is the closest year to the breakdown of socialism in 1989 for which there is available population data. The idea is to select municipalities which have already lost a significant amount of their population and are therefore going to be most severely affected if the shrinking process continues in the future. In this respect, the first selection criterion is **Population decline (1992-2015) > 35,7%** as the top 25% municipalities hit the hardest by demographic decline experienced a population loss of at least 35,7% (tab. 17).

Table 17. Population change in % in Bulgarian municipalities between 1992 and 2015 (Source: NSI, 2016a).

Statistics		
Population change in % (1992-2015)		
N	Valid	261
	Missing	3
Mean		-26,635
Median		-28,050
Mode		-65,7[a]
Percentiles	**25**	**-35,684**
	50	-28,050
	75	-18,026
a. Multiple modes exist. The smallest value is shown		

The second criterion concerns unemployment rates: **Unemployment rate (2011) > 11,3%**. According to the carried out calculations in SPSS, municipalities where unemployment rates were higher than the national average of 11,3% in 2011, shrank with more than 5% over the next four years (cf. table 7).

Third, the number of urban settlements is going to be incorporated in the set of vulnerability criteria. The statistical analyses carried out, showed that municipalities with more than one city or town are more resilient towards unemployment and demographic shrinkage as well. In this regard, the vulnerability criterion is

Number of urban settlements < 2.

Last, but not least, the share of poorly educated people is going to be taken into account. For this purpose the selection criterion **Share of people without high school degree (2011) ≥ 42,9 %** is chosen (cf. table 13).

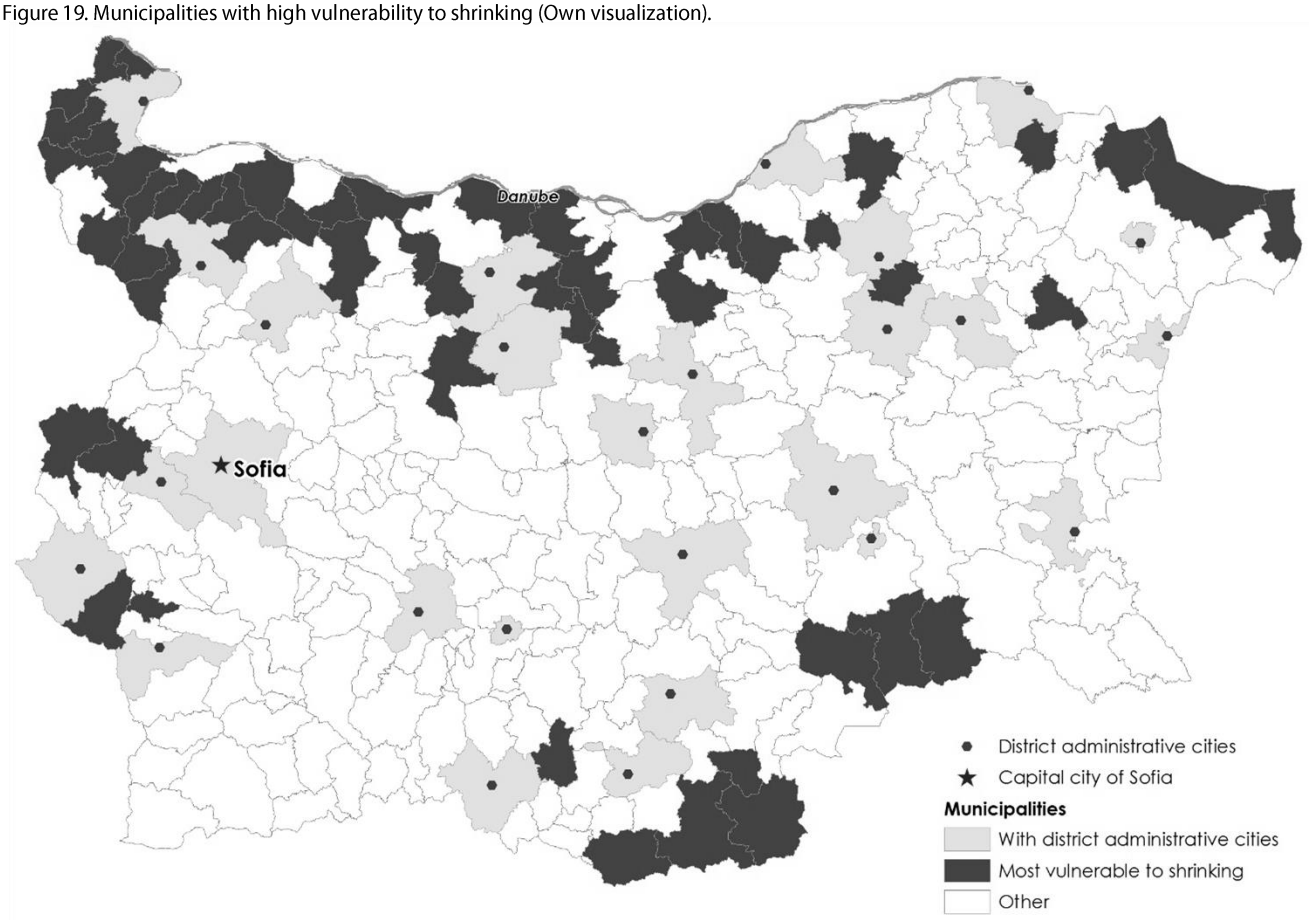
Finally, the vulnerability criteria are summarized in table 18.

Table 18. List of vulnerability criteria in regard to demographic shrinking (Own compilation).

Population decline (1992-2015) > 35,7%
Unemployment (2011) > 11,3%
Number of urban settlements < 2
Share of people without high school degree (2011) ≥ 42,9%

As a result, the municipalities most vulnerable to shrinking were spatially defined (fig. 19). After a visual inspection of the generated map it can be concluded that while all municipalities which contain

Figure 19. Municipalities with high vulnerability to shrinking (Own visualization).



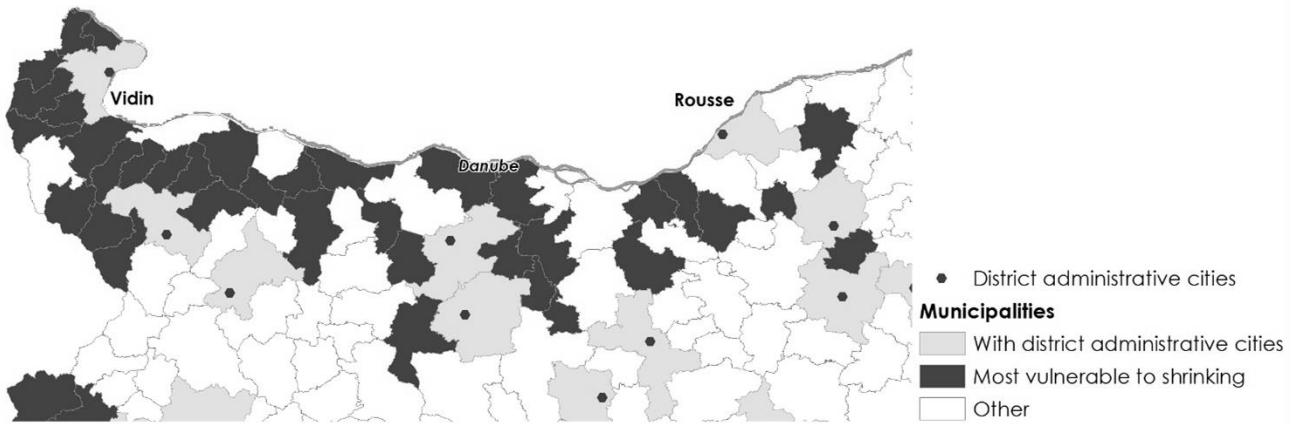
district administrative cities are stable in regard to shrinking according to the implemented selection criteria, the municipalities most vulnerable to shrinkage are mainly situated in the periphery of the country. Therefore, their vulnerability could be interpreted as a symptom of their unconnectedness in the national spatial network. Furthermore, there is a clustering of vulnerable municipalities in the northwestern part of the country and especially near the river of Danube. In direct proximity to this spatial cluster is the municipality with the district administrative city of Vidin (fig. 20).

Against this background, it is reasonable to direct measures and resources to the municipality of Vidin as it is unrealistic to believe that small, rural municipalities could experience a renaissance on their own. Instead, the development of municipal and district administrative cities has to be fostered in order to establish them as attractive urban areas providing enough jobs and a well-functioning system of social and healthcare facilities. Thus, if a good and reliable transport infrastructure is provided, people living in the neighbouring municipalities would not necessarily have to change their place of residence. As a result, shrinking should eventually slow down.

Still, how could this be achieved? What kind of planning strategies and implementation tools are necessary? To answer these questions the municipality of Rousse (fig. 20) is going to be taken as a reference example of a municipality with local potentials similar to those of Vidin, and yet with a different pace of development. The municipality of Rousse not only proved capable to stabilize at least to some extent its demographic development, but as shown in figure 20 only one of Rousse's neighbouring municipalities falls into the category *most vulnerable to shrinkage* according to the developed and implemented selection criteria. This leads to the belief that the municipality of Rousse has, indeed, managed to play a stabilizing role in regard to shrinking.

With this is view, more questions emerge: What are the socio-economic profiles of the two municipalities? How did the pattern of shrinkage evolve over the time after the breakdown of socialism? Why was Rousse able to establish itself as a prosperous municipality in the northern part of the country, famous for its poor economic condition? Is it possible for Vidin to follow its example? These are questions which are going to be addressed in the next chapters on the basis of a comparative study.

Figure 20. Vidin and Rousse – district administrative cities on the river of Danube (Own visualization).

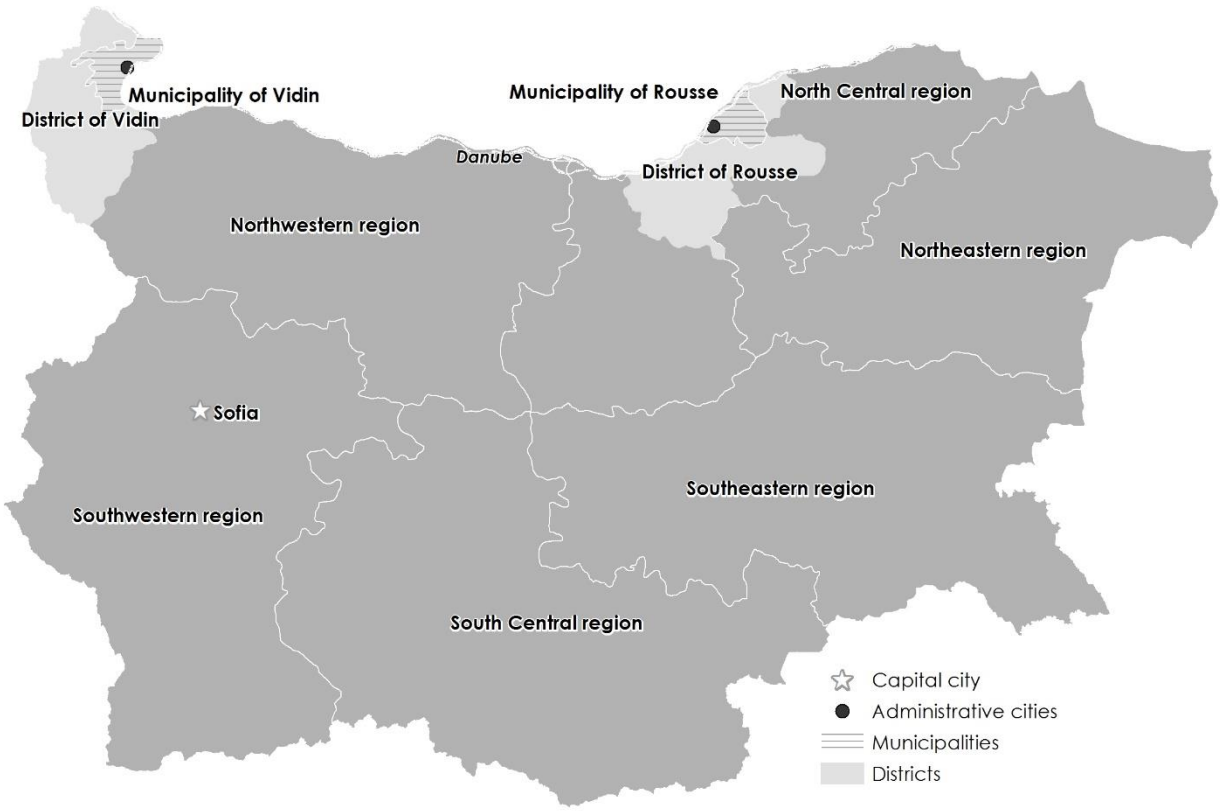


7.COMPARATIVE STUDY OF THE MUNICIPALITIES ROUSSE AND VIDIN

Vidin and Rousse are both administrative cities of their districts (NUTS III level) and municipalities (LAU I level) (fig. 21). Furthermore, they are both situated on the shores of the river of Danube – an important natural resource which played a key role for their initial establishment as settlements. Today, the river could serve as an impulse for the development of infrastructure for recreation and sporting activities in order to facilitate the creation of an attractive living environment.

Yet, the main competitive advantage of both cities is their strategic position within the Pan-European transport network (fig. 22). Next to the river of Danube (Pan-European transport corridor VII), one additional transport corridor passes through the territory of each city. In the case of Vidin, this is the Pan-European corridor IV which connects Central European cities such as Nuremberg, Prague and Bratislava with cities in Southeastern Europe. The Pan-European corridor IX passes through the city of Rousse. Its route connects cities from the northern part of Europe such as Helsinki, Saint-Petersburg and Moscow, with Bulgarian and Greek cities in the southeastern part of Europe. The crossing of these important transport corridors presents both cities with the opportunity to establish themselves as important transport and logistics centres and thus manage to

Figure 21. Vidin and Rousse on the map of Bulgaria (Own visualization. Source: Eurostat, 2011: p. 21).



become *connected* if not in the global, then at least in the European *network*.

Another potential which Vidin and Rousse have in common are the already built and functioning bridges connecting them with Romania. In the case of Rousse, Danube Bridge 1 (fig. 23) is presumed to foster trans-border cooperation with Giurgiu, the Romanian city on the opposite side of the river, as well as with the capital city of Bucharest due to its close proximity[10]. This is one of the ways in which the local economy is envisioned to benefit from its geographic location (Lecheva-Gospodinova, 2017, pers. comm.).

Figure 22. Vidin and Rousse within the network of Pan-European transport corridors (Edits by author. Source: Wikipedia, 2016c).

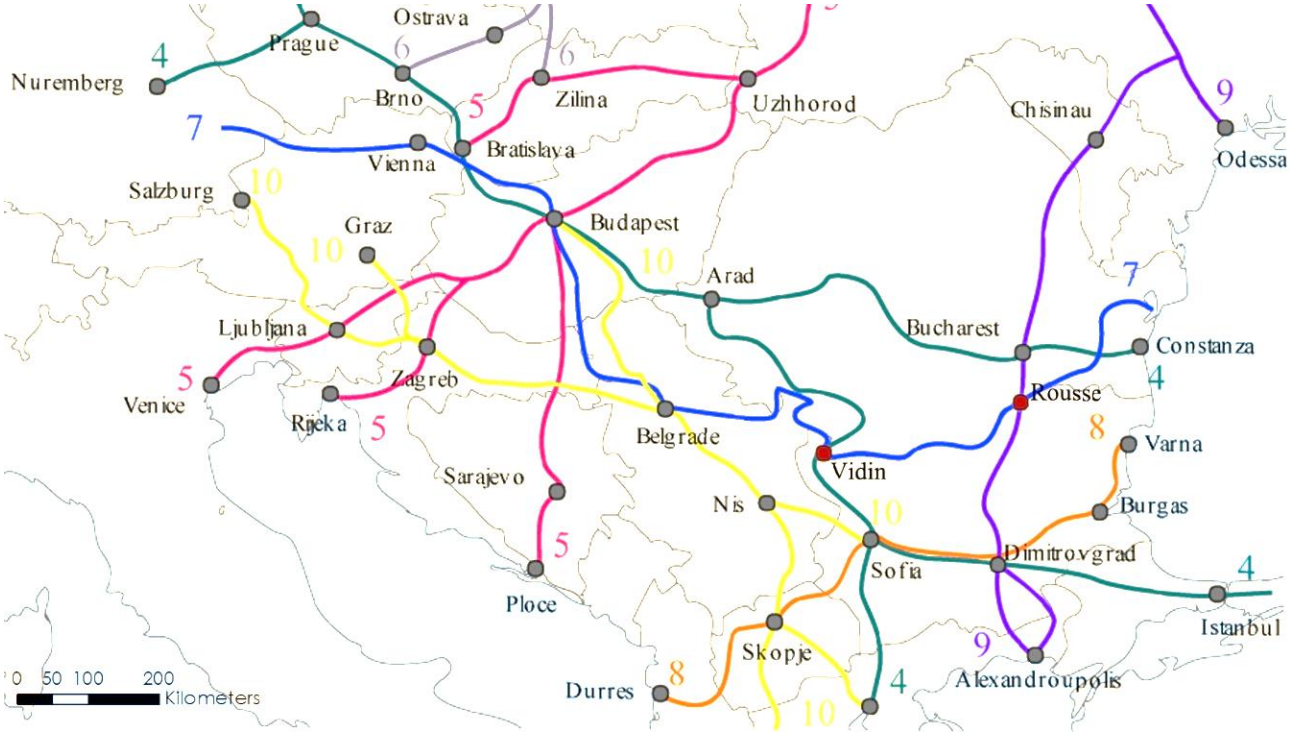


Figure 23. Danube Bridge 1 connecting Rousse and Giurgiu (Source: Altours.bg, 2015).

In the case of Vidin, Danube Bridge 2 (fig. 24) establishes a connection with the Romanian city of Calafat. Therefore, opportunities for developing trans-border cooperation exist in Vidin as well. Still, it could be argued that in this regard Vidin is in a worse position, because Calafat is a small city of around 20.000 people which does not offer much more potential than Vidin itself. The closest big Romanian city (of Craiova) is more than 100 km away

[10] The distance between Rousse and Bucharest is 74 km (Distance Calculator, 2017).

Figure 24. Danube Bridge 2 connecting Vidin and Calafat (Source: Tsvetanov, 2014)

and it can be reached within an hour and a half on the E-79 (Distance Calculator, 2017).

Despite the mentioned potentials, the northern part of Bulgaria has a much weaker economic performance than the southern regions of the country (NUTS II level) and especially the Southwestern region which benefits from the strong presence of the capital city of Sofia (NSI, 2017b). Besides its low economic position compared to the national average, the Northwestern region, where Vidin is situated, is the poorest within the EU in terms of GDP per capita in purchasing power standards (PPS): 30% of the EU-28 average (Eurostat, 2015a). The North Central Region, where Rousse is located, is the second poorest in the same regard: 34% of the EU-28 average (ibid.). According to the Regional Competitiveness Index of the European Commission (EC, 2016), the Northwestern region is 258th and the North Central region is 245th from all 263 NUTS II regions in the EU. Against this background, it is not surprising that over the years after the breakdown of socialism the unfavourable economic conditions triggered a process of persisting out-migration.

With this in view, while it is hardly possible to address tendencies related to birth and mortality rates at the local level, what is in the hands of local planning authorities is to make cities and municipalities attractive in order to slow down out-migration and thus foster a more balanced distribution of the population across the country. For this purpose, existing local potentials and weaknesses are to be identified and a set of strategic planning policies aimed at governing and developing these potentials and addressing the weaknesses is to be developed. Provided that the policies elaborated at the local level are well-coordinated with corresponding policies addressing the problem of shrinking at the district, regional and national level and their consistent implementation is guaranteed, a first step towards slowing down shrinking in the most vulnerable municipalities could be made. Against this background, this chapter aims to:

- First, investigate why the municipalities of Vidin and Rousse, which possess similar local potential, differ significantly in their vulnerability to shrinking.

- Second, estimate whether Vidin could adopt strategies which proved to be successful in addressing the process of shrinkage in Rousse.

To this end, different methods are going to be used. First, the demographic and economic make-up of the two example municipalities with their administrative cities is going to be explored in detail using a wide range of quantitative data. This should help determine key similarities and differences between Vidin and Rousse especially in regard to the factors which were previously identified as main contributors to the vulnerability to shrinking. In addition, planning policies are going to be analysed and compared in order to estimate to what extent local authorities have addressed the problem of urban shrinkage in their strategies so far. Last, but not least, statements from the carried out expert interviews are going to be taken into consideration and incorporated in the analysis.

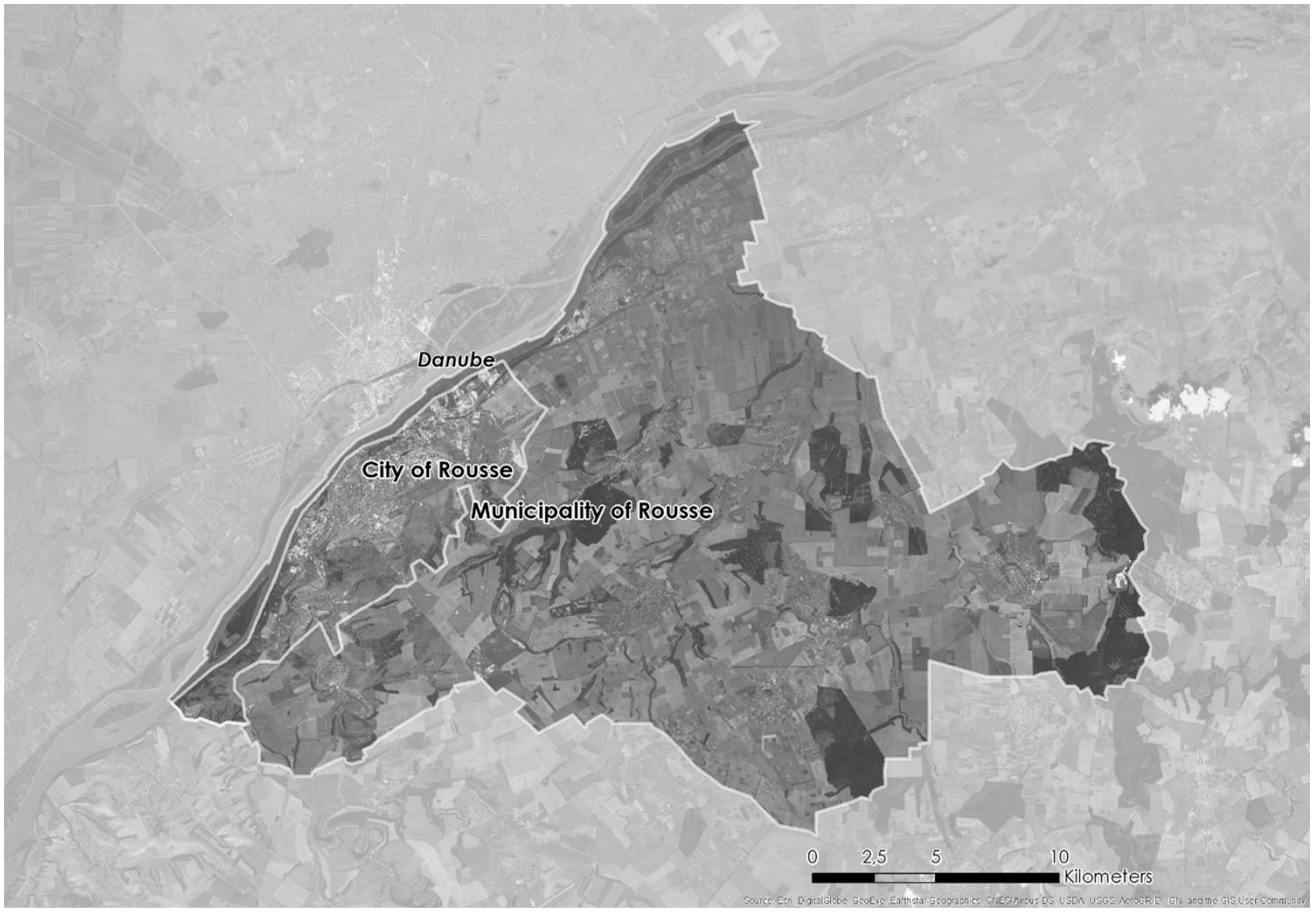
7.1. The municipality of Rousse

Rousse's path of development is going to be brought into focus first. This decision is dictated by the intention to take Rousse as a reference example for a municipality which managed to slow down the process of urban shrinking at least to some extent. Thus, a basis for comparison with the municipality of Vidin, which was identified as a municipality in need of assistance measures, will be created.

7.1.1. Geographic and socio-economic make-up of Rousse

The municipality of Rousse is located in the North Central NUTS II Region on the shores of the river Danube (fig. 25). It is the most populous municipality on the northern border of Bulgaria (NSI, 2016a). This is mostly to be accounted to the administrative

Figure 25. Aerial image of the municipality and the city of Rousse (Own visualisation. Source: Google Maps, 2017a).



city of Rousse which is the fifth largest Bulgarian city in terms of population (ibid.) and takes a relatively big part of its territory.

Besides the city of Rousse, there is also the town of Marten with less than 3.500 inhabitants (in 2015) and another 12 villages (NSI, 2017a). The population of the municipality is highly urbanised – between 2000 and 2015 around 89-92% had been living in the two urban settlements, while only 8-11% inhabited the other twelve rural settlements. Moreover, the urbanisation trend has been slowly but steadily increasing during this period (NSI, 2016a).

In terms of population age structure (fig. 26), there has been a slight decrease in the share of people under working age at the expense of an increase in the share of people over working age between 2000 and 2015. This, however, is seen as a normal trend for European countries: "Europeans are living longer than ever before and this pattern is expected to continue due to unprecedented medical advances and improved standards of living. By 2020, a quarter of Europeans will be over 60 years of age" (Geoghegan-Quinn, 2014: p. 5). Compared to data about EU-28 average population structure by major age groups, the numbers are, indeed, quite similar (Eurostat, 2015b). The share of elderly people in the municipality of Rousse, however, is slightly larger, while the other two shares (especially people at working age) are smaller.

In regard to education levels of the local population, 22,2% have a higher education, 49,8% have a secondary education, 19,6% have a primary education and only around 8% have not completed their primary education or have never visited school (NSI, 2011b). Therefore, the municipality of Rousse has a better educated labour force compared to the national average (fig. 27). This is to be attributed to the good network of educational facilities and especially to the presence of the University of Rousse "Angel Kanchev" (Lecheva-Gospodinova, 2017).

Figure 26. Population age structure in the municipality of Rousse (2000-2015) (Own visualization. Source: NSI, 2017c).

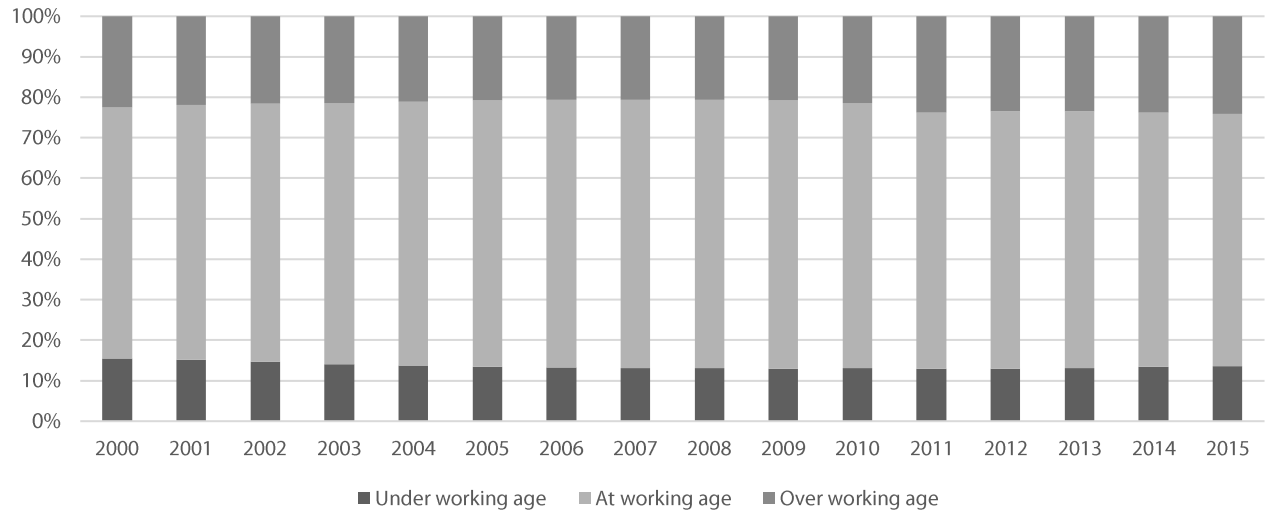
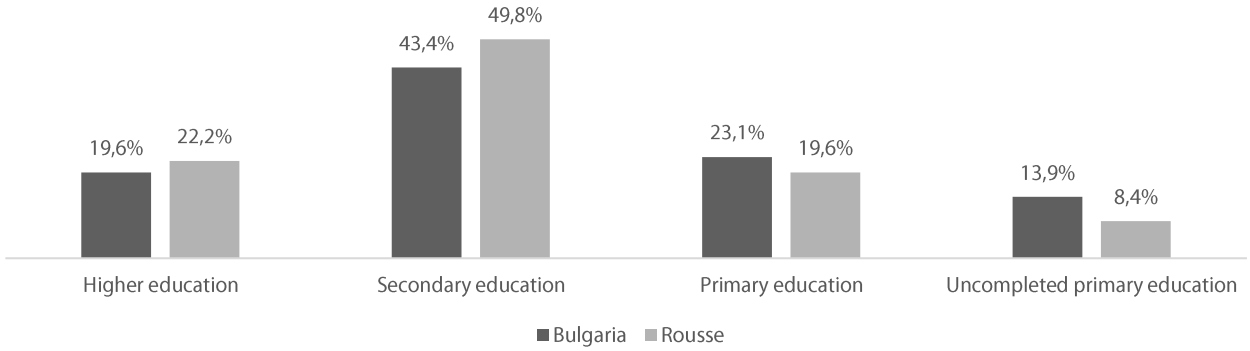


Figure 27. Comparison of the population structure by attained levels of education in Rousse and Bulgaria (Own visualization. Source: NSI, 2011b).



Unemployment rates in the municipality of Rousse were around two times lower compared to national average before the global economic crisis (fig. 28). In 2009, they almost doubled. Since then, however, the municipality managed to stabilize its economic development and unemployment rates started to drop down. According to data from the Employment Office of Rousse, the average unemployment rate in the municipality in 2015 was 4,3% (Infograf.bg, 2017). Hence, it dropped down by another 2 points over a period of four years.

Apparently, unemployment rates in the municipality of Rousse have always been significantly lower than the national average over the years after 2007. However, this does not apply to the district level (fig. 29). Therefore, in terms of unemployment which is

Figure 28. Unemployment rates in Rousse District and Rousse Municipality compared to Bulgarian average (Own visualization. Source: NSI, 2011a; Infograf.bg, 2017).

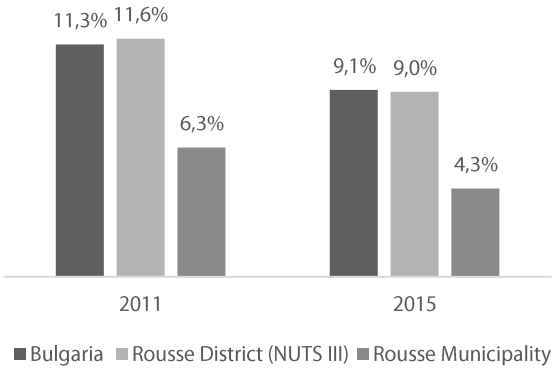
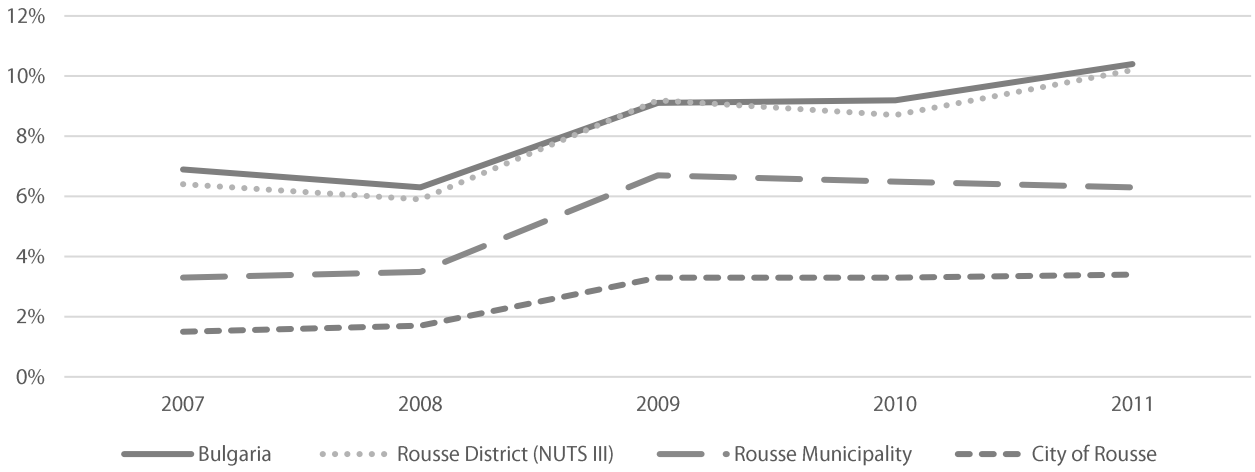


Figure 29. Comparison of unemployment rates in Bulgaria, Rousse District, Rousse Municipality and the City of Rousse (2007-2011) (Own visualization. Source: NSI, 2011a).



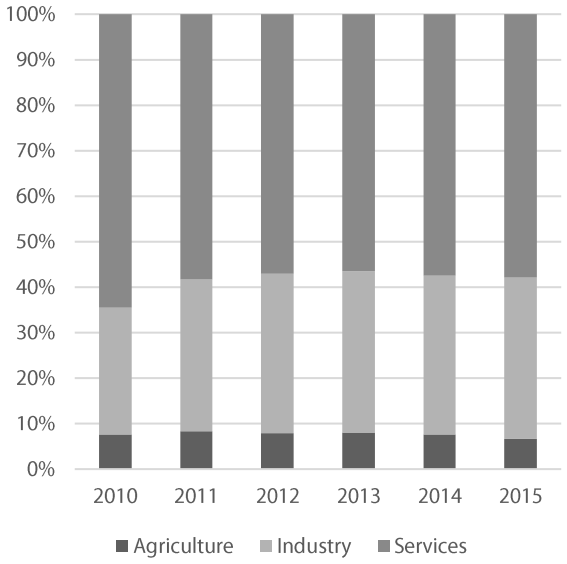
one of the factors having an impact on the vulnerability of Bulgarian municipalities to shrinking, the municipality of Rousse seems to exhibit certain resilience compared to other municipalities within the district and at the national scale as well.

Still, alarming is the trend of an increasing unemployment among people younger than 29 years. While in 2007 it was 6%, it almost doubled to 11% in 2011 (Rousse Municipality, 2014: p. 71). This negative tendency could become a significant factor in the decision-making process of young adults considering to change their place of residence. This could have an especially negative impact on the future demographic development of the municipality since an outflow of young people would decrease current birth rates and contribute to the further distortion of population age structure.

In terms of economics, leading industrial branches in the municipality of Rousse are the chemical industry, mechanical engineering, electrical engineering, electronic engineering as well as the clothing and food industries. Most of the economic and business activities are situated in the Industrial Park, in the Logistic Park and in the newly built Business Park in the city of Rousse (Rousse Municipality, 2011a). The harbour is of significant importance for the economic development of the municipality as well. In this regard, a River Information System (RIS) for the Bulgarian part of Danube was developed and implemented in Rousse. The main objective of the RIS is the "harmonization of information services to support traffic and transport management in inland navigation" (BULRIS, 2017).

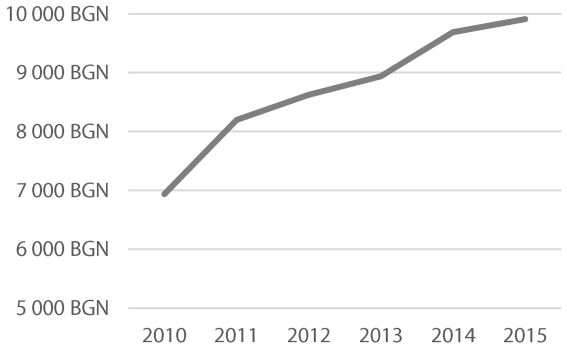
The lowest spatial level for which currently there are available statistical indicators about the economic performance, is the district level (NUTS III). Therefore, only a vague idea about the economic situation in the municipality could be conveyed. Still, the data allows for the general conclusion that the service sector has the biggest contribution in regard to GVA followed by the industry and the agricultural sectors which is typical for most developed countries nowadays (fig. 30).

Figure 30. GVA by economic sectors in the District of Rousse (NUTS III) (Own visualization. Source: NSI, 2010-2015).



GDP per capita has constantly been increasing since 2010 and over a period of five years it rose with nearly 3.000 BGN per capita which equals a growth rate of 42,9% (fig. 31).

Figure 31. GDP per capita in the District of Rousse (Own visualization. Source: NSI, 2010-2015).

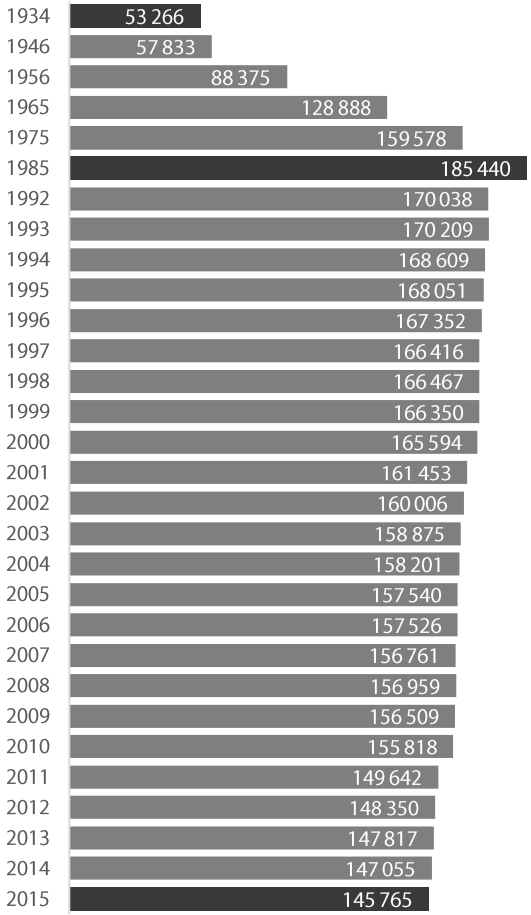


7.1.2. The shrinkage of Rousse

Both the municipality and the city of Rousse experienced demographic shrinkage after the breakdown of socialism. Between 1992 and 2015 they lost respectively 13,6% and 14,3% of their population (NSI, 2012, 2017a). Yet, these numbers are lower than the national average demographic shrinkage of more than 15% during the same period. Against all odds, this particular municipality, located in one of the poorest parts of the country, managed to remain rather stable in terms of demographic shrinking.

Based on statistical data for the period 1934-2015 available for the city of Rousse, its demographic development can be analysed in detail (fig. 32). While the city had only around 50.000 inhabitants before the Second World War, its population increased rapidly over the socialist period and by 1985 it reached its peak of more than 185.000 people.

Figure 32. Demographic development of the city of Rousse: Population in absolute numbers (1934-2015) (Own visualization. Source: NSI, 2017a).



After the end of the Soviet regime, the city started to shrink and within 30 years it lost nearly 40.000 inhabitants. According to Lecheva-Gospodinova (Senior expert in the Department of European Development at the Municipality of Rousse) (2017), the process of shrinking was triggered by variety of factors such as high unemployment rates, low wages and the collapse of the business and the industry sector. Moreover, she considers the accession of Bulgaria in the EU in 2007 as another aspect which influenced demographic shrinking. After the access to the European labour market became easier than ever, out-migration was accelerated due to the promise of more job opportunities and higher wages. At the same time, the availability of jobs in the municipality proved to be a restraining factor in regard to out-migration (pers. comm.). Against the background of the previously experienced growth which is mainly to be accounted to industrialization trends, the shrinkage pattern of the city of Rousse is not so alarming.

In this context, arch. Evrev (2017) believes that the demographic problem should not be exaggerated to apocalyptical scenarios: "In the past, our cities have been developing successfully with less population than now. When they rapidly increased over a short period of time during the industrialization, many of their problems emerged and they have not been solved yet. We have to get used to the fact that our cities are going to have to develop with less population in the future. This does not necessarily mean urban decay. The excessive urban growth from the

industrial era is now replaced by a calmer partial increase in terms of territory and more profound internal structural changes." (pers. comm.).

With this in view, it depends on local authorities to identify local development potentials and choose how to capitalize them in the most efficient way in order to adjust to the internal structural changes. Shaping the new identity of their municipalities, however, should correspond to current realities not only within the national, but within the global context as well.

7.1.3. Review of strategic planning policies

According to Lecheva-Gospodinova (2017), "Rousse is an emblematic municipality for Bulgaria and the Danube macro region with pace of economic and infrastructural development higher than the national average. These factors foster investments and employment in the sectors of industry, transport, logistics, agriculture, tourism, culture, education and science. The goal of Rousse Municipality is to efficiently capitalize local resources in order to achieve a sustainable, inclusive and intelligent growth as well as high quality of life" (pers. comm.). The next few paragraphs are going to shed light on the main strategic documents and their priorities elaborated for the purpose of achieving this goal.

The main priority outlined in the *Programme for governing the Municipality of Rousse (2011-2015)*, was economic growth: "Our understanding is that municipalities should be the main driving force for the economic growth of the regions and thus - the country as a whole. […] Considering the negative trends in the socio-economic development of Rousse in recent years, significant emphasis in our work for the period 2011-2015 will be put on creating favourable conditions for the development of the local economy and raising the living standards of local citizens. This would be the most effective way to overcome the deepening demographic problems at the local and regional level" (Rousse Municipality, 2011b: p. 5). Against this background, encouraging innovations and supporting economic sectors with high GVA were high on the municipal agenda between 2011 and 2015: "In line with the new realities caused by globalization, cities around the world are making continuous efforts to reposition their economies by attracting investments which would ensure their sustainable development in the long term. We foresee the development of an adequate strategy corresponding to contemporary global tendencies - Strategy for long-term sustainable economic development of the Municipality of Rousse […]" (ibid., pp. 10-11). In this regard, the Programme for governing the Municipality of Rousse (2011-2015) identified the following three main priorities:

- *Priority 1: Attracting investments, fostering innovations and offering job opportunities*
- *Priority 2: Ensuring attractive living environment*
- *Priority 3: Offering European culture and tourism*

Specific objectives were defined in the strategic programme as well. These included introducing electronic administrative services, developing online databases, ensuring transparency of procurements and fostering the cooperation between the business and the local authorities in order to achieve economic growth by attracting investments. Furthermore, realization of big infrastructure projects was proposed as a way to contribute to the economic growth of the municipality by developing existing local potentials – further expansion of the current in-

dustrial zone by completing the necessary engineering infrastructure, building and operating a high-tech park with the cooperation of the University of Rousse, etc. (Municipality of Rousse, 2011b: pp. 8-9).

Image marketing was used as an instrument aimed at increasing the attractive image of the municipality. A promotion video with the slogan *Rousse – city of the free spirit* was released by the Municipality in 2015. Addressed mainly to young people and potential investors, it describes Rousse as a vibrant and exciting place to live, a *modern European* and *youth-friendly* city of *diverse cultures and communities*. Its attractiveness for investors due the *excellent* collaboration with Rousse Municipality is explicitly mentioned as well. The convenient transport connections and the proximity to Bucharest are pointed out as existing potentials for developing economic activity. Next to these advantages, Rousse is presented as a *well-established academic centre, a city of culture and arts […] that offers fun and exciting experiences* and a contact with the *unique nature of the Danube region*. Last, but not least the beautiful architecture is expressed as a *distinctive feature of the city* (Rousse Municipality, 2015a).

The *Programme for governing the Municipality of Rousse (2015-2019)* intends to further improve its administration by hiring young and well-educated people and introducing a wider range of electronic administrative services. The realization of projects with EU-funding is another development direction to be continued. Renovation of the city centre, residential areas and the Danube coastline, reconstruction of transport infrastructure, increasing energy efficiency in educational facilities and residential buildings and modernization of the public transport system are among the specific objectives outlined in the programme whereby concrete measures for achieving them are explicitly listed in the document as well (Rousse Municipality, 2015b: pp. 4-6).

Particularly interesting is that the local authorities set the resuming of the operation of Rousse Airport as a main priority during the period 2015-2019: "In the mid-term, we are going to work for the purpose of turning it into an airport for public use, with its own passenger terminal" (ibid., p. 8). This is to become possible through a public-private partnership between the Municipality and a private investor. The goal behind this undertaking is to eventually turn the airport into a multimodal logistic centre offering all types of transport: road, rail, water and air (ibid.).

Another strategic planning document governing the development of the municipality is the *Municipal Development Plan*. It identifies four strategic goals which shall be pursued in the period 2014-2020 (Rousse Municipality, 2014: pp. 171-173):

- *Strategic goal 1: Improving the investment and business climate in the municipality, raising the quality of administrative services for citizens and businesses and developing an economy, based on knowledge and innovation.*
- *Strategic goal 2: Human resource development through the application of modern and sustainable policies in the fields of culture, education, health, social services, employment, youth and sport.*
- *Strategic goal 3: Improving accessibility and connectivity of the municipality at the regional, national and international level.*
- *Strategic goal 4: Environmental protection, risk prevention and energy efficiency.*

In the context of continuous negative demographic development trends, the local authorities point out

the preservation of demographic potential with special care for young people as a priority field for targeting efforts of socio-economic policies. Main objectives in this regard are creating more jobs for young people, decreasing the share of people who leave school early, increasing the number of highly educated people who manage to find a job in the municipality of Rousse, raising the living standard of the population and diminishing the risk of social exclusion and poverty (ibid., p. 170).

An example for specific action aimed at increasing the number of highly educated young people working in the municipality is the internship programme currently offered by the local authorities. Its goal is to train young postgraduates and provide them with administrative expertise and professional experience within public institutions (Lecheva-Gospodinova, 2017, pers. comm.).

Another strategic document which takes into consideration the importance of the demographic crisis for the future development of the municipality, is the *ERGO Master Plan Euroregion Rousse-Giurgiu*. It points out demographic decline and population ageing, caused by the lack of attractive job opportunities and the low living standard, as the main challenge in front of the Euroregion Rousse-Giurgiu. With this in view, its goal is to identify a way to reverse this trend through positive development eventually leading to prosperity (PAN PLAN-LASSY-BULPLAN, 2007: p. 64). To this end, an overall vision for the development of the Euroregion over the coming 30-50 years is elaborated (ibid., p. 65).

Two fundamental aims are outlined in the *ERGO Master Plan:* "Bringing the cities of Rousse and Giurgiu closer together and bringing, therefore, both cities closer to Danube" (ibid., p. 67). In this regard, practical recommendations include: "concentration of industrial sites at suburban areas, thereby, freeing vast amounts of space in or near the city centres for implementation of new living quarters; […] condensing city centres to create a stronger urban image and feel […]; strict implementation of a suitable programme of Green Zones; preference to all (especially rail-bound) modes of public transport, but not excluding suitable infrastructure for traffic on streets outside of the city centres" (ibid.).

All fields of intervention defined in *the ERGO Master plan* are related to infrastructure. Still, the proposed measures are not limited to technical issues, but concern economic and social development as well: "For all these topics, the ERGO Master-Plan provides either clear recommendations or gives exact definition on how to proceed further. Spatial planning, in its precise dedication of individual areas, provides the basis for all further positioning or dimensioning of infrastructure" (ibid., p. 69).

All in all, the *ERGO Master Plan* is aimed at providing orientation on key development aspects for the Euroregion Rousse-Giurgiu. While the number of recommendations outlined in the plan are only a first step towards shaping a new, prosperous future for the region, the work-packages laid out in the plan are to be realized without significant delay in order to benefit from trans-border cooperation and achieve actual results (ibid., p. 82).

At the city scale, the *Integrated Plan for Urban Regeneration and Development* (IPURD) formulates the following vision for the future development of the city

of Rousse: "Rousse – the city leader of the Euroregion Lower Danube – reference for integrated sustainable urban governance and development and model for competitiveness and cohesion of the European regions" (IPURD Rousse 2020+, 2013: p. 58).

In this regard, the main strategic goals identified in the IPURD are to achieve a sustainable economic growth based on knowledge, to guarantee a high-quality living standard of the population, to preserve the environment and the system of settlements (ibid.). To successfully accomplish the defined goals, a number of priorities are outlined in the IPURD: improving the urban environment, business conditions and safety, providing a modern transport infrastructure and fostering competitiveness, developing a modern, adequate and efficient urban governance (ibid.). A project-based approach is used to address this set of priorities.

Three zones for intervention are spatially defined for which concrete implementation measures are identified. The coordination between the zones for intervention in Rousse and Giurgiu is the reason why the IPURD of the city of Rousse is unique within the Bulgarian integrated planning context. Aligning the main investment priorities of the two cities aims to reinforce trans-border cooperation. In this regard, key projects of significant importance for the Euroregion Rousse-Giurgiu include the construction of Danube Bridge 3 and a high-speed urban railway connecting both cities, as well as creating a scientific high-tech park Rousse-Giurgiu (ibid., p. 70).

Next to the strategies for municipal development, integrated urban development and trans-border cooperation, a number of *sectoral strategies* are elaborated by the local authorities as well (tab. 19).

Table 19. Sectoral strategies of the Municipality of Rousse (Own compilation. Source: Rousse Municipality, 2017a).

GOAL	STRATEGY
Achieving economic growth on the basis of innovations, research and development	☐ Innovation strategy for smart specialization of the Municipality of Rousse (2016-2025)
Attracting investments by successful city marketing	☐ Strategy for investment and city marketing of the Municipality of Rousse (2014-2020)
Developing tourism	☐ Strategy for the development of tourism in the Municipality of Rousse until 2020
Strengthening Rousse's cultural presence within the national urban network	☐ Strategic plan for culture *Rousse 2019*
Increasing energy efficiency	☐ Strategy for sustainable energy development of the Municipality of Rousse (2014-2020) ☐ Energy efficiency plan for the Municipality of Rousse (2014-2024) ☐ Programme for promoting the use of renewable energy sources and biofuels in the Municipality of Rousse (2014-2024)
Fostering an environmentally friendly urban development	☐ Plan for sustainable urban mobility in the city of Rousse (2016-2026) ☐ Programme for decreasing air pollution levels ☐ Action plan concerning the noise pollution in the agglomeration of Rousse
Social integration of different ethnic groups and groups at risk of social exclusion	☐ Action plan for the integration of Bulgarian citizens with Roma origin and other citizens in a vulnerable social situation (2013-2020)

On the whole, stabilizing the demographic development is not explicitly underlined as a main priority of the Municipality of Rousse. However, throughout all of the observed strategic planning documents the negative demographic trends manifested in the form of urban shrinkage are recognized as a problem to be addressed by concrete policies at the municipal level. The proposed measures are mainly directed towards fostering economic growth because local authorities in Rousse believe that "there is direct link between demographic and economic development and the availability of jobs is a restraining factor in terms of out-migration" (Lecheva-Gospodinova, 2017, pers. comm.). Still, there are manifold measures aimed at increasing the attractiveness of the living environment as well. Hence, it can be argued that an awareness of the urban shrinkage problematic is already present in Rousse and the local authorities have so far managed to develop a set of strategies addressing this problem mainly by fostering the economic development of the municipality.

7.2. The municipality of Vidin

The next few paragraphs are going to shed light on the municipality of Vidin with its socio-economic characteristics and path of demographic development over the years after the end of socialism. Strategic planning policies are going to be closely examined as well.

7.2.1. Geographic and socio-economic make-up of Vidin

Vidin is a municipality located in the Northwestern NUTS II region and, like Rousse, it is bordering the river of Danube (fig. 33).

Besides the administrative city of Vidin, there is the town of Dunavtsi with a total population of around 2.000 people in 2015 and another 32 villages (NSI, 2017a). With this in view, it can be concluded that the municipality has a predominant rural character. Still, 80% of the municipality's total population lived in urban areas in 2015 (NSI, 2012). Hence, the rural settlements are only very scarcely populated.

The changes in the age structure of Vidin's population observed over the 15-year period between 2000 and 2015 are quite alarming (fig. 34). While the share of people under working age has been slightly, and yet constantly, decreasing over the whole time, the share of elderly people increased by around 8% only between 2009 and 2015. Moreover, the share of people in working age was less than 60% in 2015. If these tendencies continue the same pattern, the municipality is hardly going to have the human labour capacity to improve its economic condition.

Figure 33. Aerial image of the municipality and the city of Vidin (Own visualization. Source: Google Maps, 2017b).

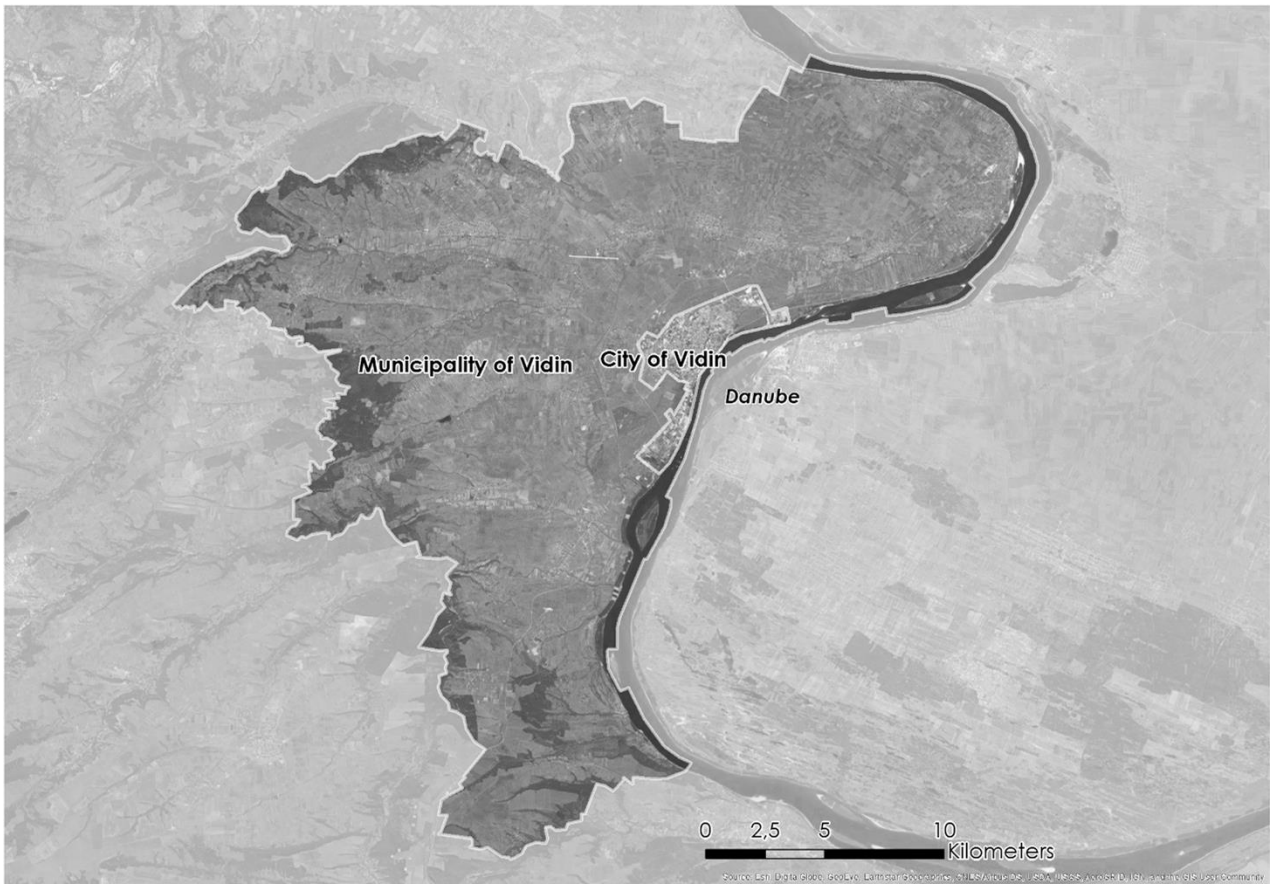
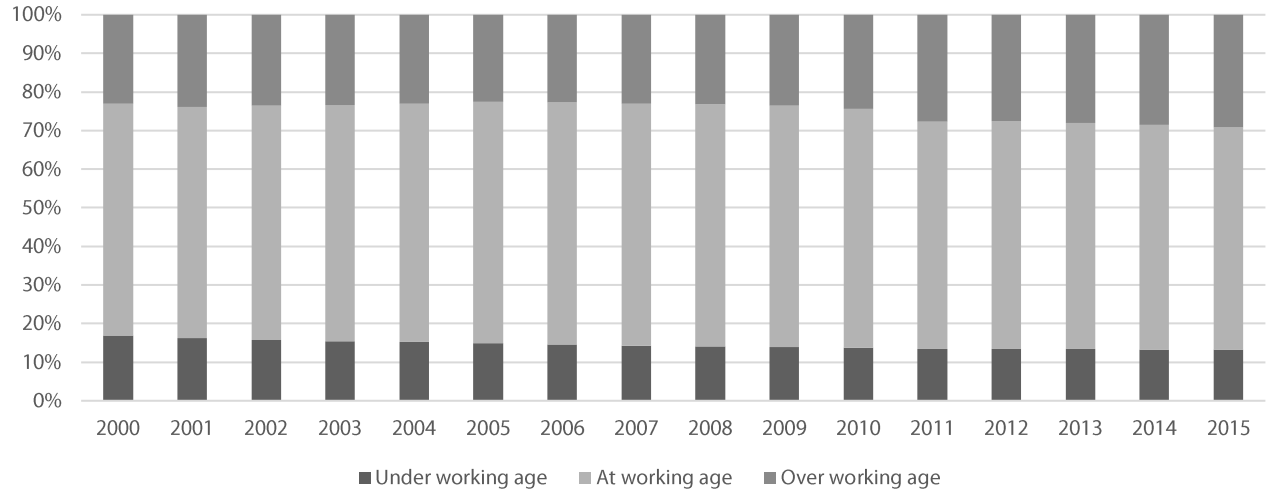


Figure 34. Population age structure in the municipality of Vidin (2000-2015) (Own visualization. Source: NSI, 2000-2015b).



In terms of attained levels of education, the population structure is not as promising as this of Rousse (fig. 35). The share of Vidin's inhabitants with an attained level of higher education is lower than the national average. This is to be accounted to the lack of a university or another type of higher educational facility within the whole district of Vidin and the neighbouring districts of Montana and Vratsa as well. Also, a total of 35% have not completed a secondary education.

Therefore, in regard to their educational attainment level, more than one third of the people living in Vidin are very likely to be socially excluded and fall into poverty (NSI, 2015).

This assumption is confirmed by the comparison of unemployment rates in the district and the municipality of Vidin with the national average rates (fig. 36). Not only are their rates higher, but while average unemployment in Bulgaria decreased by more than 2% between 2011 and 2015, the municipality of Vidin experienced a further increase in unemployment of 2,6%. The share of unemployed people in the district of Vidin shrank by 1,5% during the same period, but with its 18,8% it still remains alarmingly large.

Figure 35. Comparison of the population structure by levels of education in Vidin and Bulgaria (Own visualization. Source: NSI, 2011b).

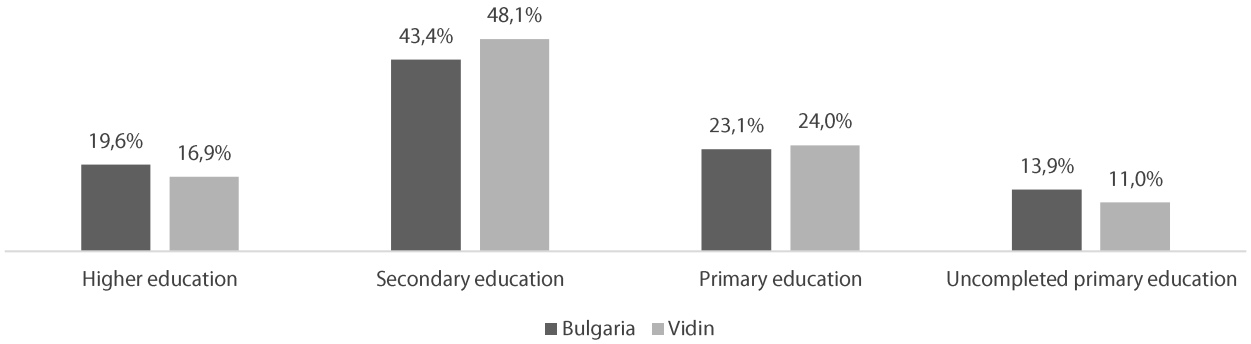


Figure 36. Unemployment rates in Vidin District and Vidin Municipality compared to Bulgarian average (Own visualization. Source: NSI, 2011a; Infograf.bg, 2017).

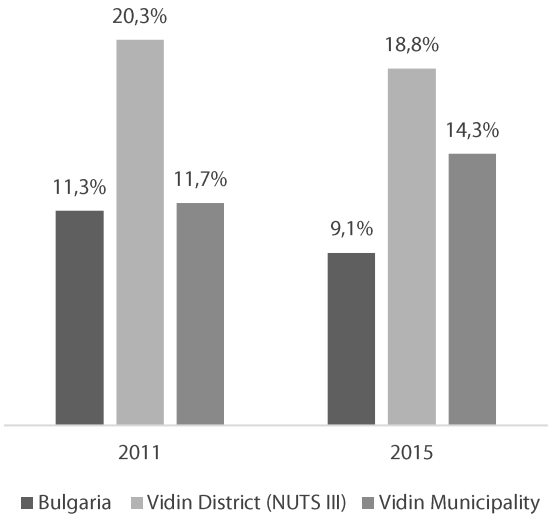
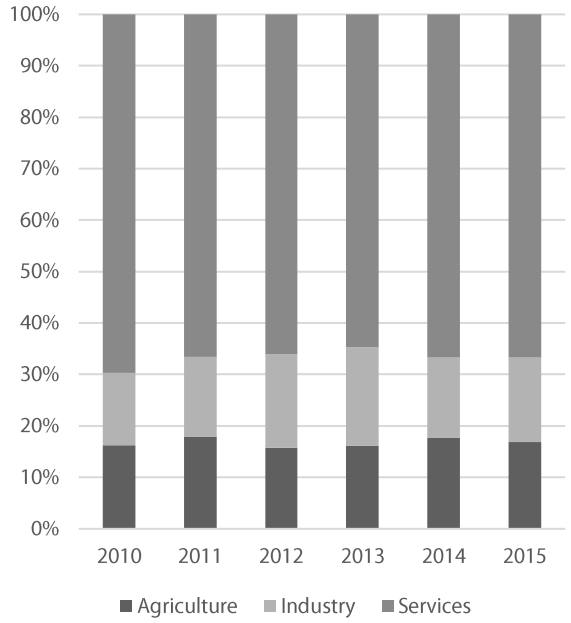


Figure 37. GVA by economic sectors in the District of Vidin (NUTS III) (Own visualization. Source: NSI, 2010-2015).



Against this background, it can be argued that either there are not enough job opportunities in the municipality, or people are not qualified for the offered positions. Most probably it is a combination of both. What is more important, however, is that the municipality has not been improving its economic condition, but on the contrary – the share of unemployed people increased, which, as already examined, is among the factors with an impact on the vulnerability to shrinking.

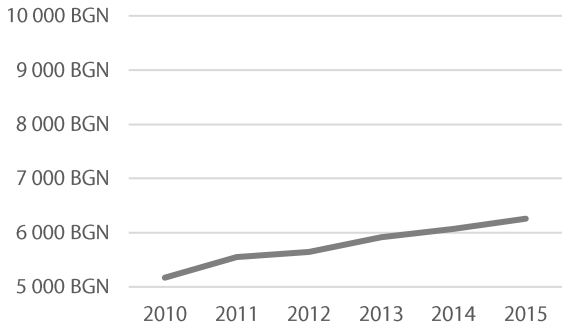
To gain a further insight into the economic situation in the municipality, the change in the distribution of GVA by economic sectors (fig. 37) and in GDP per capita (fig. 38) between 2010 and 2015 are taken into consideration. However, the lowest level there is available data for is the district level. This is to be kept in mind when interpreting the numbers.

At a first glance, the industry of the district can be assessed as rather weak because its share has generally remained the same as this of agriculture over the examined period. Since altogether they make out a bit more than 30% of the total GVA, the district has obviously been developing its service sector the most.

At the municipal level, with a structurally defining importance for the development of the tertiary sector is the so-called subsector of "Trade, repair of motor vehicles and motorcycles" which brought 63,2% of all net revenues from sales made in the non-financial sector of Vidin municipality in 2010. Second most important in the structure of Vidin's tertiary sector is the subsector of "Transportation and storage" with a share of 6,7% of all net revenues at the municipal level (Vidin Municipality, 2016a: p. 40).

While GDP per capita (fig. 38) has been increasing over the period 2010-2015, the total growth rate equals 21% and is therefore two times smaller than Rousse's. Given the fact that national GDP per capita was 12 339 BGN in 2015 and in the district of Vidin it was 6 258 BGN, the overall economic performance of the district can be assessed as very weak (NSI, 2017b).

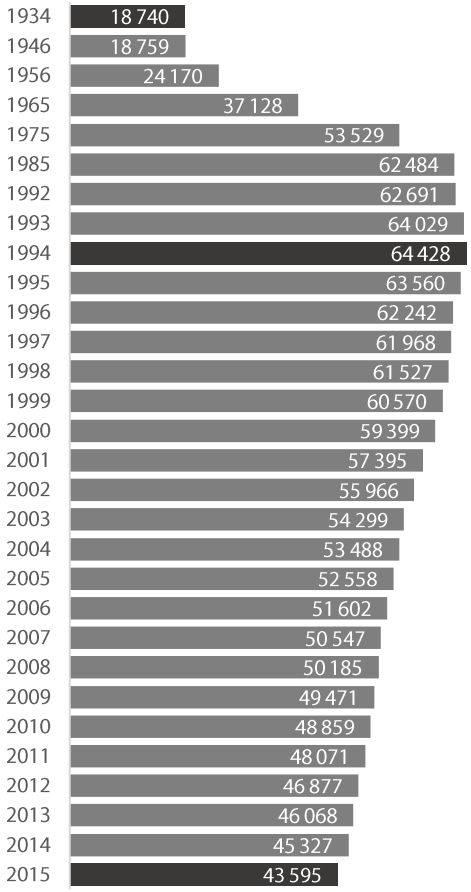
Figure 38. GDP per capita in the District of Vidin (Own visualization. Source: NSI, 2010-2015).



7.2.2. The shrinkage of Vidin

Based on the detailed statistical data available for the city of Vidin, its demographic development can be closely examined (fig. 39).

Figure 39. Demographic development of the city of Vidin: Population in absolute numbers (1934-2015) (Own visualization. Source: NSI, 2017a).



By the end of World War II, Vidin was a rather small city of less than 20.000 people. However, over the 45 years of the socialist regime, it experienced a significant growth and by the time of its breakdown it had more than 62.000 inhabitants. This growth is to be accounted mainly to the rapid industrialization during the socialist years which attracted many people from the neighbouring rural settlements to work in the industrial sector. Thus, urbanization started and continuously evolved.

The process of shrinking started a little while after the fall of the socialist regime. While the city of Vidin experienced a slight further growth of around 3% until 1994 when it reached its population peak, at the municipal level there was already a decrease of -1% in the total population until 1992. Since then, the municipality and the city lost respectively 33,7% and 32,3% of their inhabitants until 2015 (NSI, 2012, 2017a).

Against this background, the demographic situation in Vidin should be regarded as extremely alarming. According to the local authorities, it is a result of the severe regional economic depression during the 1990s and its very slow recovery which began only after the millennium. For these reasons, the Northwestern region (NUTS II) gained a negative reputation at the national scale. Moreover, due to the loss of their economic functions, the district administrative cities in the region, including Vidin, eventually lost their attractiveness and stabilization potential. These factors are the main reasons for out-migration to other regions within the country or abroad (Vidin Municipality, 2016a: pp. 61-62). With this in view, the name of the Northwestern region is nowadays used as a reference not only for demographic, but also for economic and social decline (*North-rundown Bulgaria*).

7.2.3. Review of strategic planning policies

The next paragraphs are dedicated to exploring current strategic planning policies elaborated for the development of the municipality of Vidin. Thus, it can be determined whether the problem of urban shrinking has already been put on the agenda of the local authorities.

Unlike the case of Rousse, the *Programme for governing the Municipality of Vidin (2011-2015)* is not publicly available. Therefore, only the policies designed for the period 2015-2019 can be taken into consideration.

The main political vision for the development of the municipality of Vidin outlined in this document consists in fostering economic stability and growth, raising the standard of living, building new and improving existing infrastructure in order to turn Vidin into a *European municipality*. In this regard, a number of priorities are identified (Vidin Municipality, 2015: pp. 3-4):

- *Priority 1: Reasonable and balanced financial policy.*
- *Priority 2: Competitive, dynamic and viable local economy based on local resources and attracting strategic foreign investors.*
- *Priority 3: Transport accessibility and high-quality living environment with modern infrastructure and preserved natural environment.*
- *Priority 4: Safe environment.*
- *Priority 5: Interregional and trans-border cooperation.*
- *Priority 6: New approach to governing educational infrastructure.*
- *Priority 7: Public projects for investments in the development of culture, sport and youth activities.*
- *Priority 8: Improving healthcare and social services.*
- *Priority 9: Transparency and accessibility of the administration services. Introduction of electronic administration services.*
- *Priority 10: Strengthening administrative capacity. New policy for governing human resource.*

While there is a total of ten priorities concerning different key sectors of activity in the municipality, stabilizing demographic development is not included in this list at all. The implementation of local instruments for stimulating the development of business and increasing employment rates and income levels of the population is mentioned but not as an explicit measure for counteraction of the demographic crisis. However, keeping and developing human resource within the municipality as a key factor for economic development is listed as an objective necessary for achieving the second priority. Therefore, it can be argued that the local authorities of Vidin regards the inhabitants as labour force which is to be maintained for the sole purpose of economic prosperity rather than looking at economic growth as a path towards stabilizing demographic decline.

An extensive analysis of the demographic development trends in the municipality of Vidin is carried out in the *Municipal Development Plan (2014-2020)*. This problematic, however, is completely exhausted in the first, analytical part of the document and not at all addressed in the next part concerning the strategic goals for future development (Vidin Municipality, 2016a: p. 139):

- *Strategic goal 1: Achieving economic growth by utilizing local development potentials.*
- *Strategic goal 2: Increasing the quality of the living standard, the personal and social security of the population.*
- *Strategic goal 3: Improving technical infrastructure parameters and preserving the environment.*
- *Strategic goal 4: Implementing initiatives for territorial cooperation and cohesion.*

While improving the quality of the offered educational infrastructure in the municipality and increasing the development opportunities for young people in Vidin are identified as specific objectives necessary for the achievement of strategic goal 2 (ibid., p. 144), this is not directly related to the problem of urban shrinking. Therefore, the inspection of this strategic document reveals that rather than an already built awareness regarding this problematic, an intuitive approach to tackling some of its causes has so far been adopted in the Municipality of Vidin.

Unlike the case of Rousse-Giurgiu, there is *no strategic plan outlining a long-term vision for the future development and cooperation between Vidin and Calafat*. Still, a Romanian national study was conducted before the bridge was operational (South-East Europe, 2011) and a Strategy for sustainable development of the Calafat-Vidin border region was elaborated in 2014 (DECF, 2014).

The Romanian national study provides a summary of pilot activities in the cross-border area Vidin-Calafat and is written mainly from the Romanian perspective for the development potentials of Calafat. In this regard, the elaborated SWOT analysis points out demographic decline in Calafat as a threat for its future development as it "may result in scarcity of qualified employees at local level" (South-East Europe, 2011: p. 64). However, none of the proposed pilot activities are addressing this particular problem. Instead, the general objective outlined in the document is to create conditions for the development and diversification of tourism activities in Calafat and the rural neighbourhood (ibid., p. 67). Therefore, all specific measures are aligned with the vision of turning the cross-border area into an attractive touristic spot.

In the elaborated *Strategy for sustainable development of the Calafat-Vidin border region* the introduction of innovation is regarded as "vigorously necessary to counteract the negative effects of population decline (implying reduced labor), a decrease of investment in physical capital, and leading to employment and improve standard of living" (DECF, 2014: p. 62). Yet, the problem of urban shrinkage in its own essence is not explicitly addressed by this strategy either. Instead, it is regarded only as a cause for the weak economic performance of the region. Against this background, the identified objectives of the strategic document include: increasing the number of jobs and the level of professionalism in agriculture, industry and services, developing a tourist industry market with a low environmental impact, providing a modern and flexible administration oriented towards society and its needs, ensuring optimal conditions in terms of infrastructure to attract and retain investments in various sectors of the economy, increasing the visibility of the area at the regional and the European level, in terms of business development opportunities and existing tourism potential, etc. (ibid., p. 110).

In contrast to the strategic planning documents observed so far, Vidin's *Integrated Plan for Urban Regeneration and Development* (IPURD) promises to pay special attention to the problem of demographic decline: "Vidin has a severely deteriorated demographic structure which will be important milestone in the proposals of the IPURD and its realization" (CIDV, 2013: p. 73). The IPURD describes the demographic situation within the city and the municipality as complex and with manifold unfavourable tendencies (ibid., p. 16). In this context, the city of Vidin is considered to be of highest importance for stabilizing the negative demographic trends (ibid., p. 17). The current educational profile of the municipality and most of all the large share of people without completed secondary education (almost 35%) are identified as factors with an especially negative impact on the municipality's human resource capacity (ibid., p. 19). In view of the economic situation, the continuous out-migration of qualified specialists from the city and municipality is defined as another unfavourable factor. The lack of prospects for professional realization of young and skilled people is believed to be at the bottom of work-related out-migration primarily from Vidin to Sofia or outside Bulgaria (ibid.). Against this background, economic development is seen as a main solution for counteracting urban shrinkage (ibid., p. 24).

In spite of the proclaimed intention for demographic decline to be explicitly addressed by the IPURD's development proposals, the formulated vision has little to do with this problematic: "Reviving and turning Vidin into an international touristic and cross-border cultural centre of supra-regional importance. Shaping a city with an own identity and spirit, with a leading role as an innovative and creative city, with an environment favouring the professional development of its citizens" (ibid., p. 75). To achieve this purpose, the following strategic goals are set:

- *Strategic goal 1: Improving the basic infrastructure in the city*
- *Strategic goal 2: Increasing employment opportunities and the quality of the living environment.*
- *Strategic goal 3: Encouraging entrepreneurship, creating a favourable business environment and offering good governance strategies.*

- *Strategic goal 4: Supporting a balanced territorial development.*

The so formulated strategic goals do not specifically address the problem of urban shrinking. Still, it can be argued that they are indirectly aimed at decreasing out-migration rates by improving the economic situation in the city and raising the standard of living.

In contrast to Rousse, *no explicit sectoral strategic documents* could be found at the official website of Vidin Municipality. This could either mean that no such strategies have so far been elaborated, or it could indicate a lack of transparency.

All in all, the examined strategic planning documents elaborated for the specific context of Vidin are missing depth and show little notice to actual local problems. Instead, the formulated strategic goals and priorities are kept vague and cliché. They could, indeed, easily be applied to almost any another Bulgarian municipality. Furthermore, there is a lack of comprehensive strategies for the development of key sectors such as transport, energy efficiency, tourism, culture, environment, etc. While demographic shrinkage is recognized as a vital problem of the municipality (only in the Municipal Development Plan and the IPURD), no explicit counteractive measures are elaborated in any of the strategic documents. A general wish to stabilize the economic situation in the municipality is expressed, yet no innovative strategies for the achievement of this goal are developed. Instead, the utilization of local potentials (mainly in the field of culture and tourism) combined with attracting foreign and national investments are pointed out as general ways to foster economic growth. Against this background, it can be argued that the local authorities have so far adopted a rather passive approach to dealing with the manifold unfavourable conditions in the municipality resulting from urban shrinkage.

7.3. Comparison of the two municipalities and summary of key features

In order to provide an easier comprehension of the similarities and differences between the municipality of Rousse and the municipality of Vidin, their key features are organized into subsections and presented in table 20.

Based on the analysis results it can be concluded that the municipalities of Rousse and Vidin possess similar geographic potential, but significantly differ in terms of human resource capacity. On the one hand, the age structure of Vidin's population is more unfavourable due to the smaller share of people in working age and the continuously increasing share of elderly people. On the other hand, the inhabitants of Vidin municipality are worse educated. Against this background, among the constraints for the future development of the municipality is the lack of educational facilities for attaining higher education levels. Besides the consequence of a rather poorly educated population which deprives the municipality of having the capacity of a high-qualified labour force, this impedes the development of the R&D sector as well. Thus, any kind of creativity or innovation in economic terms is unlikely to emerge. Therefore, the municipality has to rely on its *traditional* economic activities, which have so far not proved as efficient or capable to drag out the municipality of its economic recession.

This, combined with the lack of sufficient financial resources of the municipality to realize and implement significant public projects on its own (Vidin Municipality, 2016a: p. 128), further diminishes the chances of short-term improvement which could, potentially, slow down the process of out-migration.

Additionally, Rousse has a much better image than Vidin at the national level. This is a factor which not only has a restraining influence on out-migration, but it attracts investments and thus fosters economic growth. Moreover, Rousse makes further efforts to improve its image by releasing promotion videos and developing city marketing strategies, while Vidin passively admits its bad reputation but does not take any active measures to change it.

With this in view, the first aim outlined in the beginning of this chapter to investigate why Rousse and Vidin have similar local potentials but different vulnerability to shrinking can be considered as achieved. The second question which was raised as to whether it is possible for Vidin to adopt strategies which proved to be successful in addressing the problem of shrinking in Rousse, is going to be addressed in more detail in the next, conceptual part of the thesis.

Table 20. Comparison of the Municipality of Rousse and the Municipality of Vidin (Own compilation).

MUNICIPALITY OF ROUSSE	MUNICIPALITY OF VIDIN
DEVELOPMENT POTENTIALS	
Administrative core city at the NUTS III and LAU I level	Administrative core city at the NUTS III and LAU I level
Strategic geographic position at the crossing of Danube and the Pan-European transport corridor IX	Strategic geographic position at the crossing of Danube and the Pan-European transport corridor IV
Danube Bridge 1 connecting Rousse with the Romanian city Giurgiu	Danube Bridge 2 connecting Vidin with the Romanian city of Calafat
Close proximity to Bucharest and its international airport	-
GEOGRAPHIC AND SOCIO-ECONOMIC MAKE-UP	
Two urban settlements (Rousse and Marten)	Two urban settlements (Vidin and Dunavtsi)
Highly urbanized population (more than 90%)	Predominantly urbanized population (80%)
Age structure of the population is similar to EU-28 average	Unfavourable age structure of the population (people in working age less than 60% in 2015)
Better educated labour force compared to the national average	Share of highly educated people is lower than the national average
Good network of educational facilities, university in the city of Rousse	Lack of university or other facility for attainment of higher level of education in the whole district of Vidin
Unemployment rates have remained lower compared to the district and national average since 2007	Unemployment rates were higher than the national average and continued to grow (2011-2015)
Leading role of the tertiary economic sector in the district of Rousse	Leading role of the tertiary economic sector and poorly represented industry in the district of Vidin
Significant growth of GDP per capita 2010-2015 (43%) in the district of Rousse	20% increase in GDP per capita (2010-2015). Still, it is half of the national average GDP per capita
DEMOGRAPHIC SHRINKAGE	
The most populous municipality on the northern border of Bulgaria	The second most populous municipality on the northern border of Bulgaria after Rousse
Rapid growth during the socialist regime because of industrialization	Rapid growth during the socialist regime because of industrialization
Total shrinkage experienced between 1992-2015 lower than the national average (around 14%)	Dramatic population loss of more than 30% during the period 1992-2015
STRATEGIC PLANNING POLICIES	
The Programmes for governing the municipality (2011-2015; 2015-2019) consistently underline the fostering of economic growth as a main priority	The Programme for governing the municipality identifies ten different priorities. Lack of explicit direction for future development
The Municipal Development Plan points out specific actions for achieving economic growth. The preservation of demographic potential with special care for young people is identified as a priority field for targeting efforts of socio-economic policies	The Municipal Development Plan vaguely points out the utilization of local potentials as a way to achieve economic growth. Demographic shrinking is not directly addressed by the policies outlined in the plan
A comprehensive strategy for the trans-border cooperation between Rousse and Giurgiu is elaborated	No comprehensive strategy for the trans-border cooperation between Vidin and Calafat is elaborated
Rousse's IPURD manages to coordinate the zones for intervention between Rousse and Giurgiu in order to further facilitate trans-border cooperation	Demographic decline is proclaimed as a milestone in the elaboration of the IPURD's proposals but it is not explicitly addressed by any of the offered projects
Various and comprehensive sectoral strategies	No sectoral strategies

8. SHAPING THE FUTURE OF VIDIN

The following paragraphs are dedicated to the elaboration of a concept for the future development of the municipality of Vidin. To this end, the experience of Rousse is going to serve as an example for the formulation of a coherent vision and a model for the outlining of development strategies. With this in view, the concept will consist of several proposals which differ in their level of detail.

First, a vision for development corresponding to the local features of the municipality is going to be outlined. Second, general recommendations about what kind of strategies could Vidin borrow from Rousse for the implementation of the elaborated vision will be formulated. Third, one single project is going to be selected and presented in more detail: what is the objective, what results should be expected, what are the concrete actions to be taken, what are the possible funding mechanisms, what if the project fails to be realized? The decision to focus on one single project is dictated by the wish to make a concrete proposal that local authorities could take and start to pursue in real life. It should serve as an impulse for the new development direction of the municipality.

8.1.Following the example of Rousse

The analysis showed that the local authorities of Rousse have not elaborated strategies targeted explicitly at resolving the problem of urban shrinking yet. Still, they have so far managed to create a well-coordinated set of strategic planning documents which all recognize this problematic and address it indirectly by fostering economic growth and improving the urban living environment. Thus, the identification of Rousse's inhabitants with their municipality is facilitated and this is yet another way to slow down out-migration. Furthermore, the Programmes for governing the Municipality of Rousse for the two subsequent periods 2011-2015 and 2015-2019 indicate that the local authorities have been pursuing one specific vision for the future development of the municipality since 2011. In both documents clear priorities are identified: stimulating economic growth by attracting investments and fostering innovations, offering jobs and ensuring attractive living environment.

What is even more important, however, is that Rousse's local authorities have outlined concrete implementation strategies for actually achieving their goals. Besides the obligatory strategic documents which have to be prepared by every municipality (e.g. Municipal Development Plan, Programme for governance of the municipalities, etc.), Rousse has prepared a set of additional sectoral, urban and regional development strategies which are well interlinked. The goal of fostering economic growth is underlined in all of them and the ways to accomplish it are clearly stated. These mainly include trans-border cooperation with Romania and strengthening the collaboration between public administration, business and education.

To this end, the elaboration of the Master Plan for the Euroregion Rousse-Giurgiu represents a significant contribution to facilitating trans-border relations and expanding the local economy. The consistency of the selected zones for intervention in

Rousse's IPURD with the goals outlined in the Euro-regions' Master plan (bringing the cities of Rousse and Giurgiu closer to each other and therefore closer to the river of Danube) is a further example for the good coordination of Rousse's strategic policies. For the facilitation of the relationship *public administration-business-education*, the local authorities of Rousse are investing in R&D, organizing frequent meetings with business stakeholders and making continuous steps towards introducing electronic administration in order to create a more favourable business environment.

The consistency of Rousse's approach managed to generate actual results which found public recognition as well. For the period 2013-2015, the Municipality of Rousse was awarded with the European Label for innovation and good governance at local level (Rousse Municipality, 2017b). In 2014, the Municipality received the prize "Golden Euro" for its successful project management and contribution to improving the local economy and creating new jobs through the absorption of European funds (Lecheva-Gospodinova, 2017, pers. comm.). In 2015, the city of Rousse won the prize "Best city to live in Bulgaria" and in 2016 "Most promising city to live in Bulgaria"[11], both voted by Bulgarian citizens.

While the population of Rousse would most probably continue to decrease over the next years because of general negative tendencies at the national level (dropping birth rates and increasing mortalities), the municipality is unlikely to experience further dramatic population loss. The analysis showed that unemployment rates are among the lowest across the country (comparable to Sofia and the other biggest cities) and the economy has been experiencing continuous growth. This, combined with the well-functioning educational system (ibid.), is a good prerequisite for keeping young people in the municipality. Furthermore, these aspects are among the criteria which influence the vulnerability of Bulgarian municipalities to shrinking. Therefore, Rousse has so far been managing to play a stabilization role at the district level by offering jobs and education opportunities.

Yet, what can be done in Vidin in order to contribute to slowing down the process of urban shrinking in the most affected, northwestern part of Bulgaria?

8.2.A vision for Vidin

To shape the future of Vidin in a sustainable way which will ensure that the chosen course of direction will not be disrupted, but that it will, to the contrary, prove the right strategy for the municipality and manage to stabilize the numerous ongoing negative trends, special attention has to be paid to the local peculiarities – both potentials and deficiencies.

The currently formulated vision is way too broad: *"Reviving and turning Vidin into an international touristic and cross-border cultural centre of supra-regional importance. Shaping a city with an own identity and spirit, with a leading role as an innovative and creative city, with an environment favouring the professional development of its citizens"* (CIDV, 2013: p. 75). Moreover, it does not sound very adequate to the current reality either. Why is that?

[11] This is an annual competition organized by Darik radio and the daily newspaper "24 hours". Listeners and readers vote themselves to select the winner.

The analysis showed that Vidin has a rather weak economy and a share of highly educated people below the national average. Therefore, it is unrealistic to expect that the city has the potential to play *"a leading role as an innovative and creative city"* – at least not in the short term. According to the Regional Competitiveness Index developed by the EC (2016), the Nothwestern NUTS II region of Bulgaria is at the lowest stage of development (<50 % of the EU average GDP per capita in PPS) (p. 17). Besides offering a general perspective about the development stage of EU's regions and a base for comparison, the RCI offers a guide for policymaking as well: "the competitiveness of a medium-developed region is likely to benefit more from improving institutions and basic education than from trying to increase its patent applications or R&D expenditure" (ibid., p. 18). Hence, while the so formulated vision of Vidin's future development sounds very appealing, it barely corresponds to the actual problems and needs of the municipality.

Based on the results from the analysis, it can be argued that Vidin is a municipality where urban shrinkage is manifested in various ways. Next to the continuous population decrease, there is economic and social decline. High unemployment, lack of economic competitiveness, a population characterized by poor education and poverty make up Vidin's image, rendering it thoroughly unattractive at the national level.

Still, Vidin was not identified as a municipality with high vulnerability to shrinking according to the list of criteria developed in chapter 5. On the contrary, it was selected for targeting regeneration measures with the purpose of strengthening its stabilizing role at the district level. What kind of a vision should be pursued to achieve this goal?

The first step towards slowing down the process of shrinkage should be to take measures against outmigration. To this end, the municipality has to offer enough jobs and maintain a well-functioning system of public services (e.g. education, healthcare, social care, culture, etc.). Thus, it will provide normal living conditions for its inhabitants and would potentially have a positive influence on the quality of life in neighbouring municipalities as well. The provision of jobs and adequate public services should therefore be the first priority of local authorities. In this regard, the following vision could be formulated:

"*Vidin – a municipality with regional significance, offering high-quality living standards, attractive and diverse employment and education opportunities*".

8.3.Development strategies

To achieve the elaborated vision, suitable development strategies have to be outlined. The first steps which should be taken in order to strengthen the position of Vidin at the district level and turn it into a municipality which has the potential to slow down the process of shrinkage, should be in the fields of employment and higher education.

8.3.1. Fostering employment and economic growth

Given the fact that the main local potential of Vidin is its geographic location and the river of Danube as a natural resource, economic activities which could yield positive results include transport and logistics, hydropower generation and tourism.

The idea of turning Vidin into Bulgaria's logistics centre in the Northwest is not new. This potential of the territory has been recognized by planners and investors and there already is a plot designated for a Logistic Park. It is located on the edge of the Southern Industrial Zone of Vidin, on the road from Sofia and Montana to the Danube Bridge 2, connecting Bulgaria and Romania and providing a link to the other European Union member states (fig. 40).

The plot comprises of 200,000 square metres of land, 30,000 square metres of which are regulated. The zoning is favourable for the development of both manufacturing and logistics real estate. So far, just one building with an area of around 4,600 sq. metres has been built (Forton, 2014). It was first used by Technomarket, a leading consumer electronics retailer in Bulgaria, but now it is rented by Slam Group, a German clothing company which invested around 1 million EUR in the conversion of the building to a clothing plant. The company has rented the building for 10 years with the option to purchase it. This investment provided jobs for around 150 people and the company intends to hire up to 600 people until 2020. The main activity of the clothing plant consists in manufacturing men's shirts for international fashion brands. (Mihaylov, 2015).

This is an example of the positive influence which FDI could have on employment in Bulgarian municipalities. Since there already is a territory designated for a Logistic Park, the local authorities should facilitate the further expansion of the range of economic activities clustered there. There are several ways to do this.

On the one hand, they could learn from the experience of Timisoara (Romania). There, local authorities have elaborated specific policies to facilitate start-ups. More specifically, the public administration has to prepare all the necessary approvals and authorisations for the start of any relevant investments with an average term of 3 to 7 days (Rink et al., 2012: p. 34). This is important because sometimes the incoherence of national legislation can delay the obtaining of all necessary documentation and thus discourage investment activities.

Second, to foster the efficient use of the transport possibilities offered by the river of Danube and integrate these into the operation of the Logistic Park,

Figure 40. Logistic Park in Vidin (Edits by author. Source: Glorient Investment BG Ltd, 2017).

Vidin could implement a River Information System on the example of Rousse. The RIS would not only improve transport navigation but it could also enhance the capacity for the port infrastructure modernization, by offering competitive transport services. Furthermore, it could attract more transit cargo through the port and create conditions for turning Vidin into one of the intermodal terminals along the river. This should further contribute to the successful functioning of the Logistic Park by potentially attracting new investors.

Besides stimulating the further development of the Logistic Park, Vidin should follow the example of Rousse and strengthen trans-border cooperation with Romania. Currently, there is barely any fruitful interaction between Vidin and Calafat which potentially deprives both cities of new impulses for development. The first step towards establishing a meaningful collaboration consists in elaborating a common strategy for development. This would allow both cities to identify what fields for cooperation exist. In this regard, the local authorities could exchange know-how with Rousse and Giurgiu which already have some experience in elaborating a common vision and have been pursuing one for almost a decade. In the short term, Vidin and Calafat could benefit from the expansion of the local trade and labour market. In the long term, provided that an adequate infrastructure is built (e.g. high-speed rail system), Vidin could potentially profit from more intensive relations with the bigger city of Craiova and thus further strengthen trans-border cooperation with Romania.

8.3.2. Investing in human resources

Like it was already indicated by the analysis, the main difference between Vidin and Rousse consists in human resource capacity. While Rousse has a well-developed system of educational facilities, there are no universities or colleges in Vidin or in any of the neighbouring districts. Therefore, it is no surprise that many young people leave Vidin in search of better life prospects. There are no opportunities for attaining higher education levels and no jobs that would open up a career path. Thus, the municipality is left without young and well-educated labour force which deprives it of any kind of impulse for a new direction of development.

With this in view, Vidin needs to brush up its reputation and become attractive to young people. This should have a positive influence on slowing down out-migration and would eventually improve the age structure of the population. Yet, how could this be achieved?

So far, the authorities at the municipal level have been pursuing economic growth mainly by fostering the development of tourism. However, while economic pro-growth strategies are typical for post-socialist cities trying to deal with the consequences of urban shrinking (Bernt et al., 2012: p. 9), they, on their own, should not be regarded as panacea for resolving the problems of the municipality. To ensure the sustainability of Vidin's local economy, investment in human resources, such as education and training opportunities for young and old are necessary.

Would could an impulse for future development look like?

The lack of opportunities for attaining a higher level of education can be regarded as one of the main weaknesses of the municipality. It is mirrored in the educational structure of the population which has a direct impact on the competitiveness of the local economy. Education is considered as the main driver of innovations and without developing this sector the municipality is doomed to function with the sole purpose of surviving rather than achieving progress. Indeed, one of the main targets of the EU member states outlined in the Strategy *Europe 2020* is to increase "the share of the population aged 30-34 having completed tertiary education from 31% to at least 40% in 2020" (EC, 2010: p. 9). In the Northwestern region (NUTS II), where Vidin is located, this share was only 22% in 2010 (MRDPW, 2012: p. 61). This is manly to be accounted to the fact that there is only one university in the whole region and it is situated in Pleven – a city, which is more than 150 km away from the city of Vidin. Against this background, a strategic move for the future development of the municipality and the whole district of Vidin would be the establishment of a facility for attaining higher level of education.

It has to be noted that some steps have already been made in this direction. The National Strategy for Regional Development (2012-2022) outlines this undertaking as a necessary public action to "compensate for the negative processes and the backwardness of the region" (ibid., pp. 164-165). Vidin's IPURD also points out that "realizing such project is going to play an important role for the positive development of the city and the whole region because it would deliver high-qualified labour force to the local economy, it will bring new investments, create jobs in the field of education and what is most important – it will attract young and active population to Vidin" (CIDV, 2013: p. 70). Hence, an awareness of this necessity and the positive outcomes it can generate is already present.

Moreover, in the end of 2016, the University of Rousse opened a training centre in Vidin which should eventually become an affiliate university: "The opportunity to establish this training centre is the first step towards the idea to open a branch of the University of Rousse in Vidin" said the rector of the University of Rousse, Prof. Dr. Pencheva, in an interview published on the official website of the Municipality of Vidin (Vidin Municipality, 2016b). Until now, a total of 62 people have been registered as students of the University of Rousse in the training centre in Vidin which offers five bachelor programmes: Industrial management, Agricultural machinery and technology, Mechanical engineering, Electronic engineering and Computer sciences (ibid.).

While this is a good start, more than a training centre is needed to effectively manage to improve Vidin's image and slow down out-migration. Therefore, for the achievement of actual results in this respect, the following strategy is proposed:

<u>*Expansion of the training centre's activities*</u>

This could be achieved by:

- *Offering programmes with the objective to support the local economy (Logistics, Transport engineering, Tourism)*
- *Offering a wider spectrum of bachelor programmes because the current ones are attractive mainly to male*

students (e.g. Economics, Business administration, Management, etc.)

- *Offering master programmes as a next step*
- *Relocating faculties of the University of Rousse to Vidin (this should be regarded as a possible action only after sufficient infrastructure is provided in Vidin) and eventually turning the training centre into an affiliate university*

Provision of modern educational infrastructure which would attract young people outside Vidin as well

This could be achieved by:

- *Relocating the training centre from the current school building to a new, modern building. For this purpose the Municipality of Vidin should select a suitable and attractive location possibly in the city centre or near the river so that it could become the first modern landmark of Vidin.*
- *Building dormitories so that the city could accommodate students from other cities as well (as it was already pointed out, there are no universities in the neighbouring districts of Montana and Vratsa either).*

Active promotion of the educational facility at the national scale

Apart from a few articles online, currently the existence of the training centre is barely made public. Therefore, a PR strategy is needed to attract the attention of students

Provision of social benefits for studying at this affiliate university

This could be achieved by:

- *Granting scholarships to the first few students who enrol in the new programmes*
- *Exempting people with low social status from paying tuition fees*

Active cooperation with the business

This could be achieved by:

- *Aligning the offered modules and courses with the needs of local companies for labour force with specific skills and competencies*
- *Playing a mediation role between students and private companies by arranging internships, job interviews, etc.*

Establishment of R&D centres as a long term goal

This could be achieved by:

- *Tight collaboration with the R&D centres in Rousse which have already gained experience*
- *Inviting experts from Rousse and other national universities as well as from Romania and other EU countries*

For the implementation of this strategy the main objectives of the Municipality of Vidin would be to identify a plot for the new building and the dormitories, to actively participate in the coordination between Rousse and Vidin, to contribute to the elaboration of a PR strategy and to create a suitable platform for frequent dialogue with the business. However, the most important task of the local authorities would be to apply for national and EU funding in order to have the financial capacity to realize this ambitious project in the first place.

Organizing the funding

For the programme period 2014-2020, only 4,9% of the total budget of Bulgaria (both national and EU funding) is assigned to the theme *Education and Vocational Training* and 5,4% to *Research and Innovation* (EC, 2017). Therefore, it can be argued that investing in education and R&D is not high on the priority list of Bulgarian policymakers until 2020.

What is more alarming, however, is that this has always been the case and a shift in the political agenda is not likely to emerge soon. Big infrastructure projects continue to be prioritized, while investing in human resources is left behind as a problematic to deal with sometime in the future. Against this background, it would be difficult to draw the political attention towards the need to invest in education. Furthermore, Vidin (as the chosen place for intervention) is not perceived as an urban area with potential to create growth and thus contribute to upgrading the national economic performance and image. Hence, the local authorities are going to have the difficult task to persuade the government that increasing the subsidy of the University of Rousse with the explicit purpose of developing the already accredited training centre in Vidin, is going to pay off in the long term.

The national subsidies could be used for the implementation of four of all the six steps outlined in the strategy: expansion of the the training centre's activities, provision of modern educational infrastructure, provision of social benefits for studying at the affiliate university and establishment of R&D centres.

All national subsidies except for the provision of modern educational infrastructure should be transferred directly to the University of Rousse. In this regard, it is recommended to establish a special administrative division within the university in order to guarantee the transparency of the funding distribution process. This way it should be clear what amount of the subsidy is allocated to the affiliate university in Vidin and for what purposes the financial resources are going to be spent.

The subsidies for the provision of modern educational infrastructure should be transferred to the Municipality of Vidin. Yet, it is unrealistic to believe that they are going to be sufficient for the implementation of all measures suggested in the strategy. Therefore, the local authorities would have to allocate a larger share of its own budget for these purposes. Nevertheless, it might be meaningful to seek public-private partnerships by involving other actors interested in the realization of this project. Since the local economy is expected to profit the most by the inflow of young and high-qualified workers, private companies might be willing to invest in the provision of adequate infrastructure for the training centre. For this purpose, a platform for efficient dialogue shall be established and the obligations and rights of all involved actors should be clearly communicated from the beginning of their collaboration. The promotion of the new educational facility is to be realized with funding from public-private partnerships as well. Also, donations from NGOs can be accepted.

From the list of EU Operational Programmes the following two could be utilized for the further development of the training centre in Vidin:

Operational Programme
Science and Education for Smart Growth (2014-2020)

This OP for the implementation of the ESF and the ERDF in the period 2014-2020 is planned to invest "over €673 million (of which €596 million from the EU budget) to help strengthen research and innovation, general and higher education, and vocational training in Bulgaria" (EC, 2015a). Two overall goals are outlined in the programme: strengthening research and innovation and enhancing education

and social inclusion at all educational levels. Over the funding period, the programme is expected to create new centres of excellence and competence, support regional laboratories and pilot centres, involve researchers in activities under the programme, provide scholarships and include students in practical training in real work environment, including career guidance activities (EC, 2015a). Both municipalities and higher education institutions are eligible for funding (MEYS, 2014). Against this background, this OP should be the main EU funding instrument to be utilized by the Municipality of Vidin in regard to fostering the further development of the training centre by implementing the outlined strategy. In this regard, it has to be noted that the University of Rousse is mentioned in the OP as a university which has shown "significant capacity for involvement in projects and infrastructure under the Strategy for the Danube Region, in partnership with the business" (EU, 2014: p. 16). Therefore, it is realistic to believe that it could potentially become a beneficiary of the OP *Science and Education for Smart Growth*. If a coherent strategy is, indeed, elaborated by the University of Rousse with the support of Vidin's local authorities, the training centre could significantly benefit from this OP if not in this, then in the next programme period.

Operational Programme
Human Resources Development (2014-2020)

"Bulgaria's Human Resources Development (HRD) operational programme (OP) has two overall goals: boosting employment and reducing social exclusion; and reducing poverty levels […] The total ESF investment is over EUR 1 billion, including funding from the Youth Employment Initiative. The OP has several broad priorities, including job creation, mobility and education, as well as training" (EC, 2015b). Since the outlined goals concern problems which completely correspond to the current reality in Vidin, this OP could play a significant role in facilitating its future development. Moreover, the North-western region is explicitly mentioned in the full text of the programme: "The shrinking population in the North-Western Region […] is extremely worrying. In addition to the highly aggravated demographic indicators, the region also stands out with its poverty risk, high levels of migration, aggravating problems in the areas of employment and access to quality social services. There are particularly pronounced downtrends in the districts of Vidin, Vratsa and Montana. This unfavourable condition of the region also underpins the decision set out in the partnership agreement to qualify the North-Western Region as a territory eligible to receive targeted development support. The North-Western Region is expected to receive support from the ESI Funds based on the targeted support strategy for the North-Western Region with an emphasis on the use of the local potential in view of the main challenges and problems in the region" (EU & ESF, 2014: p. 230).

Formulated this way, the OP should be suitable for funding the measures aimed at establishing the current training centre into an affiliate university because this undertaking is specifically targeted at developing local potential by investing in human resources. Moreover, the realization of this project is going to have a positive impact on the districts of Vratsa and Montana, which are mentioned in the OP as well, because currently there are no educational facilities for attaining a level of higher education there either.

If this project fails to be realized, the training centre will undergo a much slower transition to an affiliate university, it would most probably have to continue to function under the roof of the old school building where it is currently situated and it would gain less public attention. Furthermore, the establishment of R&D centres might never be realized. Thus, the effects of the training centre on the development of the municipality are going to be significantly delayed.

Therefore, the more active combination of other measures not only at the subnational, but also at the national and at the EU level is going to be necessary in order for Vidin and other, even more vulnerable municipalities to get a fair chance to stabilize their development.

A list of suggestions about possible measures is going to be presented in the following chapter.

9.WHAT CAN BE DONE TO STABILIZE THE DEVELOPMENT OF SHRINKING MUNICIPALITIES?

The main strategic goal outlined in the *National Strategy for Demographic Development of Bulgaria* for the period 2012-2030 is "to slow down the rate of decrease in the population with a tendency for long term stabilization and ensuring high quality of human capital, including people with their health, education qualifications, abilities and skills" (OPRG, 2014: p. 12). To achieve this goal, one of the main priorities of the strategy is to contribute to the more even distribution of population across the country, to optimize the processes of concentration of population in the capital and the several major cities and to ensure territorial cohesion of the peripheral areas of the country (ibid.). So far, the intentions outlined in the NSDD sound promising as they indicate that the problem of demographic shrinkage is finally put on the political agenda.

However, no consistency and coordination of strategic planning policies at the local, regional and national level aimed explicitly at slowing down the process of demographic decline has been ensured yet. On the contrary, the strong competition among regions encourages local authorities to elaborate strategies fostering economic growth but taking little notice to the problems of human resource capacity and continuous urban shrinkage.

Against this background, the following list of recommendations for measures to be taken at the subnational, national and EU-level aims to contribute to the discourse of planning for shrinking areas in the spatial context of post-socialist Bulgaria. Some of the ideas for policy recommendations were taken from the papers "Governance of shrinkage – Lessons learnt from analysis for urban planning and policy" (Rink et al., 2012) and "Shrink Smart: the Governance of Shrinkage within a European Context" (Bernt et al., 2012) and adjusted to the Bulgarian spatial and administrative context.

9.1. Policy recommendations at the subnational level

Strengthen the administrative capacity of local authorities

This is a key step necessary for achieving an efficient urban governance in the context of post-socialist countries because the municipal level was deprived of any kind of power and responsibility over a period of more than 40 years. The Municipality of Vidin, which was examined as a case study, is an example of a rather passive local authority unwilling to actively accept the reality of shrinking and adopt corresponding measures to tackle its causes and mitigate its consequences. This, to a certain extent, has to do with its limited experience with self-governance and the complex framework of European policies and planning regulation documents. Municipal administrations are sometimes overwhelmed by the need of coordination between all kinds of sectoral and urban planning policies. The Operational Programmes *Good Governance* and *Human Resource Development* are suitable financial instruments for in-

creasing institutional capacity and thus administrative efficiency. The presumption is that after local municipalities start to feel more confident they will eventually be more willing to actively recognize the problematic of urban shrinkage.

Nowadays, demographic decline is presented as a natural process concerning all Bulgarian municipalities and it is therefore not perceived as a local problem to be actively addressed by concrete actions based on the specific local context. According to the results from the case studies of Rousse and Vidin, Bulgarian municipalities tend to pursue classic "post-socialist pro-growth strategies emphasizing job-creation based on attraction of inward investment and European funding, rather [than] regarding at causes and consequences of shrinkage" (Bernt et al., 2012: p. 9). Hence, they can be compared to Polish municipalities which regard raising the issue of shrinkage as politically very problematic because it "would potentially increase the burden of issues […] without opening up financial and legal resources that would be necessary for implementing any meaningful course of action" (Bernt et al., 2014: p. 1760). The *mental lock-in* of local authorities has to be changed and increasing their knowledge and capacity is a first step on the right path to do this.

Include all stakeholders in the decision-making process

Generally, urban shrinkage affects different kinds of actors within a city with its manifold implications (e.g. utility companies have to deal with the consequences of lower demand on technical infrastructure systems, the business is deprived of high-qualified labour force, there is a lack of demand in the real estate sector, etc.). In this light, it is important to involve all those actors who wish to collaborate with the local authorities in elaborating strategies for dealing with the various manifestations of shrinkage.

Yet, to achieve a constructive dialogue, a suitable communication platform has to be established. First of all, regular meetings are recommended in order to exchange ideas and ensure an ongoing communication process. In this regard, it could be useful to hold these meetings in different venues and not only in the administrative building of the given municipality. Furthermore, the moderator has to be frequently changed as well. This way all involved actors will have the feeling that their voice is equally important and the municipal authorities would not always play the leading role. This should contribute to the evolvement of a more dynamic and diverse communication process. Next to the regular personal meetings, an online platform could also prove as a meaningful instrument providing a constant interaction between all actors.

Still, lack of consensus, time delay and higher costs should be expected if such an approach is, indeed, adopted and consistently implemented by local authorities. Therefore, a certain share of the municipal budget should be allocated for moderation and mediation to foster the efficient communication between the different stakeholders and the actual consideration of the proposed ideas.

Establish better link between municipal, district and regional strategic development goals

An efficient communication is necessary not only between the different actors at the local level but also between the authorities at the municipal (LAU I), district (NUTS III) and regional (NUTS II) levels. This was identified as a deficiency of the current Bulgarian institutional system in chapter 5. To create a strategic dialogue between the administrative bodies of different municipalities within a district, it is recommended to establish so-called associations (e.g. Upper Silesian Cities (ZMG) in Poland) (Rink et al., 2012: p. 41). Thus, their priorities are going to be clearly communicated and better aligned to the strategic development documents prepared at the higher levels. Moreover, the formed associations are going to bring bigger representative power to the regional level and thus have better chances to defend their perspective on how the involved municipalities should develop in the future. In such a way, a bottom-up approach to elaborating regional planning strategies could eventually be established. This is important because the currently adopted macro-geographic perspective, based predominantly on the NUTS II level, barely corresponds to the actual scale of spatial inequalities within the country's borders. Therefore, the perspective of municipal authorities is needed to draw the attention to the problematic of urban shrinking especially in small urban areas which is currently being absorbed at the regional scale. Furthermore, the regional institutional framework which was designed merely by following EU recommendations is very complex, with too many authorities sharing more or less the same responsibilities for elaboration and adoption of strategic documents. An efficient communication between the authorities at the different levels should help on this matter. In this regard, forming associations of municipalities is a strategic move because while it is going to artificially decrease the number of participants and thus facilitate the dialogue, it would at the same time increase the power of all municipalities represented by the association. However, in order for this undertaking to function well, it is of highest importance for the municipalities within the associations to be equally involved and engaged in the new collaboration scheme.

In addition, the municipal associations should play the role of coordinators and intermediators ensuring cross-sectoral monitoring for a comprehensive view and assessment of problems and strategic planning (ibid., p. 39). In this regard, the municipal associations should guarantee that there is a link between the elaborated urban planning and sectoral policies which not only take notice but also actively address the implications of demographic decline. To ensure the consistency of such monitoring process, the municipal associations should hold regular meetings and discuss the elaboration and implementation of strategies with the purpose of establishing a good coordination between them. Thus, a holistic approach to dealing with urban shrinkage could eventually be adopted and the current way of planning with the sole purpose of achieving economic growth would be brought to an end.

Foster inter-municipal cooperation

Against the background of forming associations of municipalities within the same district, another recommendation which could further strengthen their interrelations is to establish multi-settlement-strategic planning. It shall provide a better balance of the competition between neighbouring municipalities. Furthermore, it would allow to look for cross-benefits through inter-municipal cooperation (e.g. efficient use of resources, common waste management strategies with a positive impact on the municipal budget, etc.). Incentives for regional networking and cooperation should limit the negative results of intra-regional competition in the long term. Some examples of shrinking cities which benefited from such actions include: Halle/Leipzig (Germany), Donetsk/Makiivka (Ukraine) and Sosnowiec/Bytom (Poland) (ibid., pp. 39-40).

In the case of small Bulgarian municipalities the emphasis should be put on developing efficient social and technical infrastructure systems which are to be used by inhabitants of neighbouring municipalities and thus strengthen interrelations within existing urban networks and make small settlements livelier.

Align regeneration policy with strategic planning policy

The logic behind this recommendation is that the strategic planning policies elaborated at the regional, district and municipal levels could be made more efficient if they are streamlined using regeneration policy. Urban regeneration planning is a part of the integrated planning policy and it is communicated to the public by the IPURDs. Hence, strategic policies related to urban shrinkage would be much more effective if they are directly addressed by urban regeneration measures. This is the case in East Germany where the INSEKs are elaborated as a necessary prerequisite for getting funding from the state programme *Stadtumbau Ost*. Thus, municipalities have the financial capacity to implement the measures designed explicitly to mitigate the implications of the continuous urban shrinking processes triggered after the fall of the socialist regime in 1989. This link is currently missing in Bulgaria. While IPURDs are being elaborated since 2010, they are not specifically targeted at resolving the problems of urban shrinking. Instead, the mere existence of demographic decline is acknowledged but the selection of zones for intervention and the project proposals are not dedicated to its stabilization. Still, this approach could be changed by following the example of Germany and creating a financial incentive for tackling the implications of urban shrinkage. A funding programme such as *Stadtumbau Ost* could be created at the national level in order to provide capital expenditure grants to municipalities with IPURDs in which concrete projects aimed at dealing with the problematic of shrinkage have been outlined. This recommendation is going to be addressed in further detail in the next section dedicated to the national level.

It is unlikely to believe that authorities at the subnational level are going to have the capacity to change the status quo on their own. In this regard, Dimitrova (2017) argues that especially in the smaller cities local authorities are not in the position of slowing down shrinking – it is the result of processes, which can be influenced by policy measures taken at the upper levels (pers. comm.). Hence, the following

paragraphs include policy recommendations for the national and EU levels.

9.2. Policy recommendations at the national level

Strengthen the public debate on shrinking cities

This is the first and most needed action to be executed at the national level and at the same time it has proved to be the most problematic one. Getting shrinkage on to the planning agenda is a matter of political will before anything else and this was confirmed by the comparative study of the experiences of East Germany and Poland. Provided that strong political actors are interested in the matter, more acceptance and a positive recognition of the potentials of shrinking cities could be generated.

To this end, it is recommended to actively support public and media-related activities aimed at changing the negative perception of shrinking cities. Some examples in this regard include: "development of event-related promotion and PR in favour of shrinking cities like International Building Exhibitions (IBA) in Germany, a closer interlocking research and planning or cultural/arts-projects like the European-American project "Shrinking Cities" (2002-2006)" (Bernt et al., 2012: p. 24). Facilitating public participation is extremely important as well because it would contribute to strengthening the identification of the local inhabitants with their city/municipality and thus have a positive impact on slowing down out-migration.

Establish a funding programme for shrinking municipalities and coordinate *shrinking cities policy* across all sectors of government

With the establishment of the funding programme *Stadtumbau Ost* urban shrinkage in East Germany was clearly identified as an issue and put on the political agenda. Therefore, there is a reason to believe that establishing a funding programme explicitly dedicated to the needs of shrinking municipalities in Bulgaria is going to play a decisive role for recognizing the importance of this problematic for diminishing regional disparities and fostering territorial cohesion at the national scale. Naturally, the Bulgarian government cannot allocate such a substantial amount of financial resources to shrinking municipalities like Germany. Rather than that, the objective of this programme should be to provide a financial incentive to municipalities to elaborate policies which are specifically targeted at dealing with urban shrinkage. To make sure that the little financial resource available is utilized in the most efficient way, only municipalities which fulfil certain criteria should be given grants. In this regard, the developed list of shrinking vulnerability criteria could be used as a starting point and gradually complemented over time.

In addition, a coordination platform for shrinking municipalities can be created at the national level in order to support local activities, strengthen networking, capacity building and knowledge-transfer. The transfer agency *Urban Restructuring East* (*Bundestransferstelle Stadtumbau Ost*) in Germany is a good example in this regard (ibid.).

Ensure that cities are not deprived of their fiscal and decision-making autonomy

According to Rink et al. (2012) "because of the tight budgets the improvement of the devolution system and appropriate financial support is decisive for shrinking cities" (p. 41). In this regard, it has to be noted that in Bulgaria decisions to financially assist municipalities, the development and adoption of new regulations are often taken without the participation of local authorities. As a result, instead of encouraging local development potential, the state continues to transfer responsibilities to municipalities without providing the necessary financial support for their execution: "The analysis of the deficit of municipal budgets discovered that over 90% of the costs incurred by municipalities are for carrying out functions assigned by the State and only 9-10% of the transferred subsidies could to a certain extent be spent at the discretion of the local authorities" (MRDPW, 2009: p. 6). For these reasons, local governance in Bulgaria is currently marked by the lack of a systematic approach articulated in the prioritizing of particular problems at the expense of developing policies for integrated and sustainable development. Therefore, it is strongly recommended to provide bigger power to shrinking municipalities and let them be more flexible to implement strategies which were elaborated explicitly for the purpose of dealing with shrinkage.

One possibility to do this is to allow local governments to levy surcharges on the central government taxes or to allow them to receive a share of personal income tax or corporate income tax receipts according to the derivation approach. Moreover, it is possible to increase revenues from local taxes through enlarging local property tax base or replacing the patent tax with a local business levy, due by all enterprises and based on their operating profits, added value or payroll. This, however, will probably result in a great burden for taxpayers compared to attributing a part of the central government tax yields to local authorities. Still, having a greater share of own revenue in the municipal budgets, particularly from local taxes, could possibly create incentives for more responsible spending of public funds. Furthermore, it is a prerequisite for pursuing a fiscal policy that is in line with the preferences of local residents. (Nenkova, 2014: pp. 350-351).

Redistribute national government offices in shrinking cities

This recommendation is most of all aimed at contributing to the administrative capacity building in the respective cities. As it was already identified, poor capacity of the local administration is among the factors which impede the development of shrinking municipalities the most. Therefore, complex measures at different levels are needed to target this problem. While the OP *Good Governance* and *Human Resource Development* were already outlined as suitable financial instruments in one of the recommendations for the subnational level, the temporary allocation of national government offices in shrinking cities (such as Vidin which is a district administrative city and is therefore delegated with important administrative functions) would have a direct and very positive impact on the experience of local administrations. Moreover, this intervention would also result in producing jobs in the public sector and strengthening the local labour market (Rink et al., 2012: p. 42).

Introduce Special Economic Zones

This rather radical political decision is aimed to foster the economic growth of those regions which were most severely affected by the economic transformation form a centrally planned to a market economy: "shrinking cities and regions such as Katowice or Sosnowiec in Poland made good experiences with Special Economic Zones facilitating investment and offering tax releases for a limited period of time" (Rink et al., 2012: pp. 40-41). The introduction of such zones within the Bulgarian national context could be regarded as an opportunity for regions with a bad reputation (e.g. the Northwestern region) which makes them unattractive for investors and thus impedes their economic development. Tax exemptions, provision of infrastructure and legal assistance could prove as efficient mechanisms to boost the local economy within such zones. Moreover, such an intervention would lead to clustering of companies with a similar profile which could be a good prerequisite for establishing R&D centres and thus improve the image of shrinking municipalities not only in economic terms, but in terms of education and new technologies as well.

Introduce a monitoring system to track changes in the vulnerability of municipalities to shrinking

This should provide national policymakers with an insight as to whether the elaborated policies and the implemented measures have had actual impact on municipalities. Moreover, using concrete vulnerability criteria and tracking how they change over time should indicate in which municipalities and in which directions further efforts should be made. Nevertheless, it is recommended to extend the number of vulnerability criteria which have so far been developed. Thus, a more comprehensive picture of the condition of municipalities and their main weaknesses is going to be conveyed. Another necessary condition for the success of the national monitoring system consists in the frequent update of the gathered statistical data and the adjustment of the reference values of the quantitative indicators if needed.

9.3. Policy recommendations at the EU level

Encourage local authorities to adopt a holistic approach to dealing with shrinkage

A general objective of the EU is to foster an urban development which aims to create prosperous, liveable and resource saving cities. Hence, policies elaborated at the EU level shall emphasize that shrinking cities are expected to develop in such a way as well: "European perspectives on spatial planning should encourage cities to be coherent and holistic in their strategies, i.e. to deal comprehensively with all the economic, social and environmental issues that arise from shrinkage, and not focus partially on economic growth alone, or stemming suburbanisation alone" (Bernt et al, 2012: p. 26). Thus, strategies elaborated at the national and subnational levels would have to comply with the European perspective of what the future development direction of shrinking cities and municipalities should be like and strive to achieve progress in this regard.

Pay more attention to the process of shrinking in small and medium-sized cities

Most of the research regarding the problematic of urban shrinkage at the European scale has been

conducted with an emphasis on larger cities with national significance (Manchester, Genoa, Leipzig, etc.). Small and medium-sized cities have, on the contrary, received less attention by scholars which is rather illogical since "it is perhaps these cities that lack the capacity of larger cities to resolve their own problems" (Bernt et al., 2012: p. 26). Against this background, it could be useful to draw the attention to small and medium-sized cities and provide funding explicitly for studying the process of shrinkage in such urban areas.

Localise EU policies in Eastern Europe

At present, Eastern Europe is most severely affected by urban shrinkage mainly because of its still ongoing economic and political transformation and instability which reduce their attractiveness and foster out-migration trends. However, East European countries neither have the experience, nor the capacities and resources of other member states such as France, Germany and Italy to cope with shrinkage. For these reasons it is recommended to localise EU policies and programmes in the new member states. Thus, not only a concentration of financial resources will be ensured but also capacity building and agenda-setting are going to be facilitated: "The EU can play an important role to bring the problem of urban shrinkage to the public agenda in European countries, in particular in the East" (Rink et al., 2012: 42-43).

On the whole, it can be concluded that to achieve some progress in stabilizing the development of shrinking municipalities in Bulgaria, a combination of measures at all levels is necessary. The authorities at the subnational level have to start adopting a holistic approach to elaborating strategic planning documents and strive to establish efficient communication platforms to improve the coordination of the formulated policies.

Policymakers at the national level have to finally strengthen the debate on urban shrinkage and encourage the promotion of shrinking cities and municipalities as areas which deserve a second chance for development and could, indeed, become prosperous again if the right strategies are outlined for them. Moreover, adequate funding mechanisms have to be created in order to guarantee that municipalities have the financial capacity to consistently and successfully implement their action plans aimed at counteracting further demographic, economic and social decline.

Last, but not least, the EU has to play a more active role in regard to facilitating the future development of shrinking cities by explicitly pointing out the need of a holistic approach to the EU member states and their local authorities. Furthermore, the focus of EU-funded scientific research in regard to the process of shrinking has to be diverted to small and medium-sized cities which are more vulnerable than larger ones but have not received enough attention from scholars yet. Finally, a special emphasis on Eastern Europe by the spatial targeting of EU-policies is recommended, since this part of Europe is currently most affected from the negative demographic and economic trends and yet has least financial, administrative and human capacity to deal with their implications.

10. SUMMARY, CONCLUSIONS AND OUTLOOK

The main purpose of this thesis was to study the process of urban transformation in post-socialist countries with the specific focus on the phenomenon of urban shrinkage in Bulgaria. Its causes, implications and spatial manifestation throughout the country's territory represented the main research interest. This chapter aims to summarize the main findings and report the conclusions that resulted from this study.

Broad background knowledge about the process of urban transformation and its manifestation in the globalized world in the form of either growth or shrinkage was provided in the beginning of the thesis. To this end, a number of academic journals were reviewed in order to explore the scholarly discourse around the topic. This allowed to reach the conclusion that the ever-increasing global mobility of capital and jobs makes cities differ more and more in their pace of development. Cities which are well integrated in the global economy manage to attract more investments and usually depend on high-qualified labour force because of the competition between people from all over the world for well-paid and prestigious jobs. Other cities, however, which lack a diverse economic base and have been mostly relying on a single economic sector, are more vulnerable to losing their jobs and thereby their population. Provided that they do not manage to reposition themselves in the global economic network and create enough jobs for their citizens, these cities are likely to experience a continuous process of out-migration and eventually start shrinking.

Yet, there are many more causes for urban shrinkage than just work-related out-migration resulting from the implications of globalization. These are thoroughly explained in the next section dedicated explicitly to the phenomenon of urban shrinkage. The consequences of continuous shrinking tendencies are described in detail as well.

To shift the focus onto the processes of urban transformation in post-socialist countries, first an overview of their general features is provided. The combination of political, economic and institutional transformations that found place in Central and Eastern European countries after the fall of the Iron Curtain is the main reason for triggering a continuous and still ongoing process of urban shrinking in many post-socialist cities except for the capitals. These managed to attract the bulk of FDI and national investments which contributed to the intensification of regional disparities.

The cases of East Germany and Poland were examined in more detail in order to compare their approach to addressing the implications of shrinkage. Both case studies indicated that in order for the problematic of urban shrinkage to be recognized and actually dealt with, strong political will is necessary. In the case of East Germany real estate actors were influential enough to raise awareness of the problem which led to the establishment of the funding programme *Stadtumbau Ost*. Thus, the INSEKs elaborated by the local authorities were provided with a funding mechanism which substantially facilitated their implementation. Poland's policymakers, on the other hand, have not adopted a coherent strategy for stabilizing the process of urban shrinking yet. This is mainly to be attributed to their *mental*

lock-in and the desire to pursue economic growth before anything else.

While deficiencies were registered in both cases, the experiences of East Germany and Poland provided some valuable insights and ideas about concrete actions which could be taken in the Bulgarian context.

The case of Bulgaria was first brought to the reader's attention with a short portrait of the country. Providing basic information about the country's territory, population, economy and administrative structure aimed to allow an easier comprehension of the transformation processes described in detail in the following chapter.

Bulgaria's path to democracy and a market economy was marked with political instability, economic and financial crises and administrative incoherence and confusion. These processes are still the reality of the country although, perhaps, with less intensity than 20 years ago. Still, they have managed to successfully distract the political attention from problems such as urban shrinkage.

Shrinking became the reality of numerous Bulgarian cities after the end of the socialist regime. During the Soviet time Bulgaria became a highly industrialized country where the population was being allocated across its territory in view of the needs of big state-owned industrial enterprises for labour force. Therefore, as a result of deindustrialization which started already in the early 1990s, many settlements lost their economic base. High unemployment led to poverty and social exclusion. Thus, a continuous process of out-migration was triggered. Furthermore, birth rates were dropping down as people felt uncertain about their future. Eventually, Bulgaria lost around 15% of its population over 25 years. Some cities, however, lost more than one third of their inhabitants which significantly impedes their development today.

The devolution of power and the provision of fiscal autonomy to municipalities constituted important attempts towards providing local authorities with the right and financial capacity to identify their own problems and try to resolve them in a consistent manner. This, however, remains a difficulty until present day. The State delegates activities to the local level which are only partially covered by national subsidies. Therefore, to ensure an adequate provision of services, municipalities are forced to allocate a certain share of the municipal budget to the implementation of the delegated activities. Thus, local authorities are basically put in the position of maintaining a certain infrastructure without having the financial capacity to invest in modernization or expansion measures.

Bulgaria's EU accession period was further marked with numerous administrative changes and the introduction of new legislative acts. The most important *innovation* for the Bulgarian spatial context consisted in the introduction of the NUTS hierarchy and the strategic planning policy at the regional level. Until then, regional policy was basically non-existent in Bulgaria. Against this background, the necessity to align Bulgarian spatial planning policy to EU requirements caused significant institutional confusion. In a country, where everything was decided at the national level for more than four decades, implementing the multi-level governance system of the EU proved to be too complicated for the Bulgarian public administration. The instant adherence to all requirements with the sole purpose of getting access to funding from the EU structural

funds, led to long-term difficulties and the inefficiency of aligning the newly created regional planning policies with spatial planning instruments which had remained almost unchanged from the time of the socialist regime. Furthermore, the allocation of funding to the NUTS II level which is an artificially created level in the Bulgarian spatial structure and does not represent the scale of actual problems, significantly impedes the efficient implementation of strategies elaborated at the local level. While the IPURDs, which were introduced for the first time in 2010, constitute the first attempt to combine strategic planning with urban regeneration policies at the local level, the problem of urban shrinking has so far barely been addressed by these plans.

In an effort to determine which are the urban areas most vulnerable to experiencing further shrinkage, multiple statistics tests were carried out. The examination of a number of hypotheses allowed to identify socio-economic and spatial factors which have either a direct or an indirect influence on demographic shrinking – unemployment, presence of urban settlements within municipalities and education levels of the local population. Thus, a list of vulnerability criteria was compiled in order to spatially define the areas with highest vulnerability to urban shrinkage. As a result, it was possible to conclude that these areas are mainly situated in the periphery of the country, relatively far from big cities where economic and social activities are more dynamic. Furthermore, a clustering of vulnerable municipalities was registered in the northwestern part of Bulgaria which is shaped by economic and social decline.

In view of these results, the municipalities of Vidin and Rousse were selected for further analysis. However, none of them was identified as a municipality with high vulnerability to shrinking which is mostly to be attributed to the presence of district administrative cities within their borders. This gives them the potential to play a stabilizing role at the district level and contribute to slowing down the process of urban shrinking in the neighbouring vulnerable municipalities. While Rousse was identified as a municipality which has already achieved some progress in this direction because of the rather low number of vulnerable municipalities in its immediate vicinity, Vidin is surrounded by municipalities, all of which were identified as vulnerable to shrinkage. Against this background, the objective was to eventually outline a strategy for the future development of the municipality of Vidin in order to foster its role as a stabilizer at the district level. To this end, the case of Rousse served the purpose of being a model for outlining a coherent vision and development strategies because both municipalities have a number of common local potentials.

The comparative study allowed to conclude that while Vidin and Rousse have the same geographic potential, they significantly differ in their human resource capacity. The reasons for this are to be sought mainly in the educational system which is much better developed in Rousse. The larger share of highly educated people provided Rousse with the advantage of being more resilient to experiencing high unemployment rates which were identified as one of the factors with a certain contribution to the process of urban shrinking.

Moreover, the comparative analysis of the existing strategic documents produced for both municipalities led to the conclusion that while neither one of the local authorities has so far elaborated a coherent strategy for dealing with the implications of urban shrinkage, Rousse has been more consistent in developing its strategic documents as a whole. First, the local authorities of Rousse have been pursuing the same goal of fostering economic growth and have outlined concrete measures to achieve it. Second, they have managed to interlink strategic planning with urban regeneration policy at least to some extent (e.g. Master plan for the Euroregion Rousse-Giurgiu and Rousse's IPURD). Third, they are willing to work actively for the improvement of the municipality which is visible not only by the public awards they have received, but also by their openness for establishing a dialogue with various actors including myself as a student and a researcher.

The strategic documents produced for the spatial context of Vidin, on the other hand, are missing a coherent vision for development. The elaborated plans and strategies include too many priorities which are not always connected with concrete implementation tools and funding mechanisms. In addition, it could be argued that Vidin's local authorities are missing transparency in their approach because not all strategic documents are accessible to the public. Furthermore, they could be regarded as rather unwilling to cooperate with actors from the academic field because a number of invitations for interview and thus participation in this research were left without a response.

The collaboration with Vidin's local authorities could have significantly facilitated the process of outlining a vision for the future development of the municipality in light of the necessity to strengthen its role and the district level for the purpose of slowing down the process of urban shrinking. Nevertheless, it was still possible to propose concrete development strategies which addressed the main local potentials and weaknesses of the municipality identified in the analysis.

First of all, fostering the development of the city of Vidin as a logistics centre in the Northwest of Bulgaria was proposed. This suggestion is based on the strategic geographic position of the city at the crossing of two Pan-European transport corridors (IV and VII), the harbour of Danube and the recently built and functioning bridge connecting Bulgaria with Romania. Furthermore, a plot for a Logistic Park has already been designated and there is a German investor who chose to position a clothing plant there. Hence, there is existing potential in this direction which has to be further expanded. Some suggestions on how to achieve this were outlined in chapter 8.

Second, and perhaps more important, it is recommended for the municipality to invest in human resources since this was the most problematic aspect identified in the analysis. To this end, the concept proposes the expansion of the training centre which was opened in the city of Vidin by the University of Rousse in the end of 2016. While this is a very important first step, further effort has to be made in order for the municipality of Vidin to capitalize actual results from this undertaking in the short to mid-term. In this regard, the concept suggested a comprehensive action plan and pointed out available funding mechanisms.

Next to the measures provided explicitly for the spatial context of Vidin, a set of general policy recommendations for the subnational, national and the EU levels was elaborated as well. These aim to make the conceptual part of the thesis more comprehensive by offering an overall perspective on governing the process of urban shrinking in Bulgarian municipalities. Thus, the research question *"How can policymakers slow down the process of urban shrinking in Bulgaria?"* is directly addressed. Complex measures need to be taken at all levels in order to achieve visible short-term results.

For the specific case of Bulgaria the most important steps consist in strengthening the debate on urban shrinkage at the national level and thus finally putting this problematic on the policy agenda, increasing administrative knowledge and capacity at the local level, providing greater fiscal autonomy to municipalities to enable the emergence of an actual bottom-up approach and linking strategic planning policies with urban regeneration measures. The role of the EU should be mainly in regard to shifting the focus on the topic of urban shrinkage from big to small and medium-sized cities and from Western European to Eastern European countries. This should be done both in terms of research and in terms of allocation of financial resources with the explicit purpose of facilitating shrinking cities.

The main contribution of this thesis consists in the identification of concrete socio-economic and spatial factors with an influence on the process of urban shrinking in the specific context of Bulgaria. This allowed to spatially determine the municipalities with highest vulnerability to experiencing further demographic and economic decline. Thus, it is possible to elaborate measures which are to be targeted at these concrete urban areas. Moreover, the developed list of criteria could be further expanded and used for the establishment of a monitoring system for the assessment of changing patterns of vulnerability to shrinking across the country resulting from implemented measures.

However, the lack of sufficient quantitative data at the municipal level hindered the examination of a wider variety of factors with expected impact on shrinking and thus limited the comprehensiveness of the criteria included in the vulnerability index. This, together with the unwillingness for cooperation of Vidin's local authorities were the main difficulties throughout the research process.

On the whole, the current thesis managed to fill a certain gap in the field of studying urban transformation processes in post-socialist Bulgaria. Yet, the broad scope of the study impeded the research depth to some extent. Indeed, the thesis could have benefited from narrowing down the research interest. Thus, more attention could have been paid to the conceptual part rather than investigating the theoretical issues in this much detail.

Still, the importance of the phenomenon of urban shrinkage for Bulgaria is substantial. Therefore, any limitation in the discussion of the multifaceted causes for its emergence would have been disadvantageous for the research. With this in view, the thesis is believed to be a helpful contribution to the planning discourse in Bulgaria. It aims to facilitate planners and policymakers in making first steps towards addressing the problem of urban shrinking with the purpose of eventually slowing down demographic and economic decline in Bulgarian municipalities.

APPENDIX

EXPERT INTERVIEWS

Lidiya Lecheva-Gospodinova, Senior Expert in the Department of European Development in the Municipality of Rousse

1. Do you consider demographic decline as a problem for the development of the municipality of Rousse? Why?

– *There is a direct link between demographic and economic development. The availability of jobs is a restraining factor in terms of out-migration. An example of the manifestation of this problem is the lack of labour force for many sectors of the economy.*

2. What triggered the process of urban shrinkage in the municipality of Rousse?

– *The collapse of the business in the production sector*
– *High unemployment rates*
– *Low wages*
– *After the accession of Bulgaria in the EU in 2007 the borders were open and the access to the European labour market became easier than ever.*

3. Do you consider urban governance as a possible instrument for stabilizing negative demographic development?

– *Yes, this is possible to some extent if the local authorities manage to create a favourable business environment and attractive living and working conditions. This a priority for the mayor of the Municipality of Rousse and it was and still is identified as such in the Governance programmes 2011-2015 and 2015-2019.*

a. If yes, in what way? What kind of planning practices are going to be necessary?

- *Fostering economic development*
- *Creating favourable business conditions*
- *Providing good infrastructure*
- *Introducing low tax rates*
- *Ensuring simplified and efficient administrative service for the business*

4. Are there currently any measures taken to stabilize the so-called process of urban shrinkage at the municipal level?

Yes, there are. The Programmes for governing the Municipality of Rousse for the periods 2011-2015 and 2015-2019

5. **What local development potentials has the Municipality of Vidin/Rousse? How do you envision its development for the next 10 years?**

Vision for Rousse:

"Rousse is an emblematic municipality for Bulgaria and the Danube macro region with pace of economic and infrastructural development higher than the national average. These factors foster investments and employment in the sectors of industry, transport, logistics, agriculture, tourism, culture, education and science. The goal of Rousse Municipality is to efficiently capitalize local resources in order to achieve a sustainable, inclusive and intelligent growth as well as high quality of life".

Local strengths:

– *Strategic geographic location – The Pan European transport corridors 7 and 9 cross its territory, Danube Bridge, close proximity to the capital of Romania Bucharest.*
– *Proximity to a big international airport – Bucharest*
– *developed harbour infrastructure*
– *Well-developed system of facilities for education, additional or prequalification, university.*
– *High-qualified labour force*
– *Well-functioning system of facilities for Research and Development*
– *Diverse cultural events*
– *Rich cultural heritage and existence of natural sights fostering the development of tourism.*

Interview via e-mail.
lecheva_lidia@hotmail.com
5th of January, 2017.
Translated from Bulgarian by the author.

Arch. Petko Evrev, Senior Expert in the Department of Regional analyses, Urban planning, Spatial planning and Tourism at the National Centre for Regional Development

1. How did the implementation of the socialist political and economic model in Bulgaria for a period longer than 40 years, affect the subsequent development of Bulgarian cities and municipalities after the breakdown of the Soviet Union?

– *This model had its impacts during the time of socialism. Apart from the generally negative effects on the development of the society, it should be pointed out that in many ways there was a positive impact on the urban development. During the socialist regime it was easier to expropriate land for public urban needs and therefore realize urban project ideas. To what extent does the socialist model have an influence after the fall of the regime? This impact cannot be direct anymore, because the socio-political grounds and conditions changed. However, there is a somewhat indirect influence – through the physical characteristics of the urban environment left from the socialist period. This environment is a given and it has to be reckoned with. Its flaws weigh heavily upon us and challenge us to start a change. Still, we should not ignore its merits, on the contrary – we have to preserve them. Unfortunately, we often neglect them, especially in residential areas and touristic resorts. The bad thing is that we neglect public interest and violate public space for the sake of private and corporate interests.*

2. Do you consider demographic decline as a problem for the development of Bulgarian municipalities? Why?

– *Of course it is a problem. Lower demographic potential, less children in school, less economically active population, less production, less people in active working age in the future, etc. However, this problem should not be exaggerated to apocalyptical scenarios. It should not become a source of capital for "scientists" such as demographists and sociologists. In the past, our cities have been developing successfully with less population than now. When they rapidly increased over a short period of time during the industrialization, many of their problems emerged and they have not been solved yet.*

3. Do you consider local urban governance as a possible instrument for stabilizing negative demographic development at the local level?

– *Hardly, and to be more precise – only to a certain extent, but its role cannot be decisive. There are other, global factors which could have an influence. They are of national and supranational importance. Local urban governance could slow down the out-migration from the municipality or the city, it could contribute to achieving some momentum of socio-economic development, to a better quality of life. Yet, it cannot influence birth rates and reverse current demographic trends.*

4. Do you think that planning can play a role in this process? If yes, what kind of role does planning play now and how can it be facilitated, improved?

– *We have to get used to the fact that our cities are going to have to develop with less population in the future. This does not necessarily mean urban decay. "Shrinking" cities in terms of population but not in terms of territory. This is an interesting phenomenon. Perhaps in the period of rapid growth during industrialization cities did not manage to absorb enough territory. This is why there was a housing crisis, a shortage of residential dwellings and areas, shortage of industrial territories, not entirely built up infrastructure, and lack of green areas and areas for recreation. Now that their population has decreased, the territory has to be enough or even too big for them.*

The paradox lies in the fact that there are abandoned industrial areas (with built up infrastructure) in our cities and still new production sites emerge outside of the urban area, "on a green lawn". Numerous commercial and service companies choose to settle on "a green lawn" as well. Even new residential areas pop up outside the city borders. Thus, urban territory grows. Population is shrinking, but the territory is growing. Could this phenomenon be defined as a "shrinking city"? The General Spatial Plans of our cities ubiquitously foresee new areas for construction, somewhere justified, somewhere not so much. However, urban territory is growing and the problems remain in its existing and no longer efficiently used industrial areas as well as in residential areas (mainly large areas of prefabricated residential buildings).

The notion of "urban shrinkage" should be considered in three aspects – demographic, functional and spatial shrinking. Demographic shrinking is the reality of all Bulgarian cities except for the few big ones. Severe urban shrinkage can is manifested and observed in the decay of urban functions in most cities as well – economic, educational, social, cultural. However, spatial shrinkage is not observed. It may be manifested in the decay and partial abandonment of some urban areas, but at the same time it is coupled with the absorption of new territories. This seemingly paradoxical phenomenon is to some extent legitimate. It is typical for living organisms – some cells die and others emerge. The city is like a living organism. There is always something changing inside of it. The excessive urban growth from the industrial era is now replaced by a calmer partial increase in terms of territory and more profound internal structural changes.

Interview via e-mail.

petko_evrev@abv.bg

17th of January, 2017.

Translated from Bulgarian by the author.

Assoc. Prof. Dr. Arch. Elena Dimitrova in the Department of Urban Planning at the University of Architecture, Civil Engineering and Geodesy, Faculty of Architecture, Sofia

1. How did the implementation of the socialist political and economic model in Bulgaria for a period longer than 40 years, affect the subsequent development of Bulgarian cities and municipalities after the breakdown of the Soviet Union?

– *I do not understand why the breakdown of the Soviet Union is referred to here. We have a case of a complete and profound change in the societal system of the country – political, economic and social aspects of life in its entirety as well as in the system of planning the built environment and urban governance.*

The industrialization of the country after the Second World War and the rapid urbanization triggered by it, led to the development of large residential areas built up with prefabricated buildings in all large and medium-sized Bulgarian cities. The way of planning itself – the centralized system of urban planning which had been strictly following the modernist model of functional zoning.

Yes, it still has its influence today:

– *The way residential areas are built up – giving priority to residential building units and social and educational facilities, but at the same time leaving commercial and service facilities outside, leaves a gap open and new construction projects emerge to fill in the needs that came into being after the changes.*

– *The abundant (and somewhere even over-sized) public urban space is a result of public financing of large-scale urban projects in city centres – which are the liveliest places in Bulgarian cities until present day. They allow new functions to be added.*

– *Pedestrian zones, which were introduced in the end of the 80s, seem to be working well in most cities.*

– *What was done for preserving the cultural heritage is today impossible to bear in financial terms by the municipalities and private owners of the restituted cultural properties.*

2. Do you consider the demographic decline as a problem for the development of Bulgarian municipalities? Why?

– *I consider it a problem with multiple negative consequences whose solution is vital. Depopulation has multi-layered effects – low efficiency of a number of social, cultural and transport infrastructure elements (closing down schools, cancelling or reducing bus and train routes, difficult functioning of multifamily residential buildings) leads to the decreasing of the standard of life and the marginalization of population in different parts of the country.*

3. Do you consider urban governance as a possible instrument for stabilizing negative demographic development?

b. If yes, in what way? What kind of planning practices are going to be necessary?

– *It cannot stabilize the demographic development but it could contribute to the analysis of the causes and consequences of shrinking as well as to facilitate the search for adequate measures which would allow physical structures to adapt to the new reality.*

c. If no, why? What kind of measures and at what level are necessary for stabilizing the negative demographic development? Could planning actors participate in this process?

– *I do not think that local authorities are in the position of slowing down this process – especially in the smaller cities – it is the result of processes, which can be influenced by policy measures taken at the upper levels.*

d. Do you think that planning has a role in this process? Is yes, what role does planning currently have and how can it be reinforced and improved?

– *Socio-economic and spatial planning at the regional level.*

4. Are there currently any policies for stabilizing the so-called process of urban shrinkage at the municipal level?

– *Unfortunately, I am not aware of the existence of such policies. There are some attempts to "comment" (address) this process in several political documents. A National Strategy for the Territorial Development of the Republic of Bulgaria has been developed, however, I do not consider this as a comprehensive and goal-oriented policy.*

5. Do you think that measures have to be executed at the local level, or are there necessary actions that have to be implemented at the regional or even at the national level? If so, can you please name some of these?

– *Measures should be taken in concurrence at all levels following a common coherent strategy aimed at accomplishing realistic goals which explicitly address the problem of "urban shrinkage".*

6. Do you consider EU-funding programmes helpful/sufficient for the stabilizing of local development?

– *They are undoubtedly helpful but can hardly be considered as sufficient. The project-based approach which is currently the ground for allocation of funding, does not guarantee a continuity and upgrading of the implementation of measures. The monitoring processes, although outlined and intended in the design of the programmes, unfortunately do not achieve real results – they have to take into account the long-term influence of the interventions in the urban environment funded by the EU.*

There is an effort to link the objectives of individual calls for projects (socio-economic dimensions of the physical urban transformations), but this cannot always be considered as successful. An example of a poorly thought-out formulation is the idea to fund the preservation of cultural heritage in order to turn it into a "tourist attraction" that would increase the inflow of tourists and thus facilitate the local economic development. The lack of expertise at local level in cultural heritage protection led to hypothetical reconstructions and significant damages to the authenticity of important cultural monuments.

Interview via e-mail.

eldim_far@uacg.bg

27th of January, 2017.

Translated from Bulgarian by the author.

LIST OF REFERENCES

Altours.bg (2015): Danube Bridge – Rousse. [Online] Available from: http://www.altours-bg.com/wp-content/uploads/2015/05/Danube-bridge-Rousse.jpg [Accessed 16th February 2017].

Altrock, U., Guentner, S., Huning, S., & Peters, D. (2006): Spatial Planning and Urban Development in the new EU Member States: From Adjustment to Reinvention. [Online] Available from: https://www.geschundkunstgesch.tu-berlin.de/fileadmin/fg95/Hauptordner_Megaprojekte/AltrocketalPeters2006BookSpatialPlanningEUMembChapter1.pdf [Accessed 21st March].

Ascani, A., Crescenzi, R. & Iammarino, S. (2012): Regional Economic Development: A Review. [Online] Available from: http://www.ub.edu/searchproject/wp-content/uploads/2012/02/WP-1.3.pdf [Accessed 17th November 2016].

BBSR / Bundesinstitut für Bau-, Stadt- und Raumforschung (2015): Wachsen oder schrumpfen? [Online] Available from: http://d-nb.info/1075812844/34 [Accessed 18th January 2017].

Beaverstock, J., Smith, R. & Taylor, P. (2000): Globalization and world cities. Bulletin 5, GaWC Research Programme, Loughborough, UK. [Online] Available from: http://www.sciencedirect.com/science/article/pii/S0143622899000168 [Accessed 23rd November 2016].

Castells, M. (2000): The Rise of the Network Society. Malden, MA: Blackwell Publishing Ltd.

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, March 2012, Helmholtz Centre for Environmental Research – UFZ, Leipzig. [Online] Available from: https://www.intern.ufz.de/data/ResearchBrief2_17486.pdf [Accessed 6th March 2017].

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? Experiences from Leipzig, Liverpool, Genoa and Bytom. *International Journal of Urban and Regional Research* [Online] 38 (5). pp.1749-1766. Available from: http://onlinelibrary.wiley.com/doi/10.1111/1468-2427.12101/full [Accessed: 18th January 2017].

BIA / Bulgarian Industrial Association (2013): Where is the position of Bulgaria in world exports in 2013? [Online] BIA Database. Available from: http://www.bia-bg.com/uploads/files/analysis/BIA_analiz_BG-exim_in_the_World_2013.pdf [Accessed 18th March 2017] (In Bulgarian).

BIA / Bulgarian Industrial Association (2016): Bulgarian export during the period 2001-2015. [Online] BIA Database. Available from: http://bia-bg.com/uploads/files/analysis/Export-2001-2015-press.pdf [Accessed 18th March 2017] (In Bulgarian).

BMUB / Bundesministerium für Umwelt, Naturschutz, Bau und Reaktorsicherheit (2016a): Städtebauförderung – Grundlagen. [Online] Available from: http://www.staedtebaufoerderung.info/StBauF/DE/Programm/StadtumbauOst/Programm/Grundlagen/grundlagen_node.html [Accessed 24th November 2016] (In German).

BMUB / Bundesministerium für Umwelt, Naturschutz, Bau und Reaktorsicherheit (2016b): Städtebauförderung – Handlungsfelder. [Online] Available from: http://www.staedtebaufoerderung.info/StBauF/DE/Programm/StadtumbauOst/Programm/Handlungsfelder/handlungsfelder_node.html [Accessed 24th November 2016] (In German).

BMVBS / Bundesministerium für Verkehr, Bau und Stadtentwicklung (2012): Bund-Länder-Bericht an den Deutschen Bundestag zum Programm Stadtumbau Ost in den Ländern Berlin, Brandenburg, Mecklenburg-Vorpommern, Sachsen, Sachsen-Anhalt und Thüringen. [Online] Available from: http://www.regierung-mv.de/serviceassistent/download?id=64837 [Accessed 24th November 2016] (In German).

Bratfisch, R. (2007): Stadtumbau Ost – Kahschlag statt Entwicklung. [Online] Berliner Mieterverein. Available from: http://www.berliner-mieterverein.de/magazin/online/mm1107/110720.htm [Accessed 18th January 2017] (In German).

BULRIS / River Information System in the Bulgarian part of Danube (2017): Project Bulris. [Online] Available from: http://www.bulris.bg/en/project-bulris/system-bulris [Accessed 16th February 2017].

CIDV / "Centre for Integrated Development of Vidin" (2013): Integrated Plan for Urban Regeneration and Development of the City of Vidin 2014-2020. [Online] Available from: http://vidin.bg/old/wp-content/uploads/2014/08/OPRR/IPGVR_VIDIN-FINAL-FINAL.pdf [Accessed 2nd March 2017] (In Bulgarian).

Cunningham-Sabot, E. & Fol, S. (2009): Shrinking Cities in France and Great Britain: A Silent Process? In: Wu, T. & Rich, J. (eds.). *The Future of Shrinking Cities: Problems, Patterns and Strategies of Urban Transformation in a Global Context.* [Online] Available from: http://www.rop.tu-dortmund.de/cms/Medienpool/Downloads/The_Future_of_Shrinking_MG-2009-01.pdf [Accessed 17th November 2016].

Cunningham-Sabot, E., Audirac, I., Fol, S. & Martinez-Fernandez, C. (2014): Theoretical Approaches of 'Shrinking Cities'. In: Pallagst, K., Wiechmann, T. & Martinez-Fernandez, C. (eds.). *Shrinking Cities. International Perspectives and Policy Implications.* New York: Routledge.

DECF / Danube Euroregional Civil Forum (2014): Strategy for sustainable development of Calafat-Vidin cross-border region. [Online] Available from: http://decf.org/doc/Strategy_en.pdf [Accessed 2nd March 2017].

Dimitrova, E. (2017): Expert interview over e-mail.

Distance Calculator (2017): Distance from Bucharest to Rousse. [Online] Available from: https://www.distancecalculator.net/from-bucharest-to-ruse [Accessed 20th February 2017].

EC / European Commission (2010): Europe 2020. A strategy for smart, sustainable and inclusive growth. [Online] Available from: http://ec.europa.eu/eu2020/pdf/COMPLET%20EN%20BARROSO%20%20%20007%20-%20Europe%202020%20-%20EN%20version.pdf [Accessed 7th March 2017].

EC / European Commission (2015a): Operational Programmes. Science and Education for Smart Growth - ESF/ERDF. [Online] Available from: http://ec.europa.eu/esf/main.jsp?catId=576&langId=en [Accessed 8th March 2017].

EC / European Commission (2015b): Operational Programmes. Human Resources Development - ESF/YEI [Online] Accessed from: http://ec.europa.eu/esf/main.jsp?catId=576&langId=en [Accessed 8th March 2017].

EC / European Commission (2016): The EU Regional Competitiveness Index 2016. [Online] Available from: http://ec.europa.eu/regional_policy/en/information/publications/working-papers/2017/the-eu-regional-competitiveness-index-2016 [Accessed 1st March 2017].

EC / European Commission (2017): European Structural and Investment Funds. Country Data for: Bulgaria. [Online] Available from https://cohesiondata.ec.europa.eu/countries/BG [Accessed 8th March 2017].

ESRI ArcGIS (2017): World Terrain Base. [Online] Available from: http://www.arcgis.com/home/webmap/viewer.html?useExisting=1 [Accessed 27th March 2017].

EU / European Union (2014): Science and Education for Smart Growth Operational Programme 2014-2020. [Online] Available from: http://www.eufunds.bg/document/8131 [Accessed 8th March 2017].

EU & ESF / European Union & European Social Fund (2014): Human Resources Development Operational Programme 2014-2020. [Online] Available from: http://ophrd.government.bg/view_file.php/21022 [Accessed 8th March 2017].

Eurostat (2011): Regions in the European Union. Nomenclature of territorial units for statistics NUTS 2010/EU-27. [Online] Available from: http://ec.europa.eu/eurostat/documents/3859598/5916917/KS-RA-11-011-EN.PDF [Accessed 13th January 2017].

Eurostat (2015a): Regional GDP. [Online] Available from: http://ec.europa.eu/eurostat/news/themes-in-the-spotlight/regional-gdp [Accessed 15th February 2017].

Eurostat (2015b): Population structure by major age groups, EU-28, 2015–80. [Online] Available from: http://ec.europa.eu/eurostat/statistics-explained/index.php/File:Population_structure_by_major_age_groups,_EU-28,_2015%E2%80%9380_(%C2%B9)_(%25_of_total_population)_YB16.png [Accessed 16th February 2017].

Eurostat (2017): Local Administrative Unites (LAU). [Online] Available from: http://ec.europa.eu/eurostat/web/nuts/local-administrative-units [Accessed 17th March 2017].

Evrev, P. (2017): Expert interview over e-mail.

Florentin, D. (2010): The "Perforated City:" Leipzig's Model of Urban Shrinkage Management. *Berkeley Planning Journal*. [Online] eScholarship Database 23 (1). p. 83-101. Available from: http://escholarship.org/uc/item/97p1p1jx [Accessed 17th March 2017].

Forton (2014): Logistics Park Vidin. [Online] Available from: http://forton.bg/en/post/123/logistics-park-vidin [Accessed 24th March 2017].

Gatzweiler, H. P. & Milbert, A. (2009): Schrumpfende Städte wachsen und wachsende Städte schrumpfen. [Online] *Informationen zur Raumentwicklung*. Available from: https://www.bbr.bund.de/BBSR/DE/Veroeffentlichungen/IzR/2009/7/Inhalt/DL_Gatzweiler-Milbert.pdf?__blob=publicationFile&v=2 [Accessed 15th March 2017].

Geoghegan-Quinn, M. (2014): Population ageing in Europe: facts, implications and policies. Outcomes of EU-funded research. [Online] Available from: https://ec.europa.eu/research/social-sciences/pdf/policy_reviews/kina26426enc.pdf [Accessed 16th February 2017].

Glorient Investment BG Ltd. (2017): Logistic Park Vidin. [Online] Available from: http://www.glorient-bg.com/portfolio_item/logistic-vidin/?lang=en [Accessed 24th March 2017].

Google Maps (2017a): Rousse. [Online] Available from: https://www.google.de/maps/place/Ruse,+Bulgaria/ [Accessed 26th March 2017].

Google Maps (2017b): Vidin. [Online] Available from: https://www.google.de/maps/place/Vidin,+Bulgaria/ [Accessed 27th March 2017].

Haase, A. (2011): Stadtschrumpfung – auch ein Polnisches Thema. [Online] Deutsches Polen Institut. Available from: http://www.laender-analysen.de/polen/pdf/PolenAnalysen104.pdf [Accessed 18th January 2017] (In German).

Hirt, S. (2005): Planning the Post-Communist City: Experiences from Sofia. *International Planning Studies.* 10 (3–4). pp. 219–240.

Infograf.bg (2017): Unemployment – municipal level. [Online] Available from: https://www.infograf.bg/article/1485515862000 [Accessed 17th February 2017] (In Bulgarian).

IPURD Rousse 2020+ (2013): Integrated Plan for Urban Regeneration and Development. [Online] Available from: https://www.ruse-bg.eu/bg/pages/491/index.html [Accessed 28th February 2017] (In Bulgarian).

Ivanov, R. (2007): The national economy during the socialist time (1949-1989). *Dialogue journal*. [Online] University of Svishtov (4). pp. 116-150. Available from: https://www.uni-svishtov.bg/dialog_old/2007/4.07.RI.pdf [Accessed 18th March 2017] (In Bulgarian).

Jessen, J. (2012): Conceptualizing Shrinking Cities – A Challenge for Planning Theory. In: Ganser, R. & Piro, R. (eds.). *Parallel Patterns of Shrinking Cities and Urban Growth. Spatial Planning for Sustainable Development of City Regions and Rural Areas*. Farnham: Ashgate.

Kamenova, Z. (1999): Regional policy and regional capacities in the Republic of Bulgaria. In: Brusis M. (ed.). *Central and Eastern Europe on the Way into the European Union: regional policy-making in Bulgaria, the Czech Republic, Estonia, Hungary, Poland and Slovakia*. Munich: Centre for Applied Policy Research. pp. 32-44.

Kovachev, A. (2009): Territorial Development. Sofia: Pensoft. (In Bulgarian).

Laerd Statistics (2015a): Pearson's product-moment correlation using SPSS Statistics. [Online] Statistical tutorials and software guides. Available from: https://statistics.laerd.com/ [Accessed 24th February 2017].

Laerd Statistics (2015b): Simple linear regression using SPSS Statistics. [Online] Statistical tutorials and software guides. Available from: https://statistics.laerd.com/ [Accessed 24th February 2017].

Laerd Statistics (2015c): Spearman's correlation using SPSS Statistics. [Online] Statistical tutorials and software guides. Available from: https://statistics.laerd.com/ [Accessed 24th February 2017].

Laerd Statistics (2015d): Independent-samples t-test using SPSS Statistics. [Online] Statistical tutorials and software guides. Available from: https://statistics.laerd.com/ [Accessed 24th February 2017].

Laursen, L. H. (2012): Urban Transformations – The Dynamic Relation of Urban Growth and Decline. In: Ganser, R. & Piro, R. (eds.). *Parallel Patterns of Shrinking Cities and Urban Growth. Spatial Planning for Sustainable Development of City Regions and Rural Areas.* Farnham: Ashgate.

Lecheva-Gospodinova, L. (2017): Expert interview over e-mail.

Maier, K. (2012): Europeanization and Changing Planning in East-Central Europe: An Easterner's View. *Planning Practice and Research*. 27 (1). pp. 137–154.

Marinov, V. (2006): The Regional Development Planning System in Bulgaria: Progress, Pitfalls, and Lessons Learned. *Paper presented at the Conference "Regional Development: Policies and Practices in Central and Eastern Europe"*. Chisinau, Moldova, 28-29 June 2006. [Online] Available from: http://www.undp.md/focus_areas/localdev/reg_conf/Marinov.pdf [Accessed 25th January 2017].

MEYS / Ministry of Education, Youth and Science (2014): Operational Programme "Science and Education for Smart Growth" 2014-2020. [Online] Available from: http://sf.mon.bg/?go=page&pageId=37 [Accessed 8th March 2017] (In Bulgarian).

Mihaylov, I. (2015): Germany's Slam Group to invest 1 mln euro in clothing plant in Bulgaria. [Online] SeeNews. Available from: https://seenews.com/news/germanys-slam-group-to-invest-1-mln-euro-in-clothing-plant-in-bulgaria-479119 [Accessed 24th March 2017].

Monastiriotis, V. (2008): The Emergence of Regional Policy in Bulgaria: regional problems, EU influences and domestic constraints. [Online] *GreeSE Paper* 15. Hellenic Observatory Papers on Greece and Southeast Europe. Available from: http://www.lse.ac.uk/europeanInstitute/research/hellenicObservatory/pdf/greese/greese15.pdf [Accessed 30th November 2016].

MRDPW / Ministry of Regional Development and Public Works (2009): Programme for the implementation of measures in the regions for purposeful intervention 2010-2013. [Online] Available from: http://mrrb.government.bg/docs/9a9a7e2509a7f3f3eec12895390441fc.pdf [Accessed 10th March 2017] (In Bulgarian).

MRDPW / Ministry of Regional Development and Public Works (2012): National Strategy for Regional Development of the Republic of Bulgaria for the period 2012-2022. [Online] Accessed 28th February 2017] (In Bulgarian).

NCRD / National Centre for Regional Development (2015): National Concept for Spatial Development 2013 – 2025. *METREX Lombardia Spring Conference, Milano EXPO 2015: Feeding the planet - Energy for life*. 6-8 May 2015. [Online] Available from: http://www.eurometrex.org/Docs/Meetings/milan_2015/Presentations/6-Vesselina-TROEVA-Bulgarian-National-Centre-Regional-Dev.pdf [Accessed 25th January 2017].

Nenkova, P. (2014): Fiscal Decentralization and Local Finance Reforms in Bulgaria: A Review of Ten Years' Experience. *Mediterranean Journal of Social Sciences MCSER Publishing*, Rome-Italy. [Online] MCSER Database 5 (23). pp. 342-352. Available from: http://www.mcser.org/journal/index.php/mjss/article/viewFile/4535/4406 [Accessed 23rd March 2017].

NSI / National Statistical Institute (2009): 129 years of Bulgarian statistics. [Online] NSI Database. Available from: http://www.nsi.bg/sites/default/files/files/publications/NSI_129g.pdf [Accessed 18th March 2017] (In Bulgarian).

NSI / National Statistical Institute (2010-2015): GDP and GVA by economic sector and region. [Online] NSI Database. Available from: http://www.nsi.bg/sites/default/files/files/data/timeseries/GDP_1.1.4.xls and http://www.nsi.bg/en/content/5493/gdp-regions [Accessed 17th February 2017].

NSI / National Statistical Institute (2011a): Unemployed and unemployment rates - national level; statistical regions; districts. [Online] NSI Database. Available from: http://www.nsi.bg/en/content/6503/unemployed-and-unemployment-rates-national-level-statistical-regions-districts [Accessed 25th February 2017].

NSI / National Statistical Institute (2011b): Population aged more than 7 years by completed education levels. [Online] NSI Database. Available from: http://www.nsi.bg/census2011/PDOCS2/Census2011_Edu.xls [Accessed 16th February 2017].

NSI / National Statistical Institute (2012): Census statistical yearbook of Bulgaria, 2011. Band 1. Population. [Online] NSI Database. Available from: http://statlib.nsi.bg:8181/fulltext.php?view=1&content=H:/fullt/fulltopen/p_22_2011_t1_kn1.pdf [Accessed 25th March 2017] (In Bulgarian).

NSI / National Statistical Institute (2014): Main Macroeconomic Indicators 2014. [Online] NSI Database. Available from: http://www.nsi.bg/sites/default/files/files/publications/macro2014.pdf [Accessed 18th March 2017].

NSI / National Statistical Institute (2015): People at risk of poverty or social exclusion by educational attainment level (population aged 18 and over) [Online] NSI Database. Available from: https://infostat.nsi.bg/infostat/pages/reports/query.jsf?x_2=289 [Accessed 25th February 2017].

NSI / National Statistical Institute (2016a): Population by districts, municipalities, place of residence and sex. [Online] NSI Database. Available from: http://www.nsi.bg/en/content/6704/population-districts-municipalities-place-residence-and-sex [Accessed 25th March 2017].

NSI / National Statistical Institute (2016b): Statistical yearbook 2016. [Online] NSI Database. Available from: http://www.nsi.bg/sites/default/files/files/publications/StatBook2016.pdf [Accessed 18th March 2017] (In Bulgarian).

NSI / National Statistical Institute (2016c): Foreign Direct Investments in Non-Financial Enterprises as of 31.12.2015. [Online] NSI Database. Available from: http://www.nsi.bg/en/content/6196/foreign-direct-investments-non-financial-enterprises-3112-statistical-regions-and [Accessed 18th March 2017].

NSI / National Statistical Institute (2016d): Migration of the population by districts, municipalities and sex. [Online] NSI Database. Available from: http://www.nsi.bg/en/content/6685/migration-population-districts-municipalities-and-sex [Accessed 26th March 2017].

NSI / National Statistical Institute (2017a): National Register of Populated Places. [Online] NSI Database. Available from: http://www.nsi.bg/nrnm/index.php?ezik=en [Accessed 17th March 2017].

NSI / National Statistical Institute (2017b): GDP by regions. [Online] NSI Database. Available from: http://www.nsi.bg/en/content/5493/gdp-regions [Accessed 20th March 2017].

NSI / National Statistical Institute (2017c): Population by working age, place of residence, sex, and by districts and municipalities. [Online] NSI Database. Available from: https://infostat.nsi.bg/infostat/pages/reports/query.jsf?x_2=1083 [Accessed 15th February 2017].

Oman, C. (1996): The Policy Challenges of Globalisation and Regionalisation. [Online] OECD Development Centre. Available from: http://www.eldis.org/vfile/upload/1/document/0708/DOC4404.pdf [Accessed 15th March 2017].

OPRG (2014): Operational Programme "Regions in Growth" 2014-2020. [Online] Available from: https://www.eufunds.bg/archive/documents/1434963441.pdf [Accessed 9th March 2017].

PAN PLAN-LASSY-BULPLAN (2007): ERGO Master Plan. Euroregion Rousse-Giurgiu Operations Integrated opportunity management through Master-planning. [Online] Available from: https://www.ruse-bg.eu/uploads/files/projects/MasterPlan/ERGO_Masterplan_En-LAST%20FINAL.pdf [Accessed 1st March 2017].

Renn, A. (2012): What is a global city? [Online] Available from: http://www.newgeography.com/content/003292-what-is-a-global-city [Accessed 15th March, 2017].

Rink, D., Rumpel, P., Slach, O., Cortese, C., Violante, A., Bini, P. C., Haase, A., Mykhnenko, V., Nadolu, B., Couch, C., Cocks, M. & Krzystofik, R. (2012): Governance of shrinkage – Lessons learnt from analysis for urban planning and policy. FP7 project Shrink Smart, work package 7, Helmholtz Centre for Environmental Research – UFZ, Leipzig. [Online] Available from: https://www.ufz.de/export/data/400/39029_WP7_D13_14_15_FINAL_2.pdf [Accessed 6th March 2017].

Roth, H. & Cunningham-Sabot, E. (2012): Shrinking Cities in the Growth Paradigm: Towards Standardised Regrowing Strategies? In: Ganser, R. & Piro, R. (eds.). *Parallel Patterns of Shrinking Cities and Urban Growth. Spatial Planning for Sustainable Development of City Regions and Rural Areas*. Farnham: Ashgate.

Rousse Municipality (2011a): Economic activity in Rousse. [Online] Available from: http://iip.ruse-bg.eu [Accessed 16th February 2017] (In Bulgarian).

Rousse Municipality (2011b): Programme for governing the Municipality of Rousse 2011-2015. [Online] Available from: https://www.ruse-bg.eu/uploads/files/Programa_za_upravlenie_na_Obshtina_Ruse.pdf [Accessed 28th February 2017] (In Bulgarian).

Rousse Municipality (2014): Municipal Development Plan for the period 2014-2020. [Online] Available from: https://www.ruse-bg.eu/uploads/files/Strategii%20i%20Otcheti/OPR_RUSE_2014-2020_PDF.rar [Accessed 9th December 2016] (In Bulgarian).

Rousse Municipality (2015a): Image video of the city of Rousse. [Online] Available from: http://ruse-bg.eu/bg/pages/535/index.html [Accessed 1st March 2017].

Rousse Municipality (2015b): Programme for governing the Municipality of Rousse 2015-2019. [Online] http://ruse-bg.eu/uploads/files/Strategii%20i%20Otcheti/Programa_2015_2019.pdf [Accessed 1st March 2017] (In Bulgarian).

Rousse Municipality (2017a): Sectoral strategies. [Online] Available from: http://ruse-bg.eu/bg/pages/531/index.html [Accessed 27th March 2017] (In Bulgarian).

Rousse Municipality (2017b): Awards for Rousse Municipality. [Online] Available from: http://ruse-bg.eu/bg/pages/471/index.html [Accessed 24th March 2017] (In Bulgarian).

South-East Europe (2011): Transnational Strategy for the Sustainable Territorial Development of the Danube Area with special regard to Tourism – DATOURWAY. WP 5Pilot Projects - Romanian National Study. [Online] Available from: www.southeast-europe.net/document.cmt?id=397 [Accessed 1st March 2017].

Spiridonova, J. (2002): European Integration, Regional Specialization and Location of Industrial Activity in Bulgaria. *Report under the PHARE-ACE Project P98-1117-R*. [Online] Available from: http://s3.amazonaws.com/zanran_storage/www.zei.de/ContentPages/54626774.pdf [Accessed 21st March 2017].

Stryjakiewicz, T., Ciesiółka, P. & Jaroszewska, E. (2011): Urban shrinkage and the post-socialist transformation: The case of Poland. [Online] Available from: http://www.oecd.org/regional/leed/47270786.pdf [Accessed 18th January 2017].

The Washingtion Post (2015): Map: Where Europe is growing and where it is shrinking. [Online] Available from: https://www.washingtonpost.com/news/worldviews/wp/2015/06/23/map-where-europe-is-growing-and-where-it-is-shrinking/?utm_term=.7298324ebf21 [Accessed 19th January 2017].

The World Bank (2016): Population density (people per sq. km of land area). [Online] Available from: http://data.worldbank.org/indicator/EN.POP.DNST?locations=BG [Accessed 18th March 2017].

Tsenkova, S. (2008): Managing change: the comeback of post-socialist cities. *Urban Research & Practice*. [Online] 1(3). pp. 291- 310. Available from: http://dx.doi.org/10.1080/17535060802476525 [Accessed 23rd November 2016].

Tsenkova, S. (2012): Winds of change and the spatial transformation of post-socialist cities. [Online] Available from: http://www.ucalgary.ca/cities/files/cities/20-25_tsenkova.pdf [Accessed 17th November 2016].

Tsvetanov, S. (2014): Danube Bridge 2: The event of Vidin for 2013. [Online] Available from: http://bnr.bg/vidin/post/100307848/dunav-most-2--sybitieto-na-vidin-za-2013-godina [Accessed 19th February 2017]. (In Bulgarian)

Vidin Municipality (2015): Programme for governing the Municipality of Vidin 2015-2019. [Online] Available from: http://vidin.bg/wp-content/uploads/2016/06/UPRAVLENSKA%20PROGRAMA.pdf [Accessed 1st March 2017] (In Bulgarian).

Vidin Municipality (2016a): Municipal Development Plan for the period 2014-2020. [Online] Available from: http://vidin.bg/wp-content/uploads/2016/02/7%20%D0%9E%D0%9F%D0%A0%20%D0%92%D0%B8%D0%B4%D0%B8%D0%BD%202014-2020_edited_R.pdf [Accessed 18th February 2017] (In Bulgarian).

Vidin Municipality (2016b): The First Academic Year at Training Centre - Vidin to Rousse University "Angel Kanchev" Opens on September 30. [Online] Available from: http://vidin.bg/news [Accessed 7th March 2017] (In Bulgarian).

Yanchev, P. (2012): Europeanization of the Spatial Planning System in Bulgaria. [Online] KU Leuven, Faculty of Engineering. Available from: http://www.academia.edu/5892470/Europeanization_of_the_Spatial_Planning_System_in_Bulgaria [Accessed 14th December 2016].

Weir, I. (2016): Spearman's correlation. [Online] Statstutor Database. Available from: http://www.statstutor.ac.uk/resources/uploaded/spearmans.pdf [Accessed 14th February 2017].

Wikipedia (2016a): Provinces of Bulgaria. [Online] Available from: https://en.wikipedia.org/wiki/Provinces_of_Bulgaria [Accessed 17th March 2017].

Wikipedia (2016b): Currency board in Bulgaria. [Online] Available from: https://bg.wikipedia.org/wiki/%D0%92%D0%B0%D0%BB%D1%83%D1%82%D0%B5%D0%BD_%D1%81%D1%8A%D0%B2%D0%B5%D1%82 [Accessed 21th March 2017] (In Bulgarian).

Wikipedia (2016c): Pan-European Corridors. [Online] Available from: https://en.wikipedia.org/wiki/Pan-European_corridors [Accessed 15th February 2017].

Wikipedia (2017a): Bulgaria. [Online] Available from: https://en.wikipedia.org/wiki/Bulgaria#Geography [Accessed 17th March 2017].

Wikipedia (2017b): Todor Zhivkov. [Online] Available from: https://en.wikipedia.org/wiki/Todor_Zhivkov [Accessed 21st March 2017].

Wikipedia (2017c): Comecon. [Online] Available from: https://en.wikipedia.org/wiki/Comecon#Membership [Accessed 21st March 2017].