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## **The Economic Competitiveness of Lithuanian-Polish Border Region's Cities: the Specific of Urban Shrinkage**

**JEL Classification:** *O11; O18; R11; R58*

**Keywords:** *shrinking cities; border region; economic competitiveness of cities; Lithuania – Poland*

**Abstract:** *The topic of “urban shrinkage” is receiving increasing attention in the political urban agendas of many countries. In the global market, cities, which suffer from consequences of urban decline, confront with new challenges in finding and applying creative solutions to strengthen their economic development and competitiveness. Shrinkage processes are especially widespread in the cities which are smaller and less attractive to live and work. The same tendencies are seen at national border regions. The article explains the general causes and consequences of urban shrinkage process emphasizing problems that have a direct impact on the improvement of urban economic competitiveness. The urban economic competitiveness evaluation methodology under the context of shrinkage is developed and its practical applicability is verified on the example of border cities. Various strategies of solving problems of shrinkage are overlooked. Recommendations to improve the economic development and competitiveness of Lithuanian-Polish cross border cities Alytus and Elk in the context of urban shrinkage are introduced.*

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## **Introduction**

Communities of many cities, especially from countries of small economies, in the era of free global movement of resources often face very severe problems: loss of economic basis, emigration of local population, diminishing tourist flows, inefficiently used infrastructure and social services, strict local budget constraints, and many other. Due to the outflow of social capital, these cities start to generate significant amount of derelict properties, unused infrastructure, and many other costly resources with no local demand. In this conditions it is close to “mission impossible” to maintain former local economic development and competitiveness and provide a good quality of life for local population. Competitiveness and economic growth problems are particularly important and relevant to the border cities, mostly because they are remote from cities – national economic centers, and/or the capital city (operation of the periphery syndrome), they are often economically ‘distant’ and having slower development trends.

The economically competitive cities are more attractive for human capital than others are, and feel less negative effects of shrinkage on their economy. So, it is important to evaluate and constantly know the current situation of the urban economic competitiveness, in order to implement the right, effective and timely the strategic decisions, oriented to minimize or avoid the negative effects of shrinkage on the economy.

Different authors deal with the competitiveness of individual regions and cities, propose new sets of factors of local competitiveness. However, the specifics of shrinking cities of border regions still receives very little attention. The formation of common methodological framework for assessing the economic competitiveness of different countries’ border cities is impeded by the use of two countries’ socio-economic development indicators, which in different countries are calculated in different ways and are based on different methodologies. The absence of methodological tools and guidelines for this evaluation is becoming one of the obstacles that impede the real identification of the current situation. An effective decision-making to increase the city's economic competitiveness cannot be performed without this information.

*The purpose of the article* – to identify the causes and factors for improvement of economic competitiveness of the shrinking cities of border regions and to develop methodological guidelines for the evaluation of urban economic competitiveness based on the findings of analysis performed on Lithuanian-Polish border cities.

*Methods of the research:* systemic, comparative and logical scientific literature analysis; case analysis, empirical research employing systemic analysis of external secondary data.

In this article, an urban economic competitiveness is defined as an ability of a city to use various (economic, social, institutional, infrastructure, nature etc.) factors of competitiveness in order to make a competitive position and maintain it among other cities and be attractive for different urban resources and functions. Such viewpoint allows treating the urban competitiveness as a self reinforcing process, where present factors of competitiveness (inputs) create future factors of competitiveness (outputs), and after that the outputs become inputs for a new cycle of competitiveness process. This issue is fundamental for strategic planning, as the process of improving urban competitiveness is a continual and cyclical. The strategic decisions should be based on the up to date results of the measurement of competitive position and potential of a city.

### **Content, Causes and Impact of Shrinkage on Urban Economy**

Urban development is an ongoing cyclical process of change. Every city may experience different development stages during its history: growth, stagnation, decline or even death. Both internal and external factors influence the process and results of the development. This research focuses on the phenomenon of urban decline, with particular attention paid to one of its type – urban shrinkage.

A general meaning of the word “to shrink” denotes “to contract”, “to become smaller in size”; accordingly, “shrinkage” means “the amount by which anything decreases in size, value, weight, etc.” (The Free Dictionary, 2015). Typically used in social and economic contexts, today the concept of “shrinkage” is widely applied in the urban development context. In academic literature, the problematic of urban shrinkage is discussed using a number of similar terms: decline, decay, contraction, blight, crisis, disurbanization, etc. (Haase *et al.*, 2014).

Currently the term of “urban shrinkage” is on the top of the political agenda in Europe and many other world regions. The European Commission (2011) promotes the creation of diverse, cohesive and attractive cities that should be green and healthy; they should be places for a resilient and inclusive economy. However, present reality in most European cities shows the opposite situation and calls for immediate attention from local, national and European-level policy makers. Many cities faces shrinking problems.

According to Oswalt, Rieniets (2006), at the beginning of XXI century, 25 percent of all cities (especially in former East Germany, most states of the former Soviet Union, even in the United Kingdom and France) with more than 100,000 population, were in decline.

Salone and Besana (2015) identify urban shrinkage as “a phenomenon characterizing densely populated areas that record a population losing large sections of its extension and, at the same time, undergo a transformation of the economic base, presenting some symptoms of structural crisis”. Hollander et al (2009) defines it as “a densely populated urban area with a minimum population of 10,000 residents that has faced population losses in large parts for more than two years and is undergoing economic transformations with some symptoms of a structural crisis.”

Population loss is the most important element of most definitions, being both the cause and the result of negative urban transformation. However, not only densely populated areas experience shrinkage. It is very often evident in middle-size and smaller cities with moderate or low density of populations.

Researchers (Schlappa & Neill, 2013; Martinez-Fernandez *et al.*, 2012) Often identify the globalization as a main driver for mobility of people across cities in search for more attractive places to live, work, study and/or entertain. Others stress local drives: economic downturns, out-migration (emigration, suburbanization) and demographic imbalances (negative birth rates) as main pre-conditions for decrease in size, density or other physical and mental characteristics of a city. In other words, shrinking cities have to deal with declining revenues, rising unemployment, continuous outward migration of economically active population, rapid ageing, surplus buildings and land together with a physical infrastructure, which is oversized for the population it serves. Shrinking cities lose former attractiveness to people (skilled, active labor force, students), capital (private and public sector investments) and other resources and functions (industrial, cultural, administrative, academic or other), necessary for a healthy urban functioning. According to Hospers (2014), the development of urban shrinkage has different causes, but similar effects – “deterioration of the city's hardware, software and mindware<sup>1</sup>”.

Despite the fact, that many scientists identify the negative impact of shrinkage on urban economic development and competitiveness, some of them pay attention to the positive effect of urban shrinkage: shrinkage may not always be a bad thing. In the words of Aristotle: “A great city should

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<sup>1</sup> According to Wang, Ouyang (2003), urban hardware is „technological innovation and integrative design”, software – „institutional reform and system optimization”, mindware – „behavioral inducement and capacity building”.

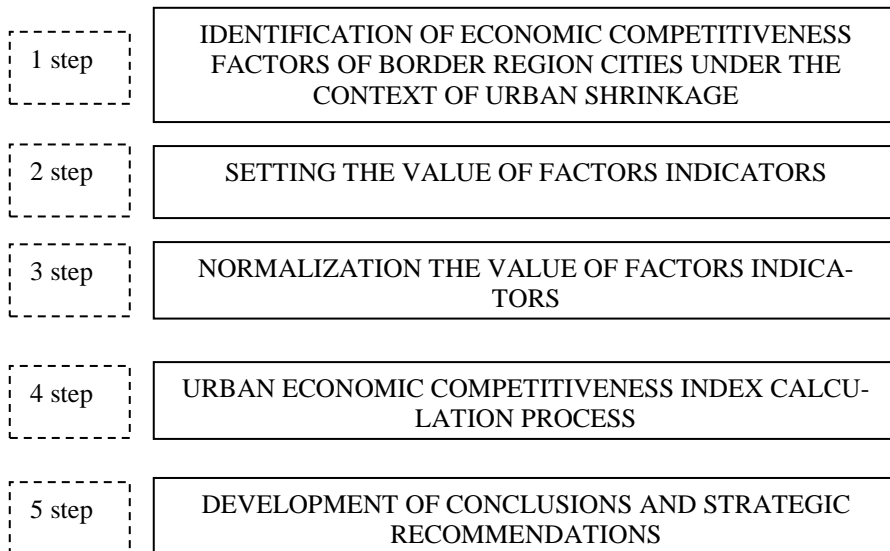
not be confounded with a populous city.” Indeed, fast growing cities often face with other set of serious problems such as insufficient housing stock, lack of social (schools, cultural, child or elderly care facilities, etc.) or transport infrastructure, insufficient provision of utilities, big pollution, higher levels of crime and many other.

In general, the majority of researchers, who analyze the problems of shrinking cities, focus on capitals or second level cities. However, the dramatic problems, caused by the shrinkage, are faced by the smaller cities. The loss of population, closure of industries and unemployment, the dramatic fall in revenue in local budgets, termination of social support and many other related social, economic and even environmental problems became typical characteristics of cities, distant from major urban centers (Ubarevičienė *et al.*, 2014). Shrinkage processes became particularly evident in border cities of post-soviet countries undergoing complex (political, economic and social) transformations.

Studies (Dumčiuvienė *et al.*, 2011) have shown that urban competitiveness is directly related to economic development. The economically competitive city is more attractive city for human capital and feels fewer negative effects of shrinkage on their economy. Therefore, it is important to evaluate and constantly know the current situation of the urban economic competitiveness, in order to implement the right, effective and timely strategic decisions, oriented to minimize or avoid the negative effects of shrinkage on the urban economy.

### **The Methodological Aspects of Evaluation of Urban Economic Competitiveness Under the Context of Shrinkage**

In the scientific literature, there are a lot of methods, by which the urban economic competitiveness is measured. Some authors the problematic of competitiveness evaluate by the dynamics of one or several indicators, the others analyze the best cases and the others (WEF, 2015; Ni *et al.*, 2014; Huang & Hergül, 2014; Ács *et al.*, 2014; Bruneckienė *et al.*, 2012, Snieška & Bruneckienė, 2009) – by composite indicators. Due to the fact that the competitiveness is treated as a multifaceted concept, usually in the scientific literature it is recommended to evaluate it by the index. The latter method is recognized as an appropriate tool for analyzing a complex problem. The economic competitiveness of Lithuanian – Polish border regions cities further will be analyzed by the urban economic competitiveness index (UECI), which is calculated by 5 stages (see Figure 1).

**Figure 1.** UECI calculation stages

Source: own work.

The scientific literature (Herz, 2006) indicate, that the main urban shrinkage expression – suburbanization (migration from the city to the suburbs), emigration from the country or to other cities and declining birth rates, population-aging processes. Because of suburbanization, the density in different parts of the city change, pendulous migration and dependence on the car (and the pollution connected with it) increase, the problems of lack of parking spaces emerge, etc.; cities expand to the suburbs, while the population is declining. Because of the low density of the population in the suburbs, the public transport cannot function effectively; there is no local social infrastructure, lack of public spaces. The infrastructure is inefficient, unprofitable: water supply, sewage, heating services become more expensive. The valuable natural areas are occupied by urbanization, the local fauna and flora is dislodged. The investments, needed for the renovation of the central parts of the city, are transferred to development of suburbs. Because of the emigration and the aging population, the number of urban services users is declining. Schools, kindergartens, theaters becoming more empty. Unoccupied and unused apartments and offices appear. The elderly and lower income residents cannot afford to pay for the renovation of the apartments and the lack of incentive to improve the environment appears. The districts become more unattractive and social segregation increases. The urban shrinkage misbalance the labor market and increase the discon-

tent of population. Therefore, the urban shrinkage has a direct impact on economic development of the whole city, region and even country. The incorporation of last mentioned indicators into the methodology of evaluation of the economic competitiveness of the border region cities is crucial to the analysis of problematic under the context of urban shrinkage.

In order to measure the economic competitiveness of different cities in a statistically significant manner, it is important to analyze it by a unified system of indicators. It should be noted that the main problem in selecting the indicators which represent economic competitiveness of the border region cities – limited possibilities to retrieve the same official statistics data from different countries (Lithuania and Poland), (especially at the urban level), as well as differences in methodologies for calculating the same data between the countries. Before selecting a unified system of indicators for the evaluation of competitiveness of Lithuanian and Polish border region cities, the possibilities of obtaining such indicators in Lithuania and Poland were compared and a unified system of indicators was formed, consisting of 4 groups of factors, 9 factors (see Table 1). 12 indicators were selected to describe these factors.

**Table 1.** Indicators for the evaluation of economic competitiveness of the Lithuanian and Polish border region cities

<b>Group of factors</b>	<b>Factor</b>	<b>Indicator</b>
<b>Competitiveness of companies</b>	Economic activeness of companies	Number of economic entities per 1000 population
<b>Attractiveness of the city</b>	Investment attractiveness	Material investments per capita
	Awareness of the city	Accommodated guests in accommodation facilities per 1000 population
	Newly built real estate	Number of residential buildings whose construction was authorized
	Science infrastructure	The number of college students per 1000 population
<b>Labor market adjustment to the changing conditions</b>	Attractiveness of jobs	The registered unemployed and working-age population ratio The average monthly gross wages
	Age structure of the population	Proportion of the working-age population Birthrate Mortality
	Migration	Net migration (internal and international) per 10 000 population
<b>Purchasing power of the local market</b>	Demand for the local market scale	Population density per 1 km <sup>2</sup>

Source: own work.

The following cities of Lithuanian and Polish border regions have been selected: Alytus, Marijampolė (Lithuania), Ełk and Białystok (Poland). For comparison, optional cities of Panevežys and Šiauliai, as industrial cities near Lithuanian and Latvian border, were selected. All factors were given the same weight coefficient. The data were normalized by the standard deviation from the average method. The period of 2008–2014 was selected for analysis. This time is sufficient to fully reflect the dynamics of economic competitiveness and its factors and analyze the reasons for this dynamics. The main source of data used in the calculation appears to be the Department of Statistics of the Government of the Republic of Lithuania and Poland.

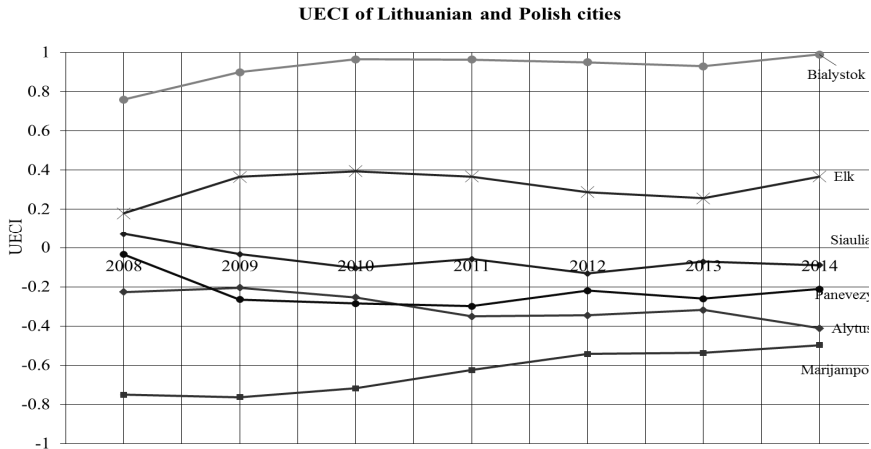
## **Results of Empirical Research**

The dynamics of urban economic competitiveness index of Lithuanian and Polish cities during the period of 2008–2014 varied by different cities (see Figure 1). During the whole period of analysis, the top places were taken by Polish cities – Białystok and Ełk, being far ahead of Lithuanian cities in terms of economic competitiveness. In 2008 Ełk UECI slightly exceeded Šiauliai UECI, but in 2009 and 2010 the economic development has gained a strong rate of growth, thus increasing the economic gap from Lithuanian cities. Meanwhile, the global financial crisis has strongly affected Lithuanian cities and their UECI, in contrast to the Polish cities, fell sharply in 2009 – 2010. During the whole period of analysis, the border region cities from the Lithuanian side – Marijampolė and Alytus – took the lowest position among the cities analyzed.

During the whole period of analysis, the economic activeness of Alytus' enterprises was relatively low, ranked in the fifth position, leaving behind only the enterprises of Marijampolė, which in 2008–2013 ranked in the sixth position. The most competitive enterprises were in the cities of Poland – Białystok (the first place) and Ełk (the second place). Analyzing the attractiveness of the city components, it can be said that the UECI analysis only verifies that border cities are characterized by a low investment attractiveness and awareness. During the whole period under analysis, the awareness of Alytus was the lowest, compared to the other cities, and was positioned in the sixth place, while the investment attractiveness (only with respect to material investments) – the fourth or third place.



**Figure 1.** Dynamics of the economic competitiveness index of Lithuanian and Polish cities in the period of 2008–2014 years



Source: own work.

Due to the fact that urban shrinkage is strongly related to the population’s internal and international migration indicator, the analysis of the impact on the final result of the UECI is presented in Table 2.

**Table 2.** The impact of migration indicator on UECI ranks in 2014

City	Ranks (with migration)	Ranks (without migration)
Bialystok	1	1
Elk	2	2
Šiauliai	3	3
Panevežys	4	4
Alytus	5	6
Marijampolė	6	5

Source: own work.

Comparison of the UECI ranks results including and excluding the migration indicator component proves that this indicators make a significant impact on the evaluation of the economic competitiveness, especially smaller and economically weaker cities. Only economically stronger cities (Bialystok, Elk, Šiauliai and Panevežys) did not change their UECI ranks.

Economically weaker cities (Alytus, Marijampolė) changed their UECEI ranks. The same tendency is typical for the whole analyzed period.

The analysis of UECEI proved that human capital is an essential factor of urban economic competitiveness. It has an essential influence on the economic development. The conditions for working, studying and living attract and retain human capital necessary for economic development and investment promotion. By losing its people, the city loses its potential and the possible added value. So the strategic measures and appropriate policy should be implemented in order to maintain and attract human capital to the city. This is vitally important for smaller and less attractive cities of whole countries, not only cross border regions.

### **Solving Problems of Shrinkage: Various Strategies**

The research proved that the emigration and loss of people is the most important element of shrinkage. In order to enlarge the population, the scientists, businesspersons and policy-makers implement various actions in order to maintain and attract human capital to the city. Therefore, in the global market of cities, the urban attractiveness became very important issue in order to solve partly the problems of shrinkage. Periodic comprehensive diagnosis of the current stage of city's attractiveness provides the basis to foresee the trajectory of future development and to form new strategic options in the context of urban change (Sinkiene & Kromalcas, 2010). Often, results of such analysis call for immediate city management actions. However, to know the problem is not enough; city managers must comprehend the causes and possible consequences of the problem. Most importantly, they must be aware of a wide set of strategies and tools to prevent and to stop the negative development trends before they occur in the most effective and timely way.

Although there are various solutions for cities to adopt, in order to stop or revert the negative impact of shrinkage on economic development and competitiveness; there is no "one fits all" solution. As the causes and context for shrinkage in individual cities differ, so do the solutions to tackle the problem. Literature suggests a large variety of strategies applied by shrinking cities to solve the problem: preservation, greening, redevelopment to demolition, beautification, neglect, and others. Where should cities start? What direction for action to take? European Commission (2011) suggests a general direction: "Shrinking cities may have to redefine their economic basis and manage transitions towards new forms of economic, social and

spatial organization“. Stryjakiewicz (2014) also indicates more generalist strategies to deal with urban shrinkage: counteracting or alleviating the adverse effects of shrinkage; seeking new sources of growth; promoting positive aspects of shrinkage.

Looking at approaches of individual cities to manage their shrinkage process one can see several models of attempts: one group of cities deal with the size/form of the city while others focus on the content/quality of the place. There are cities seeking by all possible means to maintain the former city size, while others see more potential in natural decrease of its size. Some cities implement such interventions – they demolish vacant housing stock, neglected industrial buildings and turn the plots into open or green spaces, parklands, greenways or offer the clean plots in the land (lease) market.

For example, policies of Leipzig (Germany) adopted around 2000 show the city's efforts to stop shrinkage by three priority areas of action: preservation of urban quality of the city center; reduction of urban density through the creation of green or free spaces; improvement of competitiveness of the city and its centers (Florentin, 2010). The city also implemented the annexation of suburban cities aiming to “preserve the image of growth” and to get access to national funds (cities with a larger population have the right to receive larger funds from national support programmes). Youngstown (USA) represents a different approach: after three decades of dealing with all typical negative effects of shrinkage, the city initiated its rebirth in 2010 by developing a new comprehensive plan with the overall vision acknowledging Youngstown's smaller size. The plan provided the basis for implementation of different measures to manage the development of the city in a desired way. A special financial aid program helped the city's government to encourage residents to relocate out of neighborhoods that are too far gone to save, at the same time helping to stabilize transitional neighborhoods and keep healthy middle-class neighborhoods from wilting (Swope, 2006). Liege (Belgium) city's strategy proposes to invest and densify around the infrastructural nodes (Dooghe, 2005). In addition to that, various arts projects to change the atmosphere of the environment were initiated to serve as a useful tool to deal with shrinkage of individual city districts. Thus the city tries to attract investment, jobs and, consequently, people. In Italy, city council of Gangi, a hill-top town near Sicily's Madonie Mountain offered for sale around 20 houses, many of them derelict, for a symbolic price – just one euro each. As this unusual strategy generated a great interest of potential investors in the properties, city council unexpectedly got an opportunity not only to attract new inhabitants, but also to choose among applications. The priority was given to the investors with

a real potential to contribute to economic development of the local community. Similar strategies can be observed in many U.S. cities, for example, Gary, Detroit, Indianapolis, where one can purchase a house for just one USD (US Department of Housing and Urban Development, 2015). The newly occupied homes act as catalysts for neighborhood revitalization, attracting new residents and businesses to the shrinking areas.

Druskininkai (Lithuania) is one of a few examples of Lithuanian small and border cities (bordering Belarus), which in the period of dramatic national shrinkage<sup>2</sup> managed to revert the negative development trend to a positive one. Just a decade ago, it was known nationally to its high rates of unemployment, high levels of crime, large stock of vacant buildings, old infrastructure, etc. Today it is the second largest Lithuanian resort-town with a population of 13 800 inhabitants. It is an international year-round balneological, mud, mineral water and climate therapy resort. In 2014 the town received 272 633 tourists (61 % – foreign). The main infrastructure of treatment and healthcare of Druskininkai was established in the Soviet period, and for many years the local economy was based mainly on the sanatoria and spa treatment. After the Lithuania's declaration of independence (in 1990), the tourism market of the former Soviet Union closed. The town fell into a deep economic and social crisis due to its over-dependence on the health service, obsolete equipment, poor infrastructure, and the shortage of non-treatment activities. The former well-known Soviet resort Druskininkai had to find the way out of the downward development spiral, to re-create its attractiveness and thus to adapt to rapid market changes. In 2000, a new resort development vision was proposed (Baranauskas & Rudienė, 2011). The local community decided to invest in a modern infrastructure and to create new attractive tourism objects. New health improvement resort services were introduced; recreation centers operating all-year-round and providing services for the entire family were established. The leaders of the municipality realized that they could not attract any pri-

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<sup>2</sup> In Lithuania the phenomenon of urban shrinkage is particularly striking. Lithuania is one of the countries of CEE, which in the last decades have experienced very high levels of population decline. In just a decade (2001–2011) all main cities have lost populations: Vilnius (the capital of Lithuania) -3,3% Kaunas (the second town) -16,6%, Klaipėda -15%, Šiauliai -18,3%, Panevėžys -16,8% (Lithuanian Department of Statistics, 2013). Research of Ubarevičienė *et al.* (2014) confirm a sharp population decline in Lithuania of 17.2% between 1989 and 2011, with the decrease being more intense during the second decade of the period. The population dropped in most areas, especially in smaller towns. The population increased in the regions surrounding three largest cities – Kaunas, Klaipėda, Vilnius. The similar tendency of population migration is seen in Poland: people leave the smaller cities and migrate to the centers of regions or more economically competitive cities, providing better opportunities to work, live and study.

vate investment until the municipality had invested in the development of the town. Druskininkai municipality followed the strategic plan with various renovation projects and attracted significant investment from the business sector. While implementing many investment projects using the private sector investments, as well as successfully acquiring the European Union funds, most of the facilities have been upgraded. In addition to that, to increase the international awareness of the resort, various traditional cultural and sports events are organized. In less than 10 years, Druskininkai has become the international center of active recreation, treatment resort, a conference venue. A successfully developing small town, located far from main national centers of industry and services – on the national border with non-EU state of Belarus.

Alytus and Elk cities are located in Lithuania and Poland cross-border region. The small distance within each other formulate additional way of solving shrinking problem: to stimulate a close co-operation between Alytus and Elk municipalities and business companies. The possible incentives on enhancing economic cooperation between Alytus and Elk cities are these:

- To develop a common Alytus and Elk cities' information platform, which would provide reliable information about entrepreneurs;
- To organize a bilateral missions to and from Alytus/ Elk;
- To implement the joint Alytus and Elk municipal activities, where the entrepreneurs could meet, communicate and exchange contacts.
- To recover the Polish-Lithuanian Chamber of Commerce activities.
- To organize the specialized exhibitions, missions in Alytus and Elk.
- To organize an annual conference/forum 'Economic cooperation between Alytus and Elk'.
- To implement the joint marketing communications actions.

Modern companies have realized that their own economic goals and corporate competitiveness is directly related to the city's economic and social well-being and progress. Thus, the implementation of the total value principles within the urban economic value creation process would ensure economic competitiveness of both the companies and the city, and this is becoming a mandatory condition for ensuring urban economic growth. Thus, active co-operation between municipalities and entrepreneurs has become not an issue of fashion, but rather the necessity and an essential condition for maintaining competitiveness and increasing the welfare of the city. Moreover, international economic cooperation undoubtedly benefits to both cities of different countries, therefore the establishment, development and maintenance of economic relations is an important, and for the border

region cities – an essential prerequisite for increasing its competitiveness and welfare, especially under the context of urban shrinkage.

## **Conclusions**

In recent decades urban shrinkage has become a development scenario challenging many cities around the world. Caused by different, yet interconnected processes of demographic change, outmigration, economic restructuring, suburbanization and other factors, shrinkage is often evident in cities located close to the national border and distant from main national centers of power and economy.

The urban shrinkage processes receive much attention from the EU and many national governments around the world. Cities undergoing negative development change must accumulate required resources and adapt new strategies to prevent the occurrence of even more severe social-economic-environmental problems that might have a negative impact not only on the local community, but also on the regional and national levels. Although support from other actors can and should be attracted, the primary responsibility for necessary solutions to stop the city's shrinkage belongs to the local community.

An active economic and social cooperation between different countries' border regions can be a successful tool to activate the socio-economic life in these regions, successfully exploit the potential of the border region and turn the region into a center of economic growth. This can promote not only regional cohesion, but also contribute to the overall national economic growth.

The selection of economic competitiveness assessment methodology for the border region cities is significantly affected by their availability at the Lithuanian and Polish cities level and the differences of the same data calculation methodologies between countries.

The empirical research has proved that the developed economic competitiveness evaluation methodology can be actually used as a tool for economic analysis at the regional level, distinguishing individual cities' competitive strengths and weaknesses, evaluating the dynamics of change in the urban economic competitiveness from the time and competitors perspective, and as a strategic planning tool for justifying and making strategic decisions on the improvement of regional or urban competitiveness. In addition, the methodology can be used as a tool for information and promotion of the city's economic competitiveness, as well as the quality of life, conditions for business and operational efficiency of public authorities.

The research justified that economic development and competitiveness of a city depends on availability of human resources, the people who live in or visit the city. Conditions for attractive living, working and studying attract and retain labor market necessary for economic development and investment promotion. By losing its people, the city loses its potential and the possible added value. Therefore, it is important to monitor and try to manage the emigration of people from the city both from the social and economic perspective.

Under the globalization conditions, especially cities, which suffer from urban shrinkage, have to find new and modern means and attitudes for increasing urban competitiveness. The researches proved that the increase of economic cooperation among different cities and the incorporation of shared value concept into cities and companies development strategy may increase the economic competitiveness of cities and make it more attractive for different target groups.

## References

- Ács, Z., Szerb, L., Ortega-Argilés, R., Aidis, R., & Coduras, A. (2014). The Regional Application of the Global Entrepreneurship and Development Index (GEDI): The Case of Spain. *Regional Studies*, 49(12). DOI: [10.1080/00343404.2014.888712](https://doi.org/10.1080/00343404.2014.888712).
- Baranauskas, A., & Rudienė, J. (2011). Successful Development of Druskininkai Resort in the Aspect of Recreational Treatment and Tourism Activity. *Economics Bulletin DITB*, 15.
- Bruneckienė, J., Činčikaitė, R., & Kilijonienė, A. (2012). The specifics of measurement the urban competitiveness at the national and international level. *Inžinerinė ekonomika = Engineering economics*, 23(3).
- Dooghe, D. (2005). Presentation of 'Moving East' and 'Keep it, Green it, Live in it!' @ the *Academy of Architecture and Urban Design Rotterdam*, The Netherlands. Retrieved from <http://www.daviddooghe.com/article/101>.
- Dumčiuvienė, D., Bruneckienė, J., Kilijonienė, A., Startienė, G., Snieškienė, G., & Bernatonytė, D. (2011). Verslo aplinka Lietuvoje ir Ukrainoje: sektorinė analizė. 1 tomas, Lietuvos verslo konkurencingumo didinimo sąlygos ir prielaidos: mokslo monografija. Kaunas: Kaunas University of Technology, Publishing Office Technologija.
- European Commission (2011). Cities of tomorrow: challenges, visions, ways forward. Luxembourg: Publications Office of the European Union. Retrieved from [http://ec.europa.eu/regional\\_policy/sources/docgener/studies/pdf/citiesoftomorrow/citiesoftomorrow\\_final.pdf](http://ec.europa.eu/regional_policy/sources/docgener/studies/pdf/citiesoftomorrow/citiesoftomorrow_final.pdf).
- Florentin, D. (2010). The "Perforated City: Leipzig's Model of Urban Shrinkage Management. *Berkeley Planning Journal*, 23(1).

- Haase, A., Rink, D., Grossmann, K., Bernt, M., & Mykhnenko, V. (2014). Conceptualizing urban shrinkage. *Environment and Planning*, 46.
- Herz, R. (2006). Buried Infrastructure in Shrinking Cities, International Symposium "Coping with City Shrinkage and Demographic Change – Lessons from around the Globe" Dresden, March.
- Hollander, J. B., Pallagst, K., Schwarz, T., & Popper, F. (2009). Planning shrinking cities. *Progress in Planning*, 72(4).
- Hospers, G. J. (2014). Policy Responses to Urban Shrinkage: From Growth Thinking to Civic Engagement. *European Planning Studies*, 22(7). DOI: [10.1080/09654313.2013.793655](https://doi.org/10.1080/09654313.2013.793655).
- Huang, L., & Hergül, S. (2014). The Regional Competitiveness of Hungary. *Modern Economy*, 05(12). DOI: [dx.doi.org/10.4236/me.2014.512102](https://doi.org/10.4236/me.2014.512102).
- Martinez-Fernandez, C., Audirac, I., Fol, S., & Cunningham-Sabot, E. (2012). Shrinking Cities: Urban Challenges of Globalization. *International Journal of Urban and Regional Research*, 36(2). DOI: [10.1111/j.1468-2427.2011.01092.x](https://doi.org/10.1111/j.1468-2427.2011.01092.x).
- Ni, P., Kresl, P. & Li, X. (2014). China urban competitiveness in industrialization: Based on the panel data of 25 cities in China from 1990 to 2009. *Urban Studies Journal*, January. DOI: [10.1177/0042098013514461](https://doi.org/10.1177/0042098013514461).
- Oswalt, P., & Rieniets, T. (2007). *Global context. Shrinking Cities*. Retrieved from [www.shrinkingcities.com/globaler\\_kontext.0.html?&L=1](http://www.shrinkingcities.com/globaler_kontext.0.html?&L=1)
- Salone, C., & Besana, A. (2015). Urban Shrinkage. *Theoretical Reflections and Empirical Evidence from a Southern European Perspective*. Retrieved from: [http://aperto.unito.it/bitstream/2318/138091/1/Salone\\_Besana\\_AESOP\\_2013.pdf](http://aperto.unito.it/bitstream/2318/138091/1/Salone_Besana_AESOP_2013.pdf).
- Schlappa, H., & Neill, W. J. V. (2013). *From crisis to choice: re-imagining the future in shrinking cities*. Published by URBACT. Retrieved from [http://urbact.eu/sites/default/files/import/general\\_library/19765\\_Urbact\\_WS1\\_SHRINKING\\_low\\_FINAL.pdf](http://urbact.eu/sites/default/files/import/general_library/19765_Urbact_WS1_SHRINKING_low_FINAL.pdf).
- Sinkiene, J., & Kromalcas, S. (2010). Concept, Directions and Practice of City Attractiveness Improvement. *Public Policy and Administration*, 31.
- Snieška, V., & Bruneckienė, J. (2009). Measurement of Lithuanian Regions by Regional Competitiveness Index. *Inžinerinė ekonomika = Engineering economics*, 1(61).
- Statistics Lithuania (2013). *Population at the beginning of the year by city / town and year*. Retrieved from <http://www.stat.gov.lt/en/home>.
- Stryjakiewicz T. (2014). The Process of Urban Shrinkage and its Consequences. *Romanian Journal of Regional Science*. 7, Special Issue on New Urban World. Retrieved from <http://www.rrsa.ro/rjrs/V7SP2.Tadeus.pdf>.
- Swope, C. (2006). Smart Decline. *Governing*. Retrieved from <http://www.governing.com/topics/economic-dev/Smart-Decline.html>.
- The Free Dictionary (2015). Farlex, Inc. USA. Retrieved from <http://www.thefreedictionary.com/shrink>.



- Ubarevičienė, R., van Ham, M., & Burneika, D. (2015). *Shrinking Regions in a Shrinking Country: The Geography of Population Decline in Lithuania 2001-2011*. IZA Discussion Paper No. 8026. Retrieved from <http://ssrn.com/abstract=2409548>
- US Department of Housing and Urban Development (2015). *One Dollar Homes*. Retrieved from: [http://portal.hud.gov/hudportal/HUD?src=/program\\_offices/housing/sfh/reo/goodn/dhmbout](http://portal.hud.gov/hudportal/HUD?src=/program_offices/housing/sfh/reo/goodn/dhmbout).
- Wang, R., & Ouyang, Z. (2003). *Understanding Urban Ecosystems: A New Frontier for Science and Education*. A. R. Berkowitz, C. H. Nilon & K. S. Hollweg. Springer Science & Business Media.
- WEF. (2015). *The Global Competitiveness Report 2014 – 2015*. Retrieved from <http://www.weforum.org/reports/global-competitiveness-report-2014-2015>.