



Institute of Geography and Spatial
Organization, Polish Academy of Sciences



Ministry of Infrastructure and
Development,
Republic of Poland



Polish Geographical Society

WARSAW REGIONAL FORUM 2015

Territorial uncertainty and vulnerability as a challenge for urban and regional policy

Programme and
Book of Abstracts

Warsaw, 14-16 October 2015

Organizing Committee

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Table of Contents

Foreword.....	4
General information	5
Conference Programme	8
First Plenary Session “Social vulnerability”.....	14
Second Plenary Session “Innovative Policies”	18
Third Plenary Session “Resilience of Regions”	21
First parallel session (A.1)	25
Second parallel session (B.1)	31
Third parallel session (C.1)	36
Fourth parallel session (A.2).....	41
Fifth parallel session (B.2)	47
Sixth parallel session (C.2)	52
Seventh parallel session (A.3)	57
Eight parallel session (B.3)	62
Ninth parallel session (C.3).....	67
Fourth Plenary Session “Strategic challenges”	72
Poster Session.....	76
List of Participants	85

Foreword

The Warsaw Regional Forum is organized on a regular basis once every two years (biennially) by the Institute of Geography and Spatial Organization Polish Academy of Sciences, together with the Ministry of Infrastructure and Development of the Republic of Poland and Polish Geographical Society. To date, there have been six meetings held under the common title **Warsaw Regional Forum**: *Central and Eastern Europe: Changing spatial patterns of human activity* (2004), *The core and peripheral regions in Central and Eastern Europe* (2005), *Contemporary dilemmas of spatial development in Europe* (2007), *Networking in the European, regional and local space* (2009), *Functional regions – towards a new paradigm of territorial and cohesion policy* (2011) and *Territorial Capital – concepts, indicators & policy* (2013). During the six meetings of the Warsaw Regional Forum more than 270 papers have been presented. The research studies dealt with a wide spectrum of themes and the analysis contained within them covered a wide spectrum of spatial scales – ranging from that of the European through the national and regional, to the local level. The participants of all six conferences came from 30 different countries.

The principal topic of the 2015 conference is concentrated around such problems as vulnerability, uncertainty and resilience of territories. The subject of discussion will be threats of economic (global crisis), environmental, institutional and geopolitical nature. These issues will be analyzed from a perspective of multiple spatial scales at the European, transborder, national, regional, urban and local levels. The conference's topic fits well into the current ongoing debate over the spatial development that takes place in the EU, combining academic discussion with policies of territorial dimension presently carried out, including especially the cohesion policy (i.a. relating to the EU Sixth Cohesion Report as well as to the outcomes of ESPON findings).

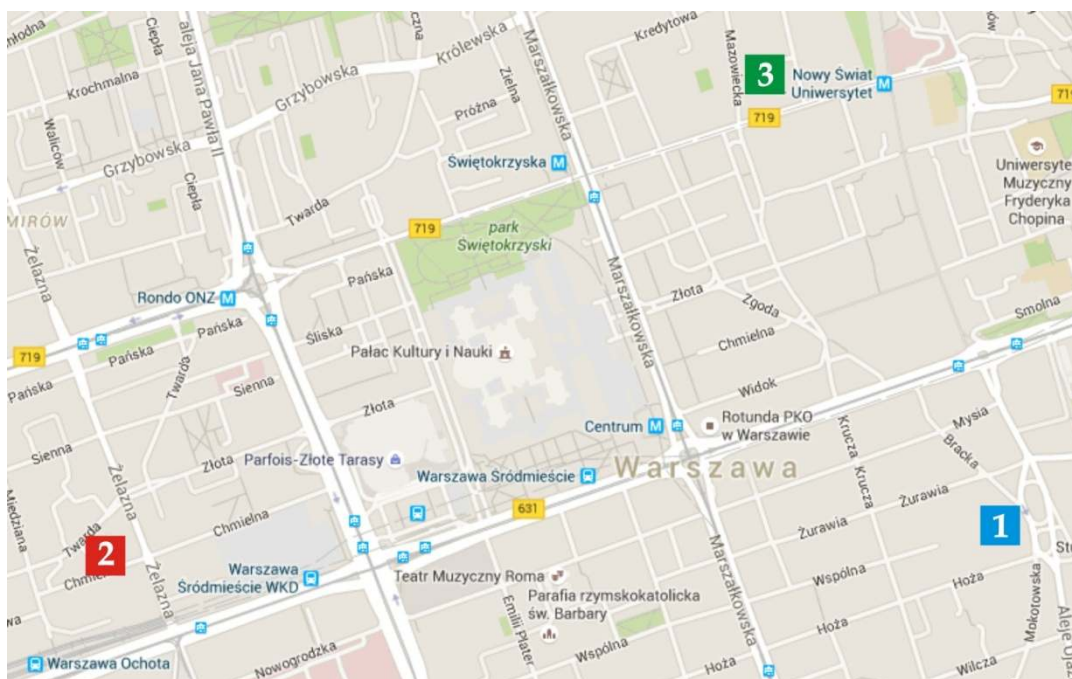
Presented papers concern different understanding in various countries of the **concept of territorial uncertainty and vulnerability** based on a foundation of different sciences across multiple disciplines (geography, economy, sociology, regional studies, spatial planning, environmental studies, etc.) as well as on the basis of political documents of varied level. Certainly, as a complementary result of this discussion, articles will be particularly welcome referring to concrete and tangible cases regarding dynamics and structure of territorial capital of European regions, including the results of research projects touching upon the aforesaid subject matter.

On behalf of the organizers of the Warsaw Regional Forum 201, we wish you all the participants fruitful sessions, a lot of impressions and unforgettable memories.

General information

Location of the conference

- First day of Warsaw Regional Forum on Thursday – **Ministry of Infrastructure and Development**, Wspólna 2/4, 00-926 Warsaw
- Conference Reception on Thursday starts at 19.00 - **Restauracja Avangarda**, (Dom Technika NOT) Czackiego 3/5
- Second day of Warsaw Regional Forum on Friday – **Institute of Geography and Spatial Organization PAS**, Twarda 51/55, Warsaw



1 Ministry of Infrastructure and Development, Wspólna 2/4

2 Institute of Geography and Spatial Organization PAS Twarda 51/55

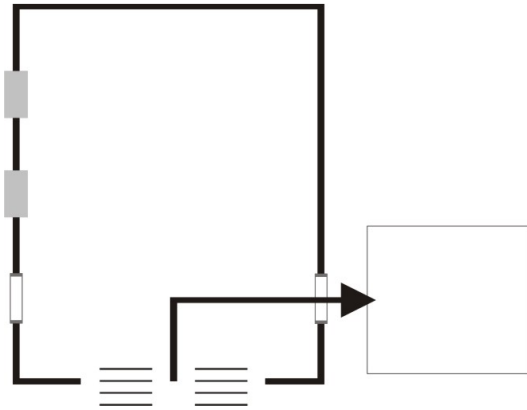
3 Restauracja Avangarda, (Dom Technika NOT) Czackiego 3/5

Entrance to Ministry of Infrastructure and Development

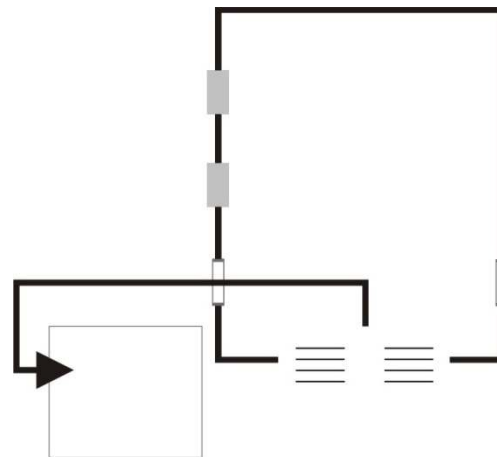


Location of sessions in the building of Institute of Geography and Spatial Organization

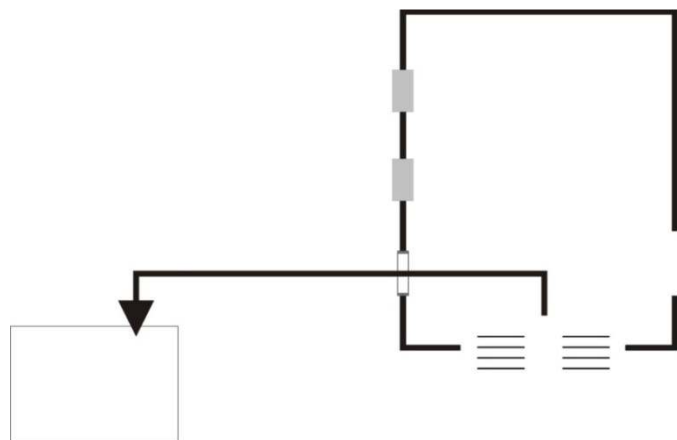
**Sessions A and
Poster Session -
6th floor**



**Sessions B -
3th floor**



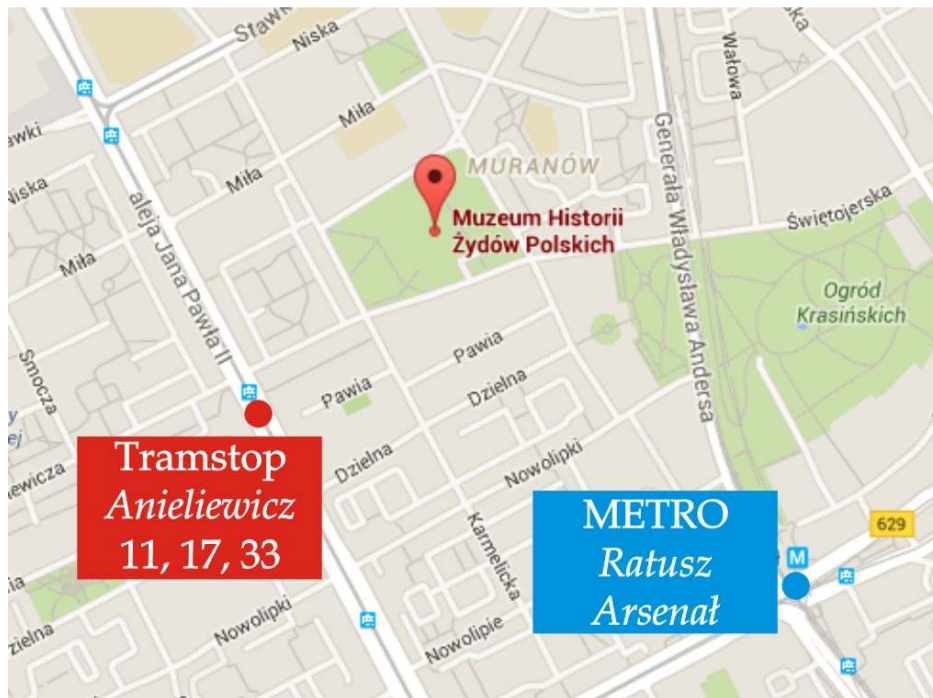
**Sessions C -
Ground floor**



Location of the Museum of the History of Polish Jews



Closest stops to The Museum of the History of Polish Jews



Please arrive 15 minutes earlier (security gates, cloakroom)

Useful links

- <http://warszawa.jakdojade.pl/?locale=en> - app how to get to certain place using public transport (Available on Google Play, App Store, WindowsPhone)
- <http://warsawtour.pl/en> - essential information about Warsaw for tourists
- <http://www.um.warszawa.pl/en> - Official website of the City of Warsaw
- <http://www.pkin.pl/> - Palace of Culture and Science
- <http://teatr Wielki.pl/en.html> - Grand Theatre - Polish National Opera
- <http://www.kopernik.org.pl/en/> - Copernicus Science Centre
- <http://www.1944.pl/en/> - The Warsaw Rising Museum

Conference Programme

14.10.2015 (Wednesday)	
8⁰⁰	Departure from Warsaw for one-day pre-conference excursion – <i>Territorial uncertainty and vulnerability in practice</i> (registered participants)
19⁰⁰	Reception on the study tour
22⁰⁰	End of the study tour; arrival to Warsaw

15.10.2015 (Thursday)	
9⁰⁰–10⁰⁰	Registration for the Conference
10⁰⁰–17¹⁰	Plenary Sessions & Panel Discussion
19⁰⁰	Conference Reception

16.10.2015 (Friday)	
9⁰⁰–15⁰⁰	Parallel Sessions
15⁰⁰–16⁴⁵	Plenary Session
16⁴⁵–17⁰⁰	Closing of the Forum

17.10.2015 (Saturday)	
10³⁰–12³⁰	Visit at The Museum of the History of Polish Jews – Polish speaking guide (registered participants)
10⁴⁵–12⁴⁵	Visit at The Museum of the History of Polish Jews – English speaking guide (registered participants)

15.10.2015 - Thursday

First Plenary Session "Social vulnerability"

9.00 – 12.00

9.00-10.00	<i>Registration for the Conference</i>	
10.00-10.20	Marek Degórski, Antoni Jackowski	<i>Opening of the Warsaw Regional Forum 2015</i>
10.20-10.50	Kai Bohme <i>(Keynote Lecture)</i>	<i>Visions for Europe: Between daydreams and nightmares</i>
10.50-11.20	David Bogataj, Samo Drobne, Marija Bogataj	<i>Quarter of century after Alonso's forecasting of Europe's urban system dynamics</i>
11.20-11.50	Gábor Király, Márton Czirfusz, Bálint Koós, Gergely Tagai, Annamaria Uzzoli	<i>Socio-economic forecasting for Hungary related to climate change</i>

11.50-12.00 Discussion

12.00-13.00 Lunch

Second Plenary Session "Innovative Policies"

13.00 – 15.40

13.00-13.30	Leonid Rudenko, Sergiy Lisovskyi, Eugenia Maruniak	<i>Spatial Development in Ukraine: risks and barriers of transitional period</i>
13.30-14.00	Erbilin Berisha, Giancarlo Cotella	<i>Spatial planning in the Western Balkans between transition, European integration and path-dependency</i>
14.00-14.30	Marek Furmankiewicz	<i>Place-based development and governance: the evolution of territorial cooperation in management of local resources in Poland</i>

14.30-14.40 Discussion

14.40-15.00 Coffee break

Third Plenary Session "Resilience of Regions"

15.00 – 17.00

15.00-15.30	Simin Davoudi <i>(Keynote Lecture)</i>	<i>Resilience and Territorial Cohesion: Complementary or Contradictory Concepts?</i>
15.30-16.00	Tomasz Komornicki, Jacek Zaucha, Barbara Szejgiec-Kolenda, Rafał Wiśniewski	<i>Impact of economic crisis on local development: Evidence from Polish regions</i>
16.00-16.30	Grzegorz Masik	<i>Economic Crisis: Resilience of Regions</i>
16.30-17.00	Paweł Churski, Robert Perdał, Tomasz Herodowicz	<i>Can a biggie get more? The place of regional centres in process of absorption of European funds in Polish voivodships</i>

17.00-17.10 Discussion

19.00 **Conference Reception**

16.10.2015 - Friday

First parallel session (A.1)

9.00-10.30

9.00-9.15	Donatas Burneika, Vidmantas Daugirdas	<i>Processes of ethnic segregation in major Lithuanian urban regions</i>
9.15-9.30	Ewa Korcelli Olejniczak, Filip Piotrowski	<i>Social Diversity as Challenge to Cohesion. Example of Warsaw</i>
9.30-9.45	Magdalena Górczyńska	<i>Restitution process and real estate market in Warsaw</i>
9.45-10.00	Alexander V. Gladkey, Iurii N. Golubchikov	<i>Post-economic uncertainty and vulnerability of global cities</i>
10.00-10.15	Eugenia Maruniak	<i>Ukrainian urban space's reaction on the globalization's challenges (a case of Kyiv)</i>
10.15-10.30 Discussion		
10.30-10.45 Coffee break		

Second parallel session (B.1)

9.00-10.30

9.00-9.15	József Lennert, Jenő Farkas, Edit Hoyk, András Donát Kovács	<i>Modelling land cover change in Hungary: forecasts for 2050</i>
9.15-9.30	Barbara Maćkiewicz	<i>Land management in the Poznań agglomeration after 1995</i>
9.30-9.45	Ada Wolny, Ryszard Żróbek	<i>The interdependence of the development of suburban housing estates and road communication on the example of Poland</i>
9.45-10.00	Andrey Medvedev, Maria Gunko	<i>Seasonal suburbanisation in Moscow metropolitan region and the problems of household solid waste disposal</i>
10.00-10.15	Marek Pieniążek	<i>Spatial Dimension of Suburbanisation as a Challenge for Public Statistics</i>
10.15-10.30 Discussion		
10.30-10.45 Coffee break		

Third parallel session (C.1)

9.00-10.30

9.00-9.15	Marcin Stępniaik	<i>What (should) we measure, when we think about accessibility to public services</i>
9.15-9.30	Daniel Michniak	<i>Changes in commuting behaviour in regions of poverty in Slovakia (2001-2011)</i>
9.30-9.45	Antonín Vaishar	<i>Integrated system of public transport and rural development in South Moravia</i>
9.45-10.00	Piotr Rosik, Tomasz Komornicki, Sławomir Goliszek	<i>Complex modelling of road traffic in Poland with the identification of local socioeconomic determinants - preliminary results</i>
10.00-10.15	Nikita Kulchitskiy	<i>Evolution of air transport network in China</i>
10.15-10.30 Discussion		
10.30-10.45 Coffee break		

Fourth parallel session (A.2)		
10.45-12.15		
10.45-11.00	Jan Barski, Jacek Barski	<i>25 years after transformation: Changes in spatial distribution of production activities in the case study of Wroclaw, Poland</i>
11.00-11.15	Dariusz Dziubiński	<i>Development flexibility of the city sprawl areas pictured by the southern region of Wroclaw</i>
11.15-11.30	Barbara Jaczewska, Anna Grzegorzczak	<i>Residential segregation and housing policy in Warsaw Metropolitan Area</i>
11.30-11.45	Aurore Meyfroidt	<i>Non-profit housing as a tool for metropolitan cohesion. The case of the Vienna-Bratislava region</i>
11.45-12.00	Magdalena Górczyńska	<i>Intermediate social housing in France as an option for middle class? A case study of Grand Paris metropolitan area</i>
12.00-12.15 Discussion		
12.15-13.15 Lunch		
Fifth parallel session (B.2)		
10.45-12.15		
10.45-11.00	Veronika Korčeková	<i>Enhancing the resilience of rural territories through utilizing human and social capital of young population</i>
11.00-11.15	Milada Šťastná	<i>Landscape memory and its importance for the future land use planning</i>
11.15-11.30	Magdalena Szczepańska	<i>Significance of family allotments in urban policy: the case of the Poznań agglomeration</i>
11.30-11.45	Karolina Dmochowska-Dudek, Maria Bednarek-Szczepańska	<i>The characteristics of NIMBY type siting conflicts in rural areas of Poland</i>
11.45-12.00	Magdalena Dej, Wojciech Jarczewski	<i>Relocation of firms within metropolitan areas in Poland – main characteristics</i>
12.00-12.15 Discussion		
12.15-13.15 Lunch		
Sixth parallel session (C.2)		
10.45-12.15		
10.45-11.00	Sara Arnon	<i>A case of geo-political uprooting and its implications</i>
11.00-11.15	Bogumiła Lisocka-Jaegermann	<i>Resilience versus Sustainable Development and Sustainable Livelihoods in the Local Context</i>
11.15-11.30	Katarzyna Dembicz	<i>Cubans: a Vulnerable Society?</i>
11.30-11.45	Michał Konopski	<i>Territorial uncertainty of Podlasie region. Regional identity vs. administrative division</i>
11.45-12.00	Tetiana I. Shparaga	<i>New trends of uncertainty and vulnerability of museum development in Ukraine</i>
12.00-12.15 Discussion		
12.15-13.15 Lunch		

Seventh parallel session (A.3)		
13.15-14.45		
13.15-13.30	Katarzyna Piskorek, Jacek Barski	<i>Participatory budgeting in different democratic contexts. Comparative studies from Wrocław (PL) and Rotterdam (NL)</i>
13.30-13.45	Ines Grigorescu, Gheorghe Kucsicsa, Bianca Mitrică, Irena Mocanu, Cristina Dumitrica	<i>Spatial and temporal dynamics of urban sprawl in Bucharest Metropolitan Area over the past century</i>
13.45-14.00	Szumilas Agnieszka, Pach Paweł	<i>Review of parking policies in the case of medium-sized Polish cities.</i>
14.00-14.15	Paweł Sudra	<i>Threats posed by urban sprawl in the suburban zone of Warsaw in the light of spatial analysis of dispersion of development</i>
14.15-14.30	Wojciech Jarczewski	<i>Determinants of company relocation in major metropolitan areas in Poland</i>
14.30-14.45 Discussion		
14.45-15.00 Coffee break		
Eight parallel session (B.3)		
13.15-14.45		
13.15-13.30	Gergely Tagai	<i>The long-run social impact of economic crisis</i>
13.30-13.45	Anastasiia Zamorina	<i>Spatial concentration of industry in Europe: Evidence for Germany</i>
13.45-14.00	Svitlana Pysarenko	<i>The main directions of reforming Ukraine's regional policy</i>
14.00-14.15	Simona Epasto	<i>The aging population and the relationships between demographic and economic dynamics. Case study: Poland</i>
14.15-14.30 Discussion		
14.30-15.00 Coffee break		
Ninth parallel session (C.3)		
13.15-14.45		
13.15-13.30	Bianca Mitrică, Monica Dumitrașcu, Irena Mocanu, Ines Grigorescu	<i>Competitiveness, cohesion and sustainability in the urban development of the Romania's border regions</i>
13.30-13.45	Sylvia Dolzblasz	<i>Post-Schengen spaces – the use of former border crossings at the Polish-Czech border</i>
13.45-14.00	Paulina Tobiasz-Lis, Marcin Wójcik	<i>From the core to peripheries. The study of the Novosibirsk urban region under post-Soviet transition</i>
14.00-14.15	Aaron Yair	<i>Aridization processes with increasing average annual rainfall at a desert fringe, Northern Negev desert, Israel</i>
14.15-14.30	Barbara Szejgiec- Kolenda, Tomasz Komornicki	<i>Areas at risk of the Russian restrictions on agri-food products. The nature of trade relations between Polish regions and Russia</i>
14.30-14.45 Discussion		
14.45-15.00 Coffee break		

Fourth Plenary Session “Strategic challenges” & Closing		
15.00-16.45		
15.00-15.30	Jacek Szlachta (Keynote Lecture)	<i>Polish regions vulnerability to the challenges of contemporary economy</i>
15.30-15.50	Vladimír Székely	<i>Rural territories: searching for identity and optimal development strategy</i>
15.50-16.10	Wojciech Janicki	<i>Depopulation as a chance, not a threat to cities and regions: a paradigm change</i>
16.10-16.30	Naja Marot, Mojca Golobič	<i>Are we prepared? Analyzing the Slovenian adaptive capacity to climate change</i>
16.30-16.45 Discussion		
16.45 Summation and closing of the Forum		

Poster Session	
10.30-10.45 During the coffee break	
Oskar Wolski	<i>Rural Development through Tourism: An Area of Conflicts</i>
Edit Hoyk, Annamária Uzzoli, András Donát Kovács	<i>Possibilities of cities in adaptation to climate change on Kecskemét example</i>
Silvie Kozlovská, Hana Vavrouchová	<i>Landscape in memories – case study from the South Moravian village Božice</i>
Irena Mocanu, Bianca Mitrică, Ines Grigorescu, Carmen Dragotă, Monica Dumitraşcu	<i>A preliminary approach to the assessment of socio-economic vulnerability to dryness and drought phenomena in Bucharest Metropolitan Area</i>
Andrzej Affek, Anna Kowalska	<i>Usage patterns of provisioning and cultural ecosystem services</i>
Barbara Szejgiec-Kolenda	<i>International trade patterns of border regions: Dynamics of intermediaries population and performance</i>
Veronika Stodolová, Hana Vavrouchová, Milada Šťastná	<i>Modern chronicle of the village – case study Vysokomytsko microregion in the Czech Republic</i>
Vladimír Kolossov, Andrey Medvedev, Maria Zotova	<i>Visualizing spatial development of border regions using GIS</i>
Sławomir Goliszek	<i>Example of GTFS data application for visualization and spatial analysis – the case of public transportation in Szczecin</i>
Maciej Wasilewski	<i>Warsaw’s nature reserves – their functioning and benefits for city residents</i>

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Visions for Europe Between daydreams and nightmares

At present Europe struggles with its future. While in many decisions and actions are taken which shape the future of the EU and its Member States, it seems there is hardly a shared vision of where the EU should be in a few decades.

Such a vision however vague and shaped might however, help to navigate in times of crisis and provide a framework for decision making. There is a saying, that visions without actions are daydreams, but actions without visions risk to become nightmares.

To start with we need to differentiate between visions and scenarios. In short, scenarios are best described as plausible descriptions of how the future might develop, based on a coherent consistent set of assumptions. Scenarios underline that our future is uncertain and hence there are often different scenarios on how the future might develop.

A vision on the other hand rather defines a desirable picture of the future. Accordingly, it is based on widely shared agreement on a single vision, based on a core set of values and principles. Other terms that are used are ‘perspectives’ or ‘strategies’.

Present political debates are characterised by a substantial lack of such a single shared vision for the EU. This is not at least the case with regard to a shared vision for the EU in terms of territorial development. The document coming closest to such a vision is the European Spatial Development Perspective from 1999 which mainly focuses on the 15 Member States of that time. While it can be argued that the basic principles of the ESPD can also be applied the rest of Europe and are generally shared by the spatial planning chorus in these countries, one has to note that the actual territorial development over the last decades(s) rather points to the opposite direction. So, maybe it is about time to start a new debate about a shared vision for Europe not at least with regard to territorial development objectives. What is the desirable picture of our common future territory?

In the context of the FP7 project FLAGSHIP on ‘Forward Looking Analysis of Grand Societal Challenges and Innovative Policies’, a team of researchers has developed two overarching visions for Europe. In a second step efforts have been undertaken to understand the territorial implications and dimensions of these visions. In both visions change is largely driven by a number of grand societal challenges to which today’s governance arrangements cannot suitably respond. In addition to driving changes in the governance systems, these challenges also drive considerable changes in territorial development.

Possibly visions like that can serve a starting points to think about the desirable picture of our common future territory in Europe.

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Quarter of century after Alonso’s forecasting of Europe’s urban system dynamics

Quarter of century ago William Alonso, whose seminal work »Location and land use« (1964) has become one of the main pillars of modern urban economics, considered, in his APA article »Europe's Urban System and Its Peripheries« (1991), how the fall of iron curtain will change the European cities. This transformation to the east has been almost simultaneously matched by another transformation to the west in Europe, when the dozen nations of the European Community have started to travel faster toward economic and institutional integration and expansion. Alonso announced that changes on a grand scale in the structure of European geography will happen comparable to those that Braudel traced as Europe’s economic center of gravity shifted from Venice as regional center in trans-Eurasian trade to Sevilla – Antwerp as the first European global *entrepôt*, later shifted to Amsterdam, and finally to London. He forecasted that cities on the edge of Western Europe like Berlin and Vienna, which had become a sleepy outpost on the edge of Western Europe, will again become central in a dynamic Europe, but the growth rate of London is still the same as the growth rate of Vienna and ten times higher than the dynamics of Berlin while Alonso forecasted that Berlin will successfully compete with London and Paris, and he was also wrong, saying that Trieste would now booming as the gateway to Eastern Europe – Trieste is shrinking city. Why such differences appeared (against the forecasting of Alonso) will be discussed in this paper.

The second consequence, predicated by Alonso, was that over few decades the cities of Eastern Europe on the whole will grow demographically, from the modernization of the agricultural sector and therefore out-migration from the agricultural areas. It did not happened for majority of Polish, Slovakian or Latvian cities, while smaller industrial Western cities, especially in Germany or even bigger South European cities like Napoli and Marseille are also shrinking. For all Western Europe's population Alonso forecasted that because the population is long-lived and is fare below the replacement level of reproduction it will face the prospect of decline in total population numbers, an increasing economic burden from the aged, and a diminishing number of entrants into the labor force. This phenomenon increased the economic burden even more than Alonso could imagin 25 years ago. The crisis in 2008 additionally contribute to this dynamics. The number of lone pensioner households in cities is growing faster than number of households in general in nearly all European cities. But the financial crisis in Europe has inflicted heavy losses on older people by increasing the average retirement age, decreasing the value of pensions, decreasing the ECB interest rate and decreasing returns on assets held by pension funds. The income of senior citizens in Europe has decreased, while the major part of their assets is still equity embedded in their home, i.e. their residential property which in most cases is not appropriate for use when the seniors are losing their functional capacities and in many cases can not be mentained properly because of law income of seniors. Therefore European cities are facing not only with milions of empty houses, but also with dilapidated housing stock of lone pensioner housholds. The papers discusse the possibilities how to mitigate these problems of shrinking cities. Some numerical examples for Slovenian central places of regions are given and compared with others.

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Socio-economic forecasting for Hungary related to climate change

Socio-economic impacts of climate change and its territorial consequences have become important research topic in the past decades. Extreme meteorological events caused by climate change increase social and economic vulnerability of local communities; therefore adaptation to changing conditions and circumstances is becoming relevant issue. There have been a number of regional projects aiming to examine causes and effects of climate change on local communities from various perspectives.

Our project aims to support the adaptation process by providing a scientific ground for territorially specific actions, spatial strategies, flagship projects as well as enhancing the climate-related knowledge base and awareness of decision makers, professionals and the general public in Hungary.

The presentation consists of two major structural parts. The first theoretical part investigates international and Hungarian results of climate modelling on global and regional scale, and, in particular, it analyses the inclusion of social and economic indicators in these models. The empirical part contains a forecasting model about socio-economic processes related to climate change in Hungary through 2050, on the scale of NUTS 3 and LAU 1 as well as on a 10x10 km grid. This model focuses on demographic processes with the statistical indicators of population by number, age and gender. The main added value of the project is that it delivers spatially disaggregated data on future socio-economic, especially demographic trends in Hungary and links these processes to climate change, thereby addressing the needs of those social groups most vulnerable to climate change.

Our study introduces the most important results and theoretical-methodological experiences of this research project supported by the EGT Grants and carried out by the Centre for Economic and Regional Studies in Hungary (HAS). These outcomes will offer significant contributions to enhance climate change adaptation, design and implement spatially focused measures, establish local adaptation strategies and increase climate-awareness of local communities and actors from related policy and decision-making fields.

The project benefits from a €175,000 grant from Iceland, Liechtenstein and Norway through the EEA Grants (EEA-C12-11).

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Spatial Development in Ukraine: risks and barriers of transitional period

Like the other post-soviet states Ukraine passed through the difficult times of changes in economic structure and significant institutional restructuring. After Ukraine's independence reorganization of the governmental structures was constantly carried out. It was accompanied by the designing of new legislation and efforts to introduce various reforms. Lack of matured civil society and policies' gaps under free market conditions led to the concentration of property and production in the hands of a small group of owners. Public policy, particularly in the field of spatial development, was formed exactly to meet their interests. It significantly affected the sectoral and territorial structure of industry, which accordingly to the Soviet practice was the main factor of social infrastructure location. Mass protests in 2004 and 2013 showed that the most of the Ukrainians are dissatisfied by existing social standards, including possibilities of participation in planning and management. During the 2013-2014 the number of officials reached 370-380 thousand. Therefore one bureaucrat should serve no more than about 100 people. However, the quality of management and institutional services remained low, especially at the local level.

Finally Ukraine declared its innovative vector of spatial development. In accordance with this concept spatial development should be aimed at creating of equal opportunities for economic and human development through coordination of the state, regional and local policies, reducing of pressure on natural resources and providing of appropriate costs on technical and social infrastructure. But declaring such an innovative development way, Ukraine has not stepped in this direction. Its economy is still dependent on raw materials and cheap labour. Distribution and development of these industries is rarely beneficial for the state and communities. Moreover, it leads to undesirable transformations of the social and economic landscape. The idea of the economy based on knowledge and innovation is not implemented.

Among the obstacles and risks for better spatial development should be mentioned as following:

- There is no spatial development strategy in Ukraine.
- Lack of competent staff in Ministries and regional authorities.
- Corruption, extraordinary centralization of governance.
- Weak development of informational and communication technologies (e.g. lack of spatial data, poor monitoring).
- Ukrainian legislation gaps, especially in comparison to EU.
- Civil society is excluded from the process of decision-making and spatial planning.
- The lack of transparent approaches to coordinate the interests of various parties: government, business, community

These risks, measures to overcome them, and potential consequences of decentralization for Ukrainian local communities are considered in our research with special emphasis on spatial development policies.

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Spatial planning in the Western Balkans between transition, European integration and path-dependency

The evolution of spatial planning in the EU member states is a widely investigated topic (Getimis et al, 2014). However, the Western Balkan region has been relegated, until now, at the margins of the academic debate. This constitutes a serious knowledge gap, especially in relation to the process of European integration that is involving the area. In order to provide a contribution in this concern, the authors analyze the evolution of the spatial planning systems of three countries of the Western Balkans that reached different stages in their process of joining the EU (Croatia, Albania and Bosnia Herzegovina), aiming at unraveling the complexity of their patterns of change.

The contribution adopts a threefold perspective. Firstly, it explores the consequences that the transition from a centralized economic and administrative model to a decentralized model based on free market rules had over spatial planning legislation and practice. Then, it focuses on European integration and, more in details, on those Europeanization processes that triggered during the different integration steps the aforementioned countries had to go through (Schimmelfenning, Sedelmeier, 2005). Here particular attention is dedicated to the factors that determine the adoption of specific choices over others in the field of spatial planning during the process of pre-accession. Finally, the role of domestic conditions, actors and institutions is analyzed more in details, together with their path-dependent influence over the development of the spatial planning systems that now characterize the countries at stake.

The research shows that the nature and the intensity of the changes depends on the features of each specific domestic context, on the one hand, and on the advancement stage of the transition and integration processes, on the other hand. All in all, the presented results constitute a first step towards the appreciation of the impact that the different *speeds* of EU integration and the historical domestic background have on spatial planning in the Western Balkan region.

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**Place-based development and governance:
the evolution of territorial cooperation
in management of local resources in Poland**

The paper explores the evolution of territorial co-operation of local communities in Poland during the years 1990-2010 in context of place-based development and governance concepts. In the early 1990s territorial co-operation usually took the form of special-purpose municipal associations typically involving investment in, or operation of inter-communal utilities such as water or sewage systems. By the late 1990s, newly created municipal associations focused on longer-term aims such like spatial planning and joint development strategies, typically involving tourism, investment promotion and environmental issues. Only since the early 2000s a Western European-style model of cross-sector territorial governance, involving business and social sectors, have been applied with European Union support. The new territorial organisations tend to pay more attention to local business promotion and preservation of local cultural heritage. The new forms of cooperation typically do not replace the old structures of government, but they are providing additional modes of governance of local resources.

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Resilience and Territorial Cohesion: Complementary or Contradictory Concepts?

Much has been written about the concepts of 'resilience' and 'territorial cohesion' but the relationship between the two has remained largely under-examined. One thing they have in common is ambiguity. Despite, or probably because of, their elasticity, both concepts have travelled far and fast and risk becoming empty signifiers that can be filled with multiple and conflicting agendas. In this presentation, I will discuss the relationship between the two concepts by providing an overview of their origins, their multiple meanings and their ideological underpinnings. I will argue that although territorial cohesion and resilience have different genealogies and are associated with different political philosophies, their applications in social and spatial policies have a great deal in common.

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Impact of economic crisis on local development: Evidence from Polish regions

A range of processes leading to deepen interrelations between individual economies, including trade ones, is observed in a globalising world. These relations occur at the same time on a countrywide basis as well as at the level of regions and individual companies. In good economic times global economic linkages represent opportunities for development, while in an economic crisis – they might pose a threat. An assessment of the resilience of local economies may be made based on an analysis of export characteristics at the local level.

The main objectives of the research (research project 'Impact of global economic processes on local development' financed from the funds of the National Science Centre – Poland on the basis of the decision no. DEC-2011/01/B/HS4/03694) were to assess the impact of global processes, taking particularly into account the economic downturn in 2008-2009, on the economic situation of Polish powiats (LAU 1). It has been undertaken to examine local mechanisms enabling Polish powiats to adapt to global changes in the world economy. The study used primary data collected at the borders or within the EU reporting system. These materials are provided by the Customs Department of the Ministry of Finance. Data on foreign trade are therefore actual data from INTRASTAT system and customs declarations. Data on exports were referred to selected socio-economic data at the powiat level (from the Central Statistical Office).

The paper deals with the analysis of the spatial distribution of exports at the local level during the years 2005-2007 (the period of prosperity in exports caused by accession to the EU) and 2007-2009 (the first wave of the financial crisis), which allowed to identify some of the generally statistically unobservable regularities.

It was found that in good economic times at the local level there are taking place predictable economic processes characterised by the classic territorial dimension (referring to the core-periphery system). During the economic downturn there occurs an increase in the importance of other factors determining the situation of local economies. Along with economic cycles the export changes appear to lead to a spatial dispersion and thereafter to the processes of re-concentration. The financial crisis results locally in higher volume of exports, these developments are probably largely due to factors related to agglomeration benefits and spatial accessibility. It was found that the geographic concentration of exports decreases in good economic times as a result of seeking new markets. Under conditions of low level of innovation in production, the spatial distribution and the level of product export concentration have remained stable. Whereas the economic downturn is reflected in the presence of a rise in the level of geographic export concentration, but minor variations were observed in the spatial distribution and the level of product export concentration.

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Economic Crisis: Resilience of Regions

The aim of the presentation is to clarify the concept of resilience and to present the final results of research project ESPON on the resilience of regions to economic crisis. The project under acronym ECR2 had the following objectives: identification of the impact of the economic crisis on the regions' economies; examine structural and functional determinants of regions; attempt to answer the questions: why some regions are more resistant than others; identification of policies supporting economic resilience.

Resilience refers to the ability of a system to return to its pre-shock position. In the longer run, economic resilience is determined by capacity of an economy to adapt to changing circumstances; to re-orientate and renew its structure and to maintain a long-term development path.

The greatest influence on the resilience of a region is the form and structure of the economy. A more diverse economic structure provides greater resistance to shocks than does a more specialised structure since risk is effectively spread across a region's business portfolio. A key factor underlying resilience is the very strong positive relationship between higher levels of innovation performance and observed resilience outcomes.

A region's population can also influence its ability to withstand – or recover from – an economic shock. The clearest relationship is in the area of skills. Areas with more highly qualified populations tend to have more positive resilience outcomes. Flexibility in labour markets has also been an important feature shaping the ability of many regions to respond to economic crisis, such as where firms and workers agreed shorter working weeks.

Some place-based characteristics have proven more significant than others. Urban areas, and those which are more accessible, tend to be more resilient than more remote locations. The resilience of mountainous, coastal and island regions depends on wider context rather than simply their physical characteristics. Regions that were eligible under the Competitiveness and Eligibility strand of the Structural Funds also proved to be disproportionately likely to have resisted or recovered from the crisis.

Community-based features can have some impact on observed levels of resilience, although the evidence for this is primarily qualitative. Whilst rarely strong enough to impact directly on the ability of an economy to withstand the effects of an economic crisis, they are able to play an important role in shaping responses. Strong social ties and positive levels of community-based capital (including business networks, and inter-firm social capital) can play an important role in mediating resilience outcomes. Of most significance is the finding that the quality of governance has a crucial influence on observed resilience outcomes.

Alongside important structural features, resilience is also shaped by the ability of individuals, organisations, and policy-makers, to learn and to adapt. Regions with higher levels of resilience appear to have learnt from their experience of past events. What influences the choices made by households, firms and public bodies - and the forces shaping these choices – deserves greater attention.

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Can a biggie get more? The place of regional centres in process of absorption of European funds in Polish voivodeships

This paper seeks to determine the share of Polish regional centres in the absorption of European funds as compared with their regional surroundings. The analysis covered the years 2004-2013 and embraced 18 cities functioning as regional capitals, and 16 voivodeships. The absorption level and the fields of allotment of the European means were identified on the basis of data made available by the Ministry for Infrastructure and Development in the mapadotacji.pl base.

The research proceeded in three stages. In the first, the position of the regional capitals was determined against the socio-economic development of the country's poviats. To this end, use was made of a synthetic index and cluster analysis. The statistical analysis rested on a set of key measures of socio-economic development. Stage two was devoted to the magnitude and absorption structure of European means in the regional centres. An analysis was made of the number and total worth of projects and Community part-financing, and of the structure of the means granted under various funds and operational programmes. The third (main) part of the research procedure was the identification of the place of the regional centres in the process of absorption of EU funds in voivodeships. This involved the examination of the ratio of the means acquired by beneficiaries located in the capital of a voivodeship to the total absorption of those means in the voivodeship. Also determined was the concentration of the funds (the location quotient, the Gini coefficient). The obtained results provided a basis for the verification of a hypothesis about a significant concentration of the European means at the regional level in the principal cities. The result is primarily an improvement in the standards and conditions of living of the inhabitants of those cities and their nearest environment, while the effect of the funds on the cohesion of a region is only limited.

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Processes of ethnic segregation in major Lithuanian urban regions

The paper presents results of the first study of social segregation processes in major Lithuanian urban regions based on data of censuses of population. Vilnius, Kaunas and Klaipeda cities were analysed, trying to indentify the character of ethno-spatial residential differentiation in fast sprawling city regions. The major ethnic groups – Lithuanians, Poles and Russians were analysed. Authors revealed major trends of changes of spatial distribution of these ethnic groups in these sprawling city regions at LAU 2 regions. The main patterns of mosaic of distribution of ethnic groups were established at census tracts level. Census tract data were used to measure global indexes illustrating levels of segregation in city regions (cities and their metropolitan areas). Indexes of segregation, dissimilarity and isolation were measured. The correlations between distribution of ethnic groups and social groups were calculated, which revealed quite strong ethnic dimension of existing social segregation of urban spaces. The major socio-spatial divides in these cities between relatively richer Northern and poorer Southern parts increase as well as polarisation of city core areas in sense of ethnic dimension.

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Social Diversity as Challenge to Cohesion. Example of Warsaw

As an effect of diversification of personal and group identities in contemporary societies, a new standard emerges – the city of hyper-diversity. The present paper aims at comparing the patterns underlying social integration and community sustainability in two of Warsaw's districts – Praga Północ and Ursynów, areas characterised by fundamental differences in their historic development, built environment and social structure. The question is posed, whether and to what extent the unintentional social mix which leads to greater disparities within the areas, accounts for the liquidity of such values as reciprocity, social support and trust. As the analyses conducted within the framework of EU 7 FP Project DIVERCITIES show, there is a low level of social integration between 'old' residents, i.e. those that have lived in the areas under investigation since before the systemic transformation of 1989, and the 'newcomers', more recent in-migrants from other regions of Poland, or immigrants from other countries. Knowledge is provided concerning the way in which in-migration based social diversity in Warsaw impacts social integration and social cohesion.

It is argued in the present paper that in-migration and spatial mobility within cities can be as strong a factor shaping the area's specificity and its psychosocial structure, as any other primary characteristic, such as socio-economic, social or family status of the residents. The inflow of new population and its mixing is in principle a challenge to social cohesion and solidarity, irrespectively of the socio-economic status of the in-migrants, or of the destination area. It constitutes a challenge, even when the inflow involves population which represents a similar socio-economic status as the one of the arrival area. This is related to the fact that the development of a community is a process which, apart from common goals, requires time and emotions.

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Restitution process and real estate market in Warsaw

Since the communalisation of land (and subsequently the buildings) in Warsaw in 1945, the process of restitution progresses slowly and brings controversial outcomes, mainly due to lack of clearly established rules for restitution and the growing number of private actors attempting to ‘make profits’ on restitution (Górczyńska 2014, 2015). Despite a quite diverse level of maintenance of the pre-war buildings in the capital city of Poland, they are usually localized in the central districts which makes them even more interesting investment for different kind of private developers as well as for individual households particularly from upper class who search for accommodation that would allow them to distinguish themselves from the others (Bouloc 2013). These processes are embedded in the broader scientific debate concerning the specificity of the urban renewal of the central districts in the post-socialist cities and the changes in the housing property and tenure as one of the main feature of the transformation process (e.g. Bodnar, Molnar, 2010; Lux, Mikeszova, 2012), leading to gentrification in the post-socialist context (e.g. Standl, Krupickaite 2004; Sýkora 2005; Chelcea 2006; Górczyńska 2012; Kovács et al., 2013).

The aim of this paper is to identify the position of the pre-war residential buildings (and flats in these buildings) on the housing market in Warsaw, with a special attention paid on the current ownership status of buildings (restituted, private or still publically owned). To this end, different set of data sources shall be combined: (1) the information about the restitution process collected by the Real Estate Office at the City Hall of Warsaw updated during the field studies, (2) the database on prices of the buildings and flats sold between 2006 and 2014 gathered in the Register of Real Estate Prices and Values (the Office of Geodesy and Cadastre of Warsaw) supplemented with the information about the period of buildings’ construction collected during the field studies, (3) data on housing from the Central Statistical Office in Warsaw.

The analyses shall be conducted in the three districts: Śródmieście, Praga Północ and Żoliborz. Although the pre-war buildings constitute there at least 20% of the housing stock, these case studies represent completely opposite examples of social and housing structures and their evolutions. This juxtaposition of three various areas shall enable to assess the position of the pre-war buildings on the housing market in Warsaw as well as to indicate the conditions that impact their position nowadays and to draw the scenarios for the coming years.

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Post-economic uncertainty and vulnerability of global cities

Post-economic uncertainty and vulnerability in the social development models and in the territorial organization of the society were for the first time studied in the works by Pently A., Riesman D., Aron R. and Bell D. Now this subject is scrutinized in the works *Broken Civilization* by Vladislav Inozemtsev (1999) and *Geodemographic Problems of Global Cities* by Nikolai Sluka (2007). The term 'post-economic society' is often understood as the stage of society's development, when the basic material resources and incentives (*land, labor, capital - author*) lose their dominating and leading position in the process of reproduction of material and spiritual wealth. In simple words, extensive development of material production as the basis of the traditional capitalist structure of the economy and society is actively driven out by human activities focusing on creation of intellectual services and information.

The post-economic society develops more actively in the environment of global cities as highly communicational, fully integrated, internationally oriented, dispersion-modular, innovative and representative conglomerate of concentration and mutual intersection of human ideas, interests, creativity, knowledge and intellect. The territorial structure of the urban space greatly changes and accommodates under their influence. These changes according to Bell D. (1973) affect specifics of the use of land and other natural resources as well as labor, capital and information.

Transformation of the private ownership and changes in the spatial structure of the global cities do not entail the revival of the ancient 'polis' formation with its public ownership of the production means. This only means that knowledge, creativity, and in some cases, intelligence cannot be private in their essence, (though they are the product of an individual activity), and cannot occupy a clearly determined space in the cumulative structure of the city (in view of the development of mass communication means and Internet). The global cities are increasingly turning to the public spaces, where human interests extend far beyond the satisfaction of their material needs, and transformed towards acquiring often highly diversified, targeted, individualized intellectual and spiritual benefits.

The global cities are experiencing a significant transformation of its productive forces under the influence of new forms of labor based on the post-economic changes in the global cities. Entities providing a variety of high intelligent products and services to the consumers as well as organizations using human creativity in order to achieve various economic effects actively develop in the structure of these productive forces.

In global cities one observes a steady transformation of capital resources under the influence of new factors in the formation of the society wealth, new ways of its production, acquisition and accumulation. The concepts of "human capital", "intellectual capital" and so on are well established in the modern science by Golubchikov Iu. (2011) and Smal' V. (2009).

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Ukrainian urban space's reaction on the globalization's challenges (a case of Kyiv)

The role of cities in the context of globalization's shifts is extremely interesting. Historically, cities are engines and repeaters of global change, "pillars" of the world economy, from its beginnings. Cities are centres of the world system (I. Wallerstein, F. Braudel), tops of the world's geopolitical and geoeconomic landscape. Simultaneously urban space is also the first acceptor of global change, with all threats and benefits. Taking into account the social importance of the city as a living environment (since 2007 more than half the world's population lives in urban areas), it should be noticed that the urgency of research in this field is unquestionable.

How does an urban space respond on changes caused by globalization? Among main indicators are as following:

–Increased rate of urbanization simultaneously with the decline of certain regions and cities. Functions of the highest points of the national economic landscape are changed;

–Strengthening of inequality and hierarchy of the urban population. The degree of these processes will obviously vary from country to country, but the factors of space's differentiation remain enough similar. Among them are income and professional affiliation (as well as safety and a certain type of communication);

–City's informational and communicational "oversaturation" and "overload". The innovative nature of the "centre" makes a city to become "tangle" of communications. It means that mobile phones, Internet, radio, television, newspapers, and advertisement are part of everyday urban life;

–Global level representatives' appearance. There are numerous entities, banks, corporations, international organizations and even individuals, which make direct or implicit global influence;

–Urban landscape has been changed and even lost its aesthetics. Some developers in developing and post-soviet countries may run projects without following city architectural standards;

–Migration and mobility. Multiculturalism and multi-ethnicity of the urban environment. Dependence between residence and work or study places reduces;

–Increased risks of urban life;

–Accelerating pace of life, city's rhythm, the growth of individual "space-time" value;

–Problems for sustainable development, which are more typical for the developing countries' urban space (reduction of green areas, poor quality of drinking water and air).

Despite on social and economic domination among the other Ukrainian cities Kiev still is not a global city. On the other hand, its urban environment has been dramatically changing under the impact of globalization processes. To understand the situation main spatial indicators of such processes, with special attention to social segregation and suburbanization, are defined and analysed.

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Modelling land cover change in Hungary: forecasts for 2050

The fundamental changes in the social and economic processes in Hungary after the political and economic transition also had an impact on the land cover of the country. Due to the residential and economic suburbanisation, the share of artificial surfaces significantly increased in the agglomeration in Budapest, and – to a smaller extent – near to the regional centres. Although the direct effects of the changing market conditions to the land cover are rather limited to this point, the transforming farm structure bears the possibility for extended changes in the future. Moreover, climate change also poses a challenge to the agriculture; a well-known example is the ongoing aridification of the Danube-Tisza Interfluve.

The aim of our paper is to present a forecast of the probable changes in the land cover for the first half of the twenty-first century. A regionally downscaled version of the IPCC4 A1b climate model was used to integrate the changing climatic conditions into the model. We also took the predicted social and economic processes into account. The long-term plans of the central government were also built into the forecast, especially concerning afforestation and the extension of road network. The previous results indicate a further increase in artificial surfaces, but with a lower rate of transition than in the first decade of the century. A large part of the land will be taken out of agricultural land use for afforestation, but in a spatially uneven pattern. Agricultural areas with increased vulnerability due to the changes in the climatic conditions are also outlined.

The presented research findings are results from the ongoing research project Long term socio-economic forecasting for Hungary (EEA-C12-11).

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Land management in the Poznań agglomeration after 1995

Land management is a fundamental question for cities and their functional areas, and a correctly conducted land policy is a condition and a guarantee of their sustainable development. Today, when many European and world metropolises have to cope with the consequences of excessive dispersal ('urban sprawl'), the question of responsible land management seems to be regaining its proper significance.

An urgent need for more rational land management is also increasingly seen in Poland, where big cities started to go beyond their administrative limits as a result of the dynamic changes in the functional-spatial structure of their surroundings taking place since the beginning of the country's systemic transformation. A widespread spatial chaos affects not only the quality of life in Polish agglomerations, but also greatly determines its cost. In the *Conception of Poland's Spatial Development 2030*, the restoration and maintaining of spatial order is given as a priority. Suggestions for promoting the internal cohesion of urban areas, for limiting investment that leads to uncontrolled urban sprawl, and for preventing economic and social segregation can be found in other strategic government documents, e.g. the 2007-2013 National Strategic Reference Framework, the 2007-2015 National Development Strategy, the 2010-2020 National Strategy for Regional Development: Regions, Cities and Rural Areas, as well as the National Urban Policy.

Using the example of the Poznań agglomeration, which embraces the city of Poznań and 17 communes of Poznańpowiat, this paper presents mechanisms, typical of the Polish transformation, that determine land management in cities and their functional areas. It also shows far-reaching consequences of the practical absence of a land policy at an agglomeration level and proposes solutions allowing more rational land management. The analysis rests on 1995-2015 data obtained from the Land and Buildings Records concerning land transactions, i.e. information about the number, location, price and intended use of lots sold, the history of geodetic divisions, and kinds of land use.

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The interdependence of the development of suburban housing estates and road communication on the example of Poland

The aim of this article is to present the dependence between development of suburban housing estates and transportation system within suburbs. Regional relationships between the city and its surroundings depend on road network and everyday traffic. That is why cities ‘spread’ in most cases in a linear form. This process is defined as suburbanization occurring in a *urban sprawl* from. Main characteristics of *urban sprawl* are listed below (Thompson 2013):

- low density of development per hectare;
- rigorously separated uses (e.g., long distances between housing and retail);
- “leapfrogging” past existing areas of build-up, leaving undeveloped gaps;
- dependency on the automobile.

As the distance from the core city grows different phases of the *urban sprawl* may be observed. Figure 1 characterises three phases of this process.

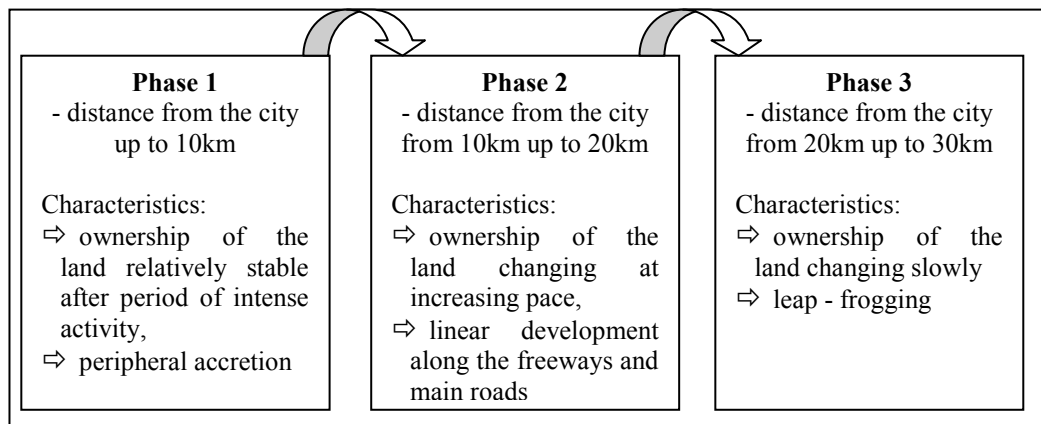


Figure 1: Phases of *urban sprawl*. Source: Own study.

According to analyses conducted for this paper cities in Poland affect their outskirts in an ‘*urban sprawl*’ way. Development of suburban housing depending on communication may lead to spatial conflicts, arise in local intense traffic and influence the environment. This article shows both interdependence and legal, economic and environmental consequences of this situation. To meet the objectives we carried out statistical and spatial analysis as well as case study.

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Seasonal suburbanisation in Moscow metropolitan region and the problems of household solid waste disposal

Metropolitan regions and large cities, concentrating population, main economic activity and innovation are the contemporary focus of urban research. Despite significant differences metropolitan areas share a number of similar characteristics and trends. One of them – suburbanization process. The present research will focus on the environmental effects of suburbanization process in Moscow metropolitan region.

One of the features of Moscow metropolitan region development – seasonal nature of suburbanization. Cottage associations in the rural area do not have the official settlement status, but form an alternative network for seasonal living (Nefedova, 2013; Makhrova, 2015). In Moscow region their total number is 11.7 thousand sites, more than 1.3 million land plots. Virtually the entire territory of Moscow suburbs within a radius of 20–30 km is densely built up by cottage formations (Makhrova, 2015). Potential residential capacity of such formations is more than 4 million people, but only 32% of owners of summer residences are ready to use them as permanent residence (Narodnoe mnenie, 2013).

Since the main method of waste disposal in Russia is landfilling, there are numerous landfills, most massive ones are situated in Moscow suburbs as Moscow is the main producer of solid domestic waste in the country. What causes the most concern is the numerous illegal dumps, in numbers exceeds official landfills by over 95%. Our analysis of open sources: OpenStreetMap, Wikimapia, GoogleEarth and internet forums aloud to locate and map over 1000 illegal dumps in Moscow metropolitan region. Widespread are dumps near cottage formations, along roads connecting them, as well as in recreational areas, parks, forests.

The seasonal nature of living in cottages typical for Moscow suburbia results in low place attachment and in combination with the overall low ecological culture leads to the development of irresponsible attitude towards the environment. This results in the decrease of landscape attractiveness, environmental pollution – especially dangerous are dump situated in water protection zones, which is widely spread, because this may decrease drinking water quality.

The problem of waste disposal and the development of ecological culture are important aspects that have to be addressed by policy in Moscow metropolitan region. It is necessary not only to increase the level of control over the illegal waste disposal, but what is even more important - to promote local patriotism and responsible attitude towards the environment, provide the opportunities for separate waste collection in cottage formations.

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Spatial Dimension of Suburbanisation as a Challenge for Public Statistics

Suburbanization is now one of the most important processes that reshapes the surroundings of large cities in Poland. In many cases, it runs chaotic, haphazard and looks as the "urban sprawl" phenomena. These processes occur particularly strong in the outskirts of large cities - the largest capitals of voivodeships (NUTS 2).

Suburbanization is a multi-faceted phenomenon and therefore difficult to measure. It applies to both social and demographic phenomena and it is strongly associated with land use planning. Due to the importance of the phenomenon the Central Statistical Office is working on the development of statistical methods for measuring the phenomenon of suburbanization and providing information to individuals responsible for planning and zoning.

The presentation will present preliminary results of the methodological works for the measurement of suburbanization. The study was performed on a number of case studies - few large voivodeship cities. It will present the results of selected studies: buildings density, number and distribution of building permits, the density of linear infrastructure and the distribution of the population and its diversity. The study was conducted using a variety of data sources, which include administrative records, eg. record of building permits, population data collected during the census 2011, geospatial data generated by geo-processing information from Topographic Objects Database (BDOT).

The results of the study indicates directions of statistical measurement capabilities of individual components of suburbanization. The use of administrative data sources allows to gain a lot of new information. These sources, however, need to be adapted for the purposes of official statistics. The same applies to the case of spatial data.

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What (should) we measure, when we think about accessibility to public services

In the European Union the term “Services of General Interest” (SGI) covers widely the arrangements, tasks and functions assumed to be of essential importance to citizen’s welfare, quality of life and participation, as well as to the general functioning of societies and quality corresponding to Community visions and goals (the European model of society). This definition implies the existence of a more universal or collective interest which is shared by – and eventually benefits – all members of society, and therefore should take precedence over interests more particular to specific individuals or groups. The assumed essential importance of SGI, poses an obligation on public authorities to ensure their provision according to certain standards regarding quality, availability, accessibility and affordability. In the paper, the terms SGI and “Public Services” are used interchangeably as they are largely overlapping.

The paper is dedicated to the review of different methods of evaluation of (spatial) accessibility to SGI. There exists different methods for assessment of accessibility to SGI. The review presented in the paper is based on the assumption, that different approaches of accessibility assessment results from different equity philosophical principles and different usage conditions of the particular amenity. The review categorises existing accessibility models with respect to both mentioned dimensions, i.e. equity philosophical principle and operationability of the particular accessibility indicator. The paper concludes with guidelines about the selection of the proper accessibility indicator.

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Changes in commuting behaviour in regions of poverty in Slovakia (2001-2011)

The most significant changes in society in Slovakia after 1989 include the post-communist transformation, transition from an industrial to the post-industrial phase of its development, and globalization of economy, politics, culture, environment, etc. Since 2008, the global financial and economic crisis has significantly affected society in Slovakia and has brought mass layoffs in some companies, the transfer of industrial production to other countries with cheaper labour (offshoring), job losses, deepening poverty, and increasing unemployment rates.

The dynamically changing social and economic conditions in Slovakia after 1989 have influenced everyday activities of people and their behaviour in time and space. One of the most important activities influenced by changes in the society is work (job or business) that allows inhabitants to earn means for their existence and satisfaction of their living needs. The character of spatial distribution of population and jobs is different. There is spatial mismatch between the localization of places of residence and places of work that can be overcome by commuting. The aim of this contribution is analysis of the commuting behaviour in regions of poverty in Slovakia based on 2001 and 2011 censuses data.

A concept of multiple deprivation have been used for the identification of regions with the highest poverty risk. Individual indicators applied to identification of poverty include unemployment, low education level, family size, incomplete family, crowded dwelling, and absence of water in dwelling (Veselovská and Michálek 2014). Sixteen regions (districts) with the highest poverty risk in the southern part of Central Slovakia and in the Eastern Slovakia have been considered regions of poverty.

The commuting behaviour of inhabitants of individual regions of poverty is different. Depending on the above average value of one or two of the individual components of commuting (commuting within the same district, commuting to other districts or commuting abroad), regions of poverty in Slovakia can be classified into four categories out of six possible. One of the common features of studied regions is the growing number of out-commuters abroad. While in 2001 there were only a small number of commuters from regions of poverty worked abroad, in 2011 commuting abroad significantly increased. Commuting abroad has been encouraged by the process of integration of Slovakia into the EU, the integration of the Schengen area and the gradual opening of labour markets in other EU countries for citizens of Slovakia.

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**Integrated system of public transport
and rural development in South Moravia**

The question of a relation between accessibility and rural development is frequently discussed. Integrated systems of public transport could play an important role – especially in the post-communist countries. Integrated transport system of the South-Moravian Region connects 24 state, municipal and private transport companies in a unified mode under one operation system, unified tariff and mutual links of individual connections which exclude competition in the most lucrative sections and thus support the unprofitable links in the peripheral rural areas. The main conditions are as follows: each inhabited place in the region has to be served by public transport at least 6 times in working days and 3 times in free days, the longest walking distance must not exceed 2,000 m (taking into account local conditions), the waiting time when transferring must not exceed 10 minutes including the walking time between stops. The system operates 320 lines (train, tramway, trolleybus, bus of municipal and regional transport), covers all communes in the region and next 57 communes in neighbouring regions and countries. The transport performance was 830 million of person/km in 2014. The Municipal Transport Enterprise in Brno transported 395 million passengers, it means more than 1 million daily. The expenses are covered by the fare from ca. one half. The remainder is granted by the South-Moravian Region, the City of Brno and other communes of the region. The fixed costs are partly supported by EU.

The relation between accessibility and rural development, in particular depopulation trends was investigated. It was found that the frequency of connections is even and sufficient in the whole territory of the region. The price is different, however using available sorts of various seasonal tickets, the fare can be reduced under 1 € per one ride. The necessity of change the transport mean in the transport nodes manifest the most criticized disadvantage. However, just this measurement enables increasing the frequency of connections in peripheral lines. The only differentiation could be seen in the time distance. The people from the distanced villages lose more time for the commuting. Nevertheless, thanks to the dense network of small towns there are only few villages which are really distanced (more than 30 minutes) from the closest urban point. These “corners” of the region registered really some depopulation in the last years. With the mentioned exception, the integrated transport system of the South-Moravian Region creates conditions for even rural development in the whole territory.

Discussing the competition between the public transport, individual car transport and using bicycle for commuting, it was found that the use of the respective mean is related to the lifestyle (car as an expression of the prestige, bicycle as a manifestation of healthy life) and to the special conditions like weather, relief, transport of baggage etc. In general, with increasing distance, using car is more expensive in comparison with the public transport but the public transport is less frequent – it means that passengers change the independency for the price. The bicycle is used for commuting only a short distance in flat areas.

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Complex modelling of road traffic in Poland with the identification of local socioeconomic determinants - preliminary results

The project “Comprehensive Modeling of Passenger Road Traffic in Poland and Identification of its Local Socio-Economic Determinant Factors” constitutes an original research study with a view to comprehensive identification of local socio-economic determinant factors (differences in traffic generating potentials) that decide about the Poles’ mobility in individual road transport at the municipal level. The distribution of traffic onto the national and voivodeship road network has been completed with the use of trip time matrices by means of the IGSO PAS speed model and VISUM software, which is a comprehensive tool for decision making in traffic engineering and transport planning. A method that compares findings of gravity model with actual distribution of traffic has been applied, resulting from measurements of traffic volume in the network for six travel purposes (commuting, business, visiting friends and relatives, tourism, shopping and education). For each travel purpose a cartographic analysis of theoretical distribution of traffic of passenger vehicles in 2010 and overestimation / underestimation of the traffic of passenger vehicles (theoretical distribution in relation to the results of GPR2010) has been presented. Sections of roads on which disparities occur between actual traffic and traffic generated on the basis of gravity model are subjected to verification. Assignment of traffic generating potentials is aimed at theoretical description of differences in the Poles’ mobility. The project envisages improvement in the so far used research tools and an orientation towards greater humanization through in-depth theoretical analysis of generating traffic potentials not only, as has been usually hitherto, in the metropolitan areas, but also in the peripheral, rural areas where frequently transportation behaviour and preferences in the field of transport shown by local communities, as well as obtained income, inclination towards traveling and availability of public transport are different from agglomeration environment.

This abstract is based on the result of analyzes carried out in the framework of the project "Comprehensive Modeling of Passenger Road Traffic in Poland and Identification of its Local Socio-Economic Determinant Factors ". The project was financed by funds of the National Science Centre on the basis of the decision DEC-2012/05/B/HS4/04147.

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Evolution of air transport network in China

Before 1949, the territory of mainland China had only 36 airports while by 2014 their number increased to 500. And still it continues to grow. The spatial expansion of new airports was extremely rapid. China’s air transportation has experienced rapid growth and major reforms in the past decades. Most of them have been partially successful and are still ongoing today. From 2011 to 2015 the Chinese government approved plans to build 82 airports. The number of flight routes increased from 2642 in 2005 to 6233 in 2014. (Table 1)

Total length of air routes was 2 765 thousand km in 2012. Domestic air routes have already connected 175 airports in 172 cities. By the year of 2012 total number of aircraft was 1780 (in 2006 there were 863 of them). By 2025, the Chinese government intends to increase the quantity to 4000.

Thus, the structure of air transport in China is a rapidly developing transportation structure. Expectation analysis shows, that China will overtake the United States as the world’s largest passenger market (defined by traffic to, from and within) by 2030. Both markets, however, are expected to remain the largest by a wide margin. In 2034 flights to, from and within China will account for some 1.3 billion passengers, 856 million more than 2014 with an average annual growth rate of 5.5%

The huge impact of the government led airline consolidation of domestic network structure and competition.

Aviation systems are less geographically constrained compared to ground transportation because their routes are not so affected by geographical conditions. Thus, there is a necessity to identify such network characteristics as the number of airports served, directness of connections and overall complexity. Graph theory is selected as the method of translating network characteristics to variables suitable for quantitative analysis.

Table 1: Civil flight routes in China

Parameter	2014	2013	2012	2011	2010	2009	2008	2007	2006	2005
Flight routes	6233	6035	4755	4055	3784	3560	3247	3141	2775	2642

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25 years after transformation: Changes in spatial distribution of production activities in the case study of Wroclaw, Poland.

In the post-industrial, free-market economy, the ability of spatial planning to truly influence the location choices of business owners is limited, while the vast majority of means of production are in non-public hands. On top of that, coordinating spatial policies and decisions between administrative entities is a major challenge in numerous places in Europe. This paper offers a convenient case study of a medium-sized European city (Wroclaw, Poland) and an analysis of the spatial management complication which has observable consequences for the spatial structure and economic functioning of the city.

The paper examines the situation through the lens of production and manufacturing activities (with a cautious approach to the term *industry*). The case is analysed in two inseparable ways: spatial and economic; parallel to that, the discussion is developed on the issue of the interconnection of policy-making in the metropolitan area (the city “vs” its surrounding rural communes). The paper reviews the changes in employment in subsequent sectors of the metropolitan area in the 25 years since the political transformation of Poland while keeping an eye on the physical, spatial changes of the aforementioned metropolitan area.

The secondary output of the paper is outlining the suburbanisation processes of large Polish cities, however as seen not from the most frequently presented perspectives (such as housing or transportation), but from a more economy- and spatial responsibility-focused one.

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Development flexibility of the city sprawl areas pictured by the southern region of Wrocław

Like most contemporary cities, Wrocław develops in an uncontrollable manner and thus becomes formless. There are four frames of reference that clash in its structure. The oldest and most dominant one is based on a nineteenth-century grid – a radiant system which determines the monocentric city model. The Study for Wrocław Spatial Development tries to change this totally outdated model by imposing the belts system as a direction for development, in which residential belts are interspersed with industrial ones. Inconsistency of its realization is revealed by a spontaneous development of buildings on the city outskirts, which has taken place over the last several years of the transformation period and is limited only by the city's topographic barriers (rivers, forests) and infrastructure (railways, motorways, airport). The last to slowly mark its share is the ring system that is based on the ring roads (Śródmiejska ring road, motorway bypass and the Eastern Ring Road still under construction) and has the potential for binding sites surrounding the access nodes. Given the complexity of economic and social processes, the effect of build-up of these systems is unpredictable.

In the text I present the outcome of analysis concerning the city peripheral areas that have been formed as a result of individual decisions of developers and individuals. The case study includes areas located along the southern border of the city: Ołtaszyn - Jagodno with its adjacent localities: Wysoka - Radomierzyce - Żerniki Wrocław. As one of the largest sprawl areas of the city, it illustrates the threats stemming from this process, but simultaneously it enables to test the flexibility of such sites in terms of opportunities for sustainable development. The analysis of the conflict of scales (regional, municipal and local) and morphology (intensity, consistency tissue, granulation and availability) of this planless and chaotic development leads to discovering its regularity, and above all, to determining reserves (i.e. uncultivated land) that can be used to increase the quality of urban life in the future.

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Residential segregation and housing policy in Warsaw Metropolitan Area

The purpose of the presentation is to show the progress of residential segregation in Warsaw Metropolitan Area and to indicate the extent to which housing policy modifies the phenomenon. In the presentation we will concentrate our consideration on selected results prepared within the project “Social segregation vs. spatial isolation. Housing policy in selected metropolitan areas in Germany, France and Poland”.

Residential segregation phenomenon, defined in terms of people living separately in various parts of cities, is treated broadly. For both the city districts and municipalities in metropolitan area socio-demographic features were selected for analysis and they were developed on the basis of accepted segregation indices (dissimilarity index D , isolation index P_x , delta index DEL , absolute centralization index ACE , spatial proximity index SP and modified location quotient LQ_p). The multidimensional and multifaceted analysis of metropolitan areas and the cities allowed the state of progress of socio-demographic segregation to be determined at the municipalities and districts levels, as well as their common features and features specific for particular areas. Moreover the socio-demographic features were correlated within characteristics that refer to the housing situation in the areas examined. The last part of the presentation will concern housing policy instruments improving access to the housing. We decided to present only selected results – so that to open a discussion on utility of existing measures and instruments for local authorities development strategies.

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Non-profit housing as a tool for metropolitan cohesion. The case of the Vienna-Bratislava region

Metropolitan dynamics are facing both diverging issues of competitiveness and cohesion. European metropolitan regions are dealing with these stakes at all levels, and services of general interest are thus questioned. One of them, social housing, represents an essential need and depends from public policies which aim to insure an equal access to housing for all types of population.

Trends to neoliberalisation of urban fabrics are reflected in housing policies that tend to promote a residualisation of social housing: this segment would be dedicated only to the most disadvantaged populations. But some segments are still devoted to a generalist conception of social housing, which aims at housing all populations. Non-profit housing, following the principles of cooperative housing (subsidized housing), is an intermediate form between market-driven housing sector and social, publicly-owned housing.

In order to seize the link between non profit housing and metropolisation, the Vienna-Bratislava region is a relevant research field. This region was often analysed in a top-down way through governance and cross-border cooperation issues which contribute to integrate this becoming metropolitan region into European dynamics. The objective here is to **challenge the cohesion effects carried by non-profit housing in the context of a growing region that is still facing disparities**. Indeed, the metropolitan region between Vienna and Bratislava is crossed by a national border but also by administrative borders since housing policies are regionalised and show different characteristics between the three *Länder*. Moreover this region is fragmented according socio-economic criteria, between metropolitan, suburban and rural areas, and demographic trends.

The main question which will guide our contribution is the following: **in a context of a fragmented region, to what extent is non-profit housing an effective tool to insure social and spatial cohesion of a becoming metropolitan region?** We form the hypothesis that this sector, which contributes to create spatial justice at the urban scale, in Vienna, could also alleviate disparities at the regional scale. A second hypothesis is that non-profit housing markets support the interconnection of various territories in order to create a metropolitan region “from the bottom up”, since there is no institutional region.

To achieve this goal, we developed a **research design based on a database gathering housing operations built by non-profit developers from 2007 to 2014**. By these means the repartition of projects and their adaptation (or not) to local socio-economic contexts can be analysed further.

The main findings are threefold :

- this specific housing construction contributes to a **territorial equity by exploiting local resources**, rather than a complete homogenisation of the region
- non-profit developers have a **social responsibility** which justifies housing construction even in areas where the viability is uncertain
- Non profit developers find **strategies to transcend regional borders**

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Intermediate social housing in France as an option for middle class? A case study of Grand Paris metropolitan area

The aim of this paper is to determine the role of the social housing in the metropolitan area of Paris (*Métropole du Grand Paris, MGP*) in order to address the housing needs of the population. Hence, this topic is in line with the classic discourse on the right to the city (Lefebvre 1968) and the role of public policies in addressing housing needs under difficult socioeconomic circumstances. Through the housing policy and the urban renewal, the diversification of the social housing stock is seen to create a social mix, which became a pivot in the recent scientific and political debates in France. The wide variety of research shed a light on different impacts of the social mix policy on the social composition (Lelévrier 2006; Prêteceille 2012; Lainé-Daniel et al. 2013), on the specificity of residential mobility of relocated population in the framework of social mix programs (Lelévrier 2008a, 2010; Lelévrier et al. 2007; Bacqué et al. 2010; Bacqué, Fijalkow 2012) or on the public/institutional actors in the process of attribution of social housing (Pinçon 1976; Lelévrier 2008b; Houard 2009).

In this perspective, this paper shall investigate the role of the intermediate social housing as a segment of the social housing in France, theoretically dedicated to middle social classes. This housing category embraces dwellings financed by different loans (mainly PLS and PLI). Albeit the rents in these social flats are greater when compared to other types of social dwellings, they are not necessarily occupied by the tenants with greater incomes as it was planned at the beginning (Joinet 2011).

Hence, this paper shall identify: (1) the specific distribution of intermediate social dwellings in different types of communes in the MGP in terms of their socio-economic types (François et al. 2011), and (2) the relationship between this distribution and the differentiation of rents in these dwellings. These quantitative analyses are based upon three different data sources: the register of the social housing (*répertoire sur le parc locatif social, RPLS, 2014*), the survey on the occupation modes of social housing (*enquête sur l'occupation du parc social, OPS, 2003, 2006, 2009 and 2012*), as well as Population Census (*Recensement de Population, 2011*).

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Enhancing the resilience of rural territories through utilizing human and social capital of young population

Development trajectories of rural territories and their vulnerability and resilience to outer threats are to considerable degree linked to their territorial capital. One of the facets of the territorial capital is human and social capital, including the capital of often marginalized cohort of rural youth. The term youth is in this context understood as the population in the age range from 15 to 26 years.

Adoption of the local planning and policies that build on the human and social capital of the target group of population and reflect the need of their inclusion has the potential to contribute to the increasing resilience of rural territories and prevent negative trends in development trajectories of rural localities and regions such as depopulation, brain drain, stagnation, lack of innovations or generation gap. Stabilisation of the young population in rural territories might be helpful for lowering vulnerability of these territories.

The aim of the presentation is to provide the insight into the topic of human and social capital of rural territories from the narrow perspective focused on rural youth aged below 26 years. The presentation will provide the proper analysis of the most common characteristics of these rural inhabitants and their role for endogenous potential of rural territories together with the possible ways of utilizing this kind of territorial capital. The content of the presentation would embrace the definition and overview of the specificities of rural youth, reasoning for the importance of their inclusion to the policies and local processes as well as the description of practical approaches to making use of the young population through their inclusion.

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Landscape memory and its importance for the future land use planning

Aim of the paper was to record visible and invisible landscape changes on different landscape level in six selected microregions in the Czech Republic. Changes of the landscape macrostructure were evaluated based on the statistical data from 1845, 1948, 1990 and 2013. Changes of the landscape microstructure were compared on the base of old maps, aerial images and field experiences. The area of an arable land was the largest in 1845. Since then it has been decreasing – more in mountain areas, less in lowland ones. It was replaced by forests, grasslands and urban areas, depending on the vegetation period, physical character and vicinity of urban centres. Results show that the microstructure recorded great changes in the communist period: large expanses of fields, irrigation and drainage measures, windbreaks, non-rural buildings in the countryside. Contemporary changes are connected mostly with urbanisation of the landscape.

Different landscapes were impacted by changes in different ways. Suburban landscapes differ from landscapes of intensive agriculture as well as landscapes in lowlands and highlands. Moreover, historical development resulting in different relation of inhabitants to their landscape could differ also due to the landscape changes.

Analysis of landscape microstructure and macrostructure of selected areas was used to determine the driving forces of landscape structure changes and understanding the functioning of the landscape. The results represent a comparative basis showing the current status and further development trends of landscape structure. The next stage of the research is to complete and confront obtained results with mental reflection of landscape structure and the appearance of the landscape in general in the memories of local people. This information will be gathered through interviews with residents.

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Significance of family allotments in urban policy: the case of the Poznań agglomeration

In advanced countries agricultural production in cities occupies a special position in their spatial policies and is financially supported by their authorities. Today it is emphasised that urban land in agricultural use performs not only productive and economic functions, but also many more of great importance to a city, including ecological, health- and landscape-related, recreational, and social ones.

In Poland, after the period of its economic and political transformation, one can observe a dynamic expansion of urban areas and their strong pressure on agricultural land most valuable in productive and landscape terms. In conceptions and documents of the spatial development of urbanised areas, agricultural functions tend to be marginalised or perceived as specific to rural areas.

A special form of urban farming is gardening, including allotment gardens, which have a rich tradition and a history more than a hundred years long. The reasons for the appearance and development of allotment gardening should be sought in socio-economic changes connected with the period of industrialisation. What is alarming today is the opinion that those plots of land supposedly restrict the spatial development of urbanised areas. In addition to their numerous socio-economic functions, allotments are an important element in the implementation of the idea of sustainable development, and as such they should play a special role in the spatial policy of the Poznań agglomeration.

The aim of this study is to determine the number, structure and distribution of Family Allotments within the Poznań agglomeration. A survey research was conducted among their owners in order to establish current uses of the allotments. An attempt was also made to formulate recommendations for a spatial policy of the agglomeration giving special place to Family Allotments.

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The characteristics of NIMBY type siting conflicts in rural areas of Poland

The topic of the analysis are siting conflicts in which main actors is the local community – inhabitants who oppose burdensome, in their opinion, investments in the vicinity of residential areas. Such siting conflicts are very often caused by NIMBY syndrome.

There are several factors that determine the siting conflicts in Poland. In the period of political transformation and especially after the accession to the EU there has been observed intensified capital and investment flow. Poland is making up for long-standing neglect in the sphere of infrastructure. The country is obliged to meet the European requirements concerning waste management and renewal energy. The next factor relates to spatial planning: there is insufficient area covered by spatial plans, the spatial plans are mostly small and change very often.

The NIMBY type siting conflicts in rural areas and small towns of Poland were identified on the basis of a query of 48 regional press titles (gathering articles published in electronic version in the period 01.2007-03.2014). As a result of this query information was collected on almost 500 conflicts exhibiting symptoms of the NIMBY syndrome in rural areas and small towns. The most numerous group of the NIMBY objects were related to technical infrastructure, in particular the ones intended for electricity production and transportation.

Approximately 20% of all NIMBY objects were wind power plants. Protests of local communities against such investments were registered with a varying intensity in all regions, not only those traditionally “windy”. There can be observed a growing social trend in Poland for acting against location of wind power plants, following the experience of similar anti-wind movements in Western Europe. The important spatial characteristics of siting conflicts is their concentration in the suburban zones in the vicinity of largest Polish cities. Almost half of the identified conflicts concentrated in the interval of 40 kilometers to the cities and with the increasing distance their number significantly decreased.

The results of a survey conducted in 116 communities show that activities undertaken by local inhabitants in order to counteract unwanted investment were similar in most cases regardless of the investment type. The fear of investment siting stimulate local public participation and interest in spatial planning. The inhabitants collect signatures under a petition to local authorities, they are active in organizing meetings themselves and taking part in meetings organized by local authorities or investors, submit comments and proposals to the project of decisions or spatial plans, acquire allies from among external institutions and organizations. The influence of action taken by investment local opponents on the outcome of siting proceedings was crucial or significant in 65% cases. There are more cases in which the opposed investment didn't come into existence than cases in which the unwanted investment was put up.

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Relocation of firms within metropolitan areas in Poland – main characteristics

Relocation of economic activity is a key subject in contemporary academic discourse. There exists a fair amount of research on the spatial and strategic aspects of this issue, which is examined from the perspective of decision-making behaviors of individual companies (for example: Pellenbarg 2010; Pellenbarg et al. 2002) and its consequences and determinants (Pen 2000), as well as in the context of a wider set of actors and some wider global trends.

The purpose of the presentation is to show the scale of business relocation in the metropolitan areas of Warsaw, Kraków, Łódź, Wrocław, and Poznań. Changes in the rate of relocation will be discussed for the last two decades. Research was performed on all companies in the study area employing at least 10 workers (6414 firms altogether). Metropolitan areas in Poland are experiencing a rapid rate of business relocation from the central city to suburban areas (see Table 1). Suburban townships with special economic zones are especially popular relocation targets.

Table 1. Scale of firms relocations in Polish Metropolitan Areas

Metropolitan area	Number of firms**			Relocations		Type of relocation	
	Totally	50 employees and more	10-49 employees	Firms with relocation/s	Firms without relocation	Internal	External
Wrocław OMA*	571	210	361	190	381	49	141
Wrocław CORE	748	748	.	315	434	231	84
Kraków OMA	329	131	198	111	218	32	79
Kraków CORE	892	892	.	333	559	247	86
Poznań OMA	1080	328	752	305	775	82	223
Poznań CORE	690	690	.	232	458	169	63
Łódź OMA	385	149	236	100	285	33	67
Warszawa OMA	1719	606	1113	564	1155	149	415
TOTALLY	6414	3758	2660	2150	4265	995	1155

*OMA – OUTER METROPOLITAN AREA

**according to HBI

Source: own studies.

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A case of geo-political uprooting and its implications

Local and global geo-political forces may influence the life course of residents of a specific region. The present research explores an Israeli case study of regional uncertainty and instability due to a relocation that resulted from national geo-political processes, and the different policies used to cope with it.

In October 2004, the Israeli government decided on a "disengagement" process: a unilateral withdrawal of military forces from occupied territories in Gaza Strip and Northern Samaria in the West Bank, and dismantling of 25 Israeli Jewish rural settlements, with a population of about nine thousand. Although the specific dates of the withdrawal process were pre-announced, many of the settlers did not know where they would move to and how they would continue their lives. Hence, they experienced a deep feeling and reality of uncertainty.

Data was gathered two and a half years after uprooting by face-to-face interviews with a sample of 120 evacuees. The research examined their reactions of settlers towards the evacuation and its uncertainties, the positive and negative economic, emotional and social effects of the spatial transferring, their feelings of attachment, sense of place and cohesion towards their communities and regions of residence pre and post uprooting, and their sense of vulnerability and resilience. We compared two groups of evacuees: those who preferred to relocate with their former community and regional friends ("Communalists"), and those who chose to relocate individually ("Individualists"). It was found that Individualists were in a better position than Communalists, in both objective and subjective terms. Hence, a community is not necessarily a guarantee for coping better with uprooting.

The table demonstrates, as an example, the uprooted people's evaluation of their success in solving problems caused by uprooting:

Solved problems ^a		Mean		t-test
		Com. ^b	Ind. ^c	sig. ^d
Practical problems	Residence	2.5	5.9	.00 ***
	Finance	2.7	4.3	.02 *
	Employment	3.6	4.6	.22
Functioning problems	Emotional distress	4.9	4.7	.76
	Children problems	5.7	6.0	.68
Solving problems index		3.8	5.1	.01 **

Notes:^a Likert measurement scale: 0 = not at all, 10 = to a great extent.

^bCom.= Communalists, ^cInd.= Individualists, ^dSig. = Significance value.

* $p \leq .05$; ** $p \leq .01$; *** $p \leq .001$ (two-tailed tests).

The paper discusses ways in which a geo-political decision of uprooting can be administrated so it would have less negative effects on the evacuees, and ways in which the community's social capital can be used to assist them.

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Resilience versus Sustainable Development and Sustainable Livelihoods in the Local Context

The paper examines meanings attributed to the concept of resilience in the recent academic writings concerning local social and economic strategies. Differing ideas on the relationship between the notion of resilience and those of sustainable development and sustainable livelihoods are presented, analysed and classified in order to clarify main approaches. According to some authors sustainability and resilience are two separate concepts stemming from two different world views, whereas for others resilience is just one of the aspects of sustainability. There are also texts where both concepts are treated as nearly synonymous. Main trends within the approach will be identified.

The author makes an attempt of explaining main reasons of the growing popularity of the notion of resilience in both, the academic and the non-academic discourse and of assessing its potential impact on the present-day research agendas concerning local social and economic dynamics as well as trends within local governance patterns. Following her interests in cultural aspects of local 'development' she also discusses cultural issues involved in the resilience-oriented thinking on local communities and their dynamics..

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Cubans: a Vulnerable Society?

This article seeks to answer what are the elements that weaken the behavior of Cuban society and enable us to define it as vulnerable. At the same time, we analyzed the conditions that reinforce the inhabitants of the island. The study is the effect of more than three years of research thanks to the "Qui Vadis Cuba? Implications for Europe and Poland" project which was directed by K. Dembicz.

The changes that are taking place in Cuba in recent years, and especially after the resumption of the relations with the United States allow us to think in the Cuban society as vulnerable. Also we try to do a comparative analysis with Central European experiences.

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**Territorial uncertainty of Podlasie region.
Regional identity vs. administrative division**

What is today referred to Podlasie is rather a *mélange* of various concepts - geographical, historical, ethnographical, etc. - and therefore delimitation of this region is challenging and ambiguous. From the physico-geographical point of view there are no distinct natural components allowing for its explicit separation, although previously there have been several attempts of regional delimitation (conducted for instance by Kondracki or Dylikowa).

Podlasie has always been a borderland region, in which numerous influences have clashed for centuries leading to the formation of a multicultural and multinational region, which even nowadays remains ethnically one of the most diverse part of Poland. Moreover, there has been a noticeable discrepancy between the terms Podlaskie Voivodship and Podlasie region. The first one, being an administrative unit was initially formed in 1569, whereas Podlasie as a cultural region has never undergone official delimitation as it has generally been perceived as an “agreed upon” region of rather vague and relative borders. These two spatial units have often been confused and mistaken by the outsiders. The last administrative reform in Poland of 1999 resulted in the formation of Podlaskie Voivodship, much of which includes areas beyond the historical as well as physico-geographical region of Podlasie. Furthermore, areas that have always been perceived as Podlasie in both, cultural and physico-geographical terms have been omitted in the formation of the Podlaskie Voivodship within its current borders. This has led to territorial uncertainty among population living in both historical and administrative regions. Assuming that the level of territorial uncertainty is significant and dependent upon a series of factors, in the case of Podlasie one can even say of territorial disintegration. The formation of the Podlaskie Voivodship in its current borders is, without a doubt a challenge for regional policy in terms of establishing social bonds and in fact integrating different cultures.

The principal aim of this paper is an attempt to determine, present and assess regional identity of Podlasie. Appropriate methods of analysis will be presented. It is anticipated that the study results could be applied in analyzing vulnerability of territorial identity to administrative reform as well as correlating territorial uncertainty with local and regional development.

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New trends of uncertainty and vulnerability of museum development in Ukraine

The main role in development of Ukrainian national identity together with mass-media, education and culture fields belong to museums as traditional educational institutions. They are the main institutions of nation's memory. They keep, investigate and popularize information about ethnic identity of the nation, the environment of its existence, its achievements in various fields, its connections to other nations on the world and so on. Each region in Ukraine has its own peculiarities of nature, history, economic and social development and also has its own prominent personalities. Museums of different profiles and ranks provide us with the information about uniqueness of different parts of unified Ukraine. Furthermore, they can pass such information to future generations.

The growth of museum institutions quantity is registered with the acquisition of state independence of Ukraine. There are two periods of particularly rapid growth of museum institutions quantity. The first one (1991-1995) was connected with the democratization of the society, liberation of the spiritual life from Soviet ideological constraints as well as with people's desire of self-identification development. In this period of time, the main museums were created permanently based on public initiative in spite of systemic economic crisis, reduction of financial resources and trade deficit.

The second period of time (2006-2010) was developed as the result of consistent state policy of museum building conducted by President Viktor Yushchenko. During the first period of time, the main growth of museum quantity was registered in Eastern and Central regions of Ukraine. During the second one - the main growth of museum quantity was observed on the territories with unique museum resources in small different parts of Ukraine. This process was based on Government and Presidential financial support. The highest rates of museum quantity growth during all period of state independence of Ukraine were developed in the Western and Central regions. These ones are characterized by the lowest number of museum institutions existence at the time of totalitarian USSR regime as well as characterized by a significant growth of museum institutions quantity after the state independence of Ukraine.

Ukrainian regions have a very different quantity of museums due to specific historical and cultural development, economic opportunities, state or business support of museum development. The largest quantity museums are located in the Central, Eastern, Northern and in the different Western regions, except of the Capital city of Kyiv and the Autonomous Republic of Crimea. The lowest quantity museums are located in the South regions of Ukraine. Population provision with museum services determines their ability to effectively implementation of educational activities but not the total number of museums. Some regions with micro quantity of museums and also the part of Eastern region leaders came last by the index of population provision with museum services. Inhabitants of these areas have no adequate accessibility to museum collections and not familiar with museum exhibitions. They cannot obtain scientific information about their land settlement, ethnogeny, prominent events and personalities. Cultural and educational activities of such museums are limited and cannot support the development of national identity and people's active state position formation.

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**Participatory budgeting in different democratic contexts.
Comparative studies from Wrocław (PL) and Rotterdam (NL)**

Many cities introduced public budgeting as a tool integrating local societies and helping to meet citizens' needs by realizing their own projects and introducing spatial solutions in their neighbourhoods. This particular tool can play different roles in the development and policies of cities. Not only because of its social or spatial aspects, participatory budgeting is, on one hand, very much welcome, but on the other – criticized heavily. This paper aims to spotlight cases of two European cities – Wrocław (Poland) and Rotterdam (The Netherlands). The chosen cities have similar populations of around 600 000 inhabitants; both introduced the participatory budgeting at the same time (in 2013) and so far three editions were organised. Wrocław and Rotterdam also had similar budgets for implementation of citizens' projects. But beside these common conditions, cultural, demographical, economical, and political contexts/settings are different.

The main analyses in this research track specific procedures of civic budgeting in chosen cities as well as results and accomplished projects. Discovering what types of public developments were executed thanks to inhabitants' ideas and what advantages or disadvantages can be named by citizens and authorities so far is likely to shed light on the role of civic budgeting in city management. The principal outcome of the research may be useful to recognise and describe shared challenges for participatory budgeting in European cities and to review the ways realized projects are able to affect city structures. It can also prove what impact cultural, demographical, economical, and political conditions have on the process and results.

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Spatial and temporal dynamics of urban sprawl in Bucharest Metropolitan Area over the past century

Urban sprawl refers to the extent of urbanisation within and beyond the city borders mainly driven by several demographic, economic, socio-political and natural driving forces. In Romania, urbanization and suburbanisation processes have been the foremost urban development stages that affected the Romanian towns in the last one hundred years. Bucharest Metropolitan Area acts an urban-rural structure organised into one core city (Bucharest) and over 100 administrative units (LAU 2 level) gathering over 2,500,000 inhabitants. Over the past century, the study-area was subject to multiple spatial transformations in terms of changes in the structure of land property, mainly related to land reforms (1919-1921, 1945), centralisation of agriculture, urbanization and industrialization during the communist regime (1945-1989) and, specific suburbanisation-related spatial transformations, mainly at the urban-rural interface (e.g. urban sprawl in the surrounding of main cities, slow-down of agricultural transitions and loss of pastures) occurred after the fall of the communist regime (1989-to date).

The current paper is aiming to analyse the historical urban sprawl-related driving forces and patterns in Bucharest Metropolitan Area over the past century with a special focus on the post-communist period (after 1990). The authors used binary logistic regressions (BLR) integrated with GIS analysis based on multi-temporal satellite images and geospatial data. Thus, a series of complex analysis of the build-up areas dynamics through relevant spatial indicators computed at LAU2 level have resulted: *Expansion, Local Expansion, Annual Growth Rate, Trend*. Moreover, in relation to some of the main drivers of change, relevant indicators grouped into several clusters were computed: demography (e.g. population growth, ageing, migration, employment), accessibility (transport and technical-edilitary infrastructure), services (e.g. education, health), functional areas (e.g. industrial and logistic parks, commercial areas, residential projects), natural (e.g. proximity to forests and water bodies, seismicity). The resulted outcomes will outline the current patterns of sprawl and, subsequently, future sprawling trends can be predicted.

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Review of parking policies in the case of medium-sized Polish cities

The development of car transport in Poland and the consequent increase of importance of individual transport generates demand for new parking areas. As practice shows: the uncontrolled increase in the number of parking spaces is not able to satisfy the " parking hunger." Parking problem requires a global approach.

A growing number of Polish cities, where the authorities implement comprehensive parking programs modeled on Western European solutions, covering: determining areas excluded from the traffic, paid parking zones or locations of car parks in the P&R system.

The aim of the article is an analysis of planning documents, studies and parking policies in medium-sized towns and synthesis of the material. The study provides an overview of planned solutions and attempt to assess the effects of their implementation, not only to solve the parking problem, but also improve living conditions in downtown areas threatened by adverse demographic processes.

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Threats posed by urban sprawl in the suburban zone of Warsaw in the light of spatial analysis of dispersion of development

Urban sprawl is a phenomenon occurring in the Warsaw metropolitan area, the most populous monocentric urban agglomeration in Poland. Several studies attempted to deal with the subject and presented interesting outcomes based on the spatial analysis of the processes (Gutry-Korycka 2005, Degórska 2012, Werner *et al.* 2013)

The author of this study is working on the project aimed to identify the influence of various methods of measurement (indicators) and various spatial scales on the analysis of concentration and dispersion of built-up areas in the Warsaw urban agglomeration.

The presentation is supported with preliminary results of the spatial analyses in GIS working environment showing the dispersion of the development in the suburban zone. In the first stage of the project the focus is on the static, one-time analysis, using methods of measurement for both point data and polygon data on buildings and built-up surfaces (Kostrubiec 1972, Boots, Getis 1988, Mitchell 2005, Solon 2005).

In the study presented an attempt is made to identify specific areas in the suburban zone of Warsaw which are the most susceptible to the threats posed by the spontaneous development of new buildings. These threats are seen as a direct or indirect effect of the suburbanization processes having impact on the natural environment, visual landscape, social and technical infrastructure, local economy and social linkages.

The examples of threats posed by the intense suburbanization in specific gminas (local communes) are given with reference to the relevant reports (Kowalewski *et al.* 2013), local spatial planning and strategic development documents, and supplemented with photographic documentation.

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Determinants of company relocation in major metropolitan areas in Poland

In contemporary academic debate, there is wide discussion concerning relocation factors, which exert influence in the relocation decision-making process. Such factors include access to global networks, company size, rate of innovation, industry type, and many others. This presentation is designed to add to the conversation. The purpose of the presentation is to show data on company relocation within five major metropolitan areas in Poland – Warsaw, Krakow, Lodz, Wroclaw, and Poznan. Both quantitative and qualitative research were conducted. Quantitative research was performed on all companies in the study area employing at least 10 workers (6414 firms altogether). For quantitative research more than 120 large and midsize companies were identified. Each company received a paper survey that sought to identify the reasons for each given relocation. All paper surveys were properly completed.

The presentation discusses the survey results by identifying the deciding factors that had triggered each given company relocation. The survey results are shown with respect to type of business activity (see Table 1), company size, length of operation, and share of foreign capital in each company. In summary, the survey made it possible to identify the key determinants of company relocation in major metropolitan areas in Poland.

Table 1. The scale of relocation depending on type of activity

PKD section	Share of firms (%)	
	Firms in the study area (in general)	Firms after relocation/s
A and B	1.66	1.32
C	27.90	30.50
D and E	2.03	1.14
F	10.89	9.15
G	25.14	29.30
H	4.09	5.45
I, J, K, L	11.06	8.53
M	6.19	5.10
N, O, P, Q, R, S	7.42	4.75
Total	100.00	100.00

Source: own study.

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The long-run social impact of economic crisis

The economic crisis started to spread out in 2008 has affected economies, societies and regions in a different way in Europe. The direct economic effects of the fiscal aspect of crisis manifested in a very short run: breakdowns in economic performance, business restructuring and lay-offs resulted in a quick rise of unemployment rates etc. After the shock of the first crisis years, most of the European economies find a way back to a more favourable but moderate path of development, due to the improvement of global economic and financial environment and the (different degree of) resilience of countries and regions.

Beside these economic effects, the crisis had/has a severe social impact as well by directly or indirectly affecting the continuously changing social conditions. Crisis related cut-backs, institutional changes and other austerity measures might had an instant impact on the access to different services, while worsening perspectives of earning a living launched many unfavourable processes in social environment too. But contrary to the most direct economic, financial and labour market-related symptoms, several crisis-related effects on social conditions take longer to materialize.

Several years after the beginning of the economic crisis its social effects might be recorded more reliably. In this way, the paper attempts to introduce various fields of social life and processes where the social impact of economic crisis still operates or can be recognized (e.g. changes of health perspectives, redirection of migration patterns caused by economic motives, labour market and demographic changes, housing anomalies etc.). The paper attempts to have a stronger focus on social impact of crisis in the field of education by analysing the case of Hungary. Beside the illustration of potential crisis effects related to education, regional dimensions of the phenomena are also analyzed (with an outlook to East Central European countries).

The paper also takes into consideration the following questions in order to achieve a better understanding on the nature of impact of economic crisis on education and qualification conditions and services. How effects of crisis can be recognized in processes in the field of education, and how they can be separated from more general processes of social environment? How institutional changes or cut-backs affecting education materialize in long-run social consequences? And what are the potential future risks related to the phenomena which are hardly or only indirectly visible in current social processes?

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Spatial concentration of industry in Europe: Evidence for Germany

The matter of spatial concentration has been quite important recently as it includes an economics effect in itself. Because of increasing enterprises' scales, technical and economic indexes improve. In addition, the concentration of large manufacturing capacities, labor and physical resources inside a single venture creates an opportunity to use general means of production more efficiently. Thereby it is possible to lower the costs of production and increase workforce productivity.

In the international theoretical and empirical literature on point of spatial concentration of production (Mills, 1967; Mirrlees, 1972; Krugman, 1993; Quigle, 1998; Shefer, 1973) it is stated that distribution of companies in close vicinity to each other amid large agglomerations boosts their productivity and growth rates due to the effects related to the scales of demand and supply markets, transaction costs' economy, joint and more efficient usage of production resources.

The research is based on a panel dataset of 21102 observations for 3477 companies in Germany, which are located in 83 cities (14 states) and 9 industry sectors. The period of the research is 2007 – 2014.

During the research the author analyzed dozens of empirical studies, based on which the variables for the models were chosen. Also, the agglomeration effects of localization and urbanization were calculated. The author has built linear and non-linear regression models to evaluate the influence of various factors, including agglomeration effects influence on the quality of an enterprise workforce.

It was found out during the research that localization effects positively influence the quantity of companies' employees, while urbanization has negative effects. Moreover, the number of a companies' employees mostly depends on the region and industry sector. The larger the region and its population, consequently the labor force, the more influence have agglomeration effects in this region. The increase of an enterprise lifespan positively influences the quantity of its employees: 1 additional year of company's existence adds to it 21 employee on average.

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The main directions of reforming Ukraine's regional policy

The urgency of reforming Ukraine's regional policy is connected with political and economic challenges, which threaten security of Ukraine's territorial integrity, as well as with the need to implement key provisions of the EU-Ukraine Association Agreement. Reforming of regional policy involves introduction of a new ideology in state administration of regional development, local self-government, territorial organization of power in Ukraine based on the principle of subsidiarity.

The reform provides transformation of existing two-tier Ukraine's territorial structure to three level according to NUTS 1, NUTS 2, NUTS 3. Introduction of NUTS in Ukraine can be considered as one of the important steps towards enabling Ukraine's accession to the single European Statistical System, which will provide a unified, transparent and effective model of statistical monitoring and based on it - implementation of an effective regional policy.

Reforming of existing Ukraine's territorial structure envisages creation of first degree units - communities (group of villages, settlements, towns); second degree - districts that will cover several modern administrative regions. Third level will be presented by economic areas that be created by combining existing regions in accordance with the level of NUTS 1.

Currently implementation of decentralization principle and strengthening the effectiveness of local government at the community level is a baseline that meets NUTS3. Aims to increase the powers of local communities in their relations with the center, concession of a right to creation and implementation of their own development strategies, concentration needed for personal development, volumes of financial resources. In carrying out decentralization question about financial support of the community is very important based on securing on them stable sources of tax revenue, differentiated provision of educational and medical subsidies, taking into account regional differences.

Due to the fact that the current second (district) level of Ukraine's administrative - territorial division does not meet NUTS 2 (150-800 thousand of people), integration of districts is expected. Territorial unit of the second degree district would cover several modern administrative districts taking into account existing settlement systems.

NUTS 2 should deal with matters that administrative districts in the current framework cannot solve: protection of public order: combating the disaster, flood and fire protection, maintenance of general hospitals, social assistance, unemployment, construction of roads.

For quantitative parameters of population there is no NUTS1 level administrative structures in Ukraine. Existing 24 regions correspond to NUTS 2 level. In the future is expected reducing number of areas, combining them into economic regions that correspond to NUTS1 level.

Is expected to transfer to NTS 1 level maintenance of transport infrastructure of regional importance, specialized health care and specialized secondary education, the development of culture, sports, tourism, providing a higher level of service (higher education, health care, cultural institutions).

The centers of selected economic areas should be large cities, in which is formed or will be formed metropolitan spatial economic systems foundation of the national economy, a

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source of new ideas, technologies and innovations, generators, growth stimulants of economic development.

Extraction of economic areas will be directed to strengthen the spatial cohesion and maintaining unitary, providing increased efficiency of national, regional administration and local government, to overcome the divergence of economic development.

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The aging population and the relationships between demographic and economic dynamics. Case study: Poland

The problems related to the change in the age structure of the population and the demographic depression, are one of the main challenges of the twenty-first century. Changes in structure of the population depend on the evolution of the birth rate, fertility and mortality. The aging of the population in recent decades, however, is mainly due to the decline in births and to the emigration. The implications related to the increase in the elderly population, are not only economic, but also social, political, cultural and psychological, affecting on the rate of population turnover and the index of dependency.

The interrelationships between demographic and economic variables are one of the most fruitful and suggestive issue of new geography of the population that is not no longer understood only as a study of population dynamics and of the effects on the composition of the population, but also as analysis of the consequences on the socio-economic aspects of the trend of demographic indicators and vice versa, and on the change of the demographic trends in correlation with the economic performance.

Regarding the aging population, it is essential to identify the tools and the actions needed to manage the effects of this phenomenon in the social, economic and financial structure of the State.

The changing age structure and social relations, speeded by globalization and supranational integration, determine, therefore, strong shock to the principles of the welfare state, which needs a renewal in relation to changing conditions.

Poland is aging very rapidly. In 1950, the median age was 25.8 and half of the Polish population was younger, half older. Today it is 38 and it will be 51 in 2050. As the population is aging, it has also started to decline: from 38.6 million in 1995, to 38.3 million in 2014, to an expected 32 million in 2050. The 2014th was the third year in a row in which the population decreased after the growth recorded in the previous years (2008-2011). By 2035, therefore, Poland could have 2.5 million fewer inhabitants and an average age much higher. The process of aging of the population will have undoubtedly far-reaching consequences for the labor market. At the same time, non-working-age population will increase. This is a considerable increase of the demographic burden. This prospect threatens the economic stability and the country's role in Europe.

After analysing the demographic dynamics and their impact on economic growth, the aim of this paper is to explore how Poland can sustain its strong economic performance under these demographic conditions and what it will take to mitigate the impact of medium-term demographic trends on Poland's economy.

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Competitiveness, cohesion and sustainability in the urban development of the Romania's border regions

The Romanian border regions include 898 Local Administrative Units 2 (LAU2), out of which 88 LAU2 are towns. The population structure by residential milieu shows that 51.6% of the total population is town-dwellers.

Identifying territorial disparities in terms of competitiveness, territorial cohesion and sustainability in the urban space of Romania's border regions implies several research stages: selecting relevant statistical indicators, analyzing their territorial disparities, standardizing the absolute values of the selected 15 indicators; grouping the elementary indicators by three secondary indexes (competitiveness, cohesion and sustainable development), stressing out the main socio-economic development aspects: 1 – *competitiveness* (general employment rate, unemployment rate, number of higher education graduates/total population over 20 years old, variation rate in the number of employed population between 2002 – 2012, physiological density); 2 – *territorial cohesion* (population migration rate, average rate of population growth, total population, dynamic of finished dwellings (1990 - 2014), living floor m²/inhabitant; the demographic dependency index, the physicians/1,000 inhabitants); 3 – *sustainable development* (% of dwellings with access to sewerage system, forest-covered area, green space area/inhabitant, the consumption of natural gas for domestic use).

The final index of territorial development is assessed using the relative distances ranking method, adapted to the objective of the current study, in order to measure simultaneously the territorial disparities between the towns of the Romania's border regions and the urban space of each border regions on the one hand, and between the mentioned towns and the national urban space on the other hand.

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Post-Schengen spaces – the use of former border crossings at the Polish-Czech border

Following the accession of Poland and the Czech Republic to the Schengen Zone, as of December 21, 2007, all border crossings at the common border were closed down. In the consequence of the adoption of the Schengen Treaty, it is allowed to cross the border almost anywhere. Desecuritization processes and new geopolitical situation brought about opportunities as well as threats both for places where it was possible to cross the border in the past and places where it is possible currently.

The aim of the article was to examine the use of former border crossings at the Polish-Czech border. The analysis was based on the data obtained from the field studies conducted at all former border checkpoints along the Polish-Czech border in 2014. The analysis concentrated primarily on the use of former checkpoints properties and economic activity in the area of up to 500m from border crossings on both sides of the border. To assess current situation in investigation area ia. land use, type and function of the buildings, small architecture and the type of economic activity were examined.

Basing on the conducted research it can be stated that although some have found new uses as restaurants and retail centres, these old border crossing points are slowly disappearing. They have lost their former function and in most cases the new one have not yet appeared.

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From the core to peripheries.

The study of the Novosibirsk urban region under post-Soviet transition

The presented research focuses on the urban region of Novosibirsk - one of the most industrialized part of Siberia in the Russian Federation, which has developed as the effect of centrally planned decisions and has been recently experiencing internal functional changes due to post-Soviet transition.

To show the main characteristics of the city as the core of the region and its peripheral area, a case study was carried concerning territorial units which form the settlement belt along the Novosibirsk-Cherepanovo regional railway line over a distance of approx. 100 km (fig. 1). This belt was chosen because of the continuity of the settlement and due to the presence of different functional types of edge towns - from Berdsk, tightly connected to the core, through Iskitim, intensely industrialised during the Soviet era to Cherepanovo - a peripheral local centre, which are differently vulnerable to the recent socio-economic changes.

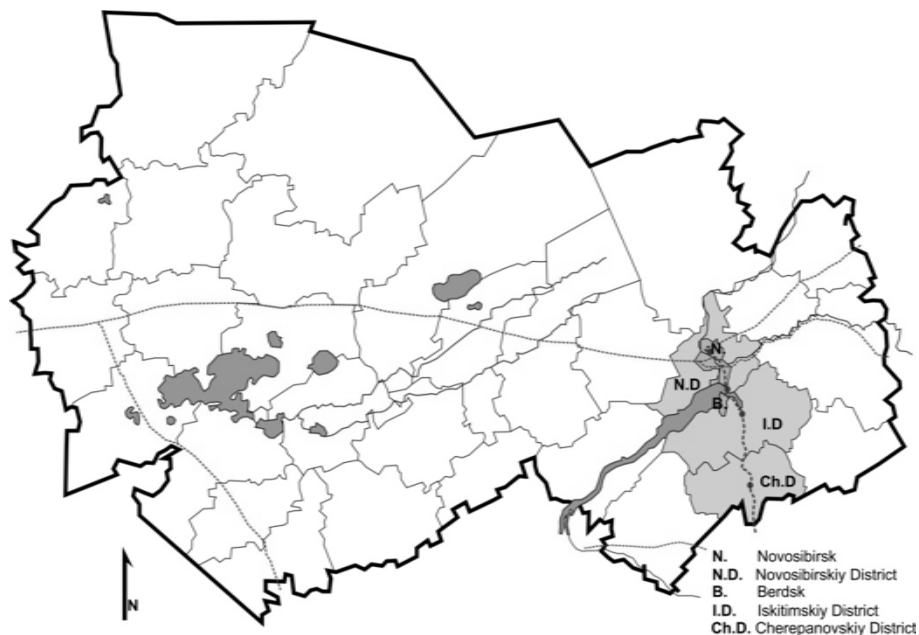


Figure 1: The territorial units selected for the study against the administrative division of Novosibirskiy Region into districts

Source: own study

The presented results show the general tendencies in the transformations of the Novosibirsk urban region's spatial structure, both in long-term perspective (the genetic view of functional development) and in contemporary circumstances related to the economic transformation of Russia. The identified structure of the economic base is not very beneficial to the formation of balanced urban functions and may be susceptible to various external influences in the future.

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Aridization processes with increasing average annual rainfall at a desert fringe, Northern Negev desert, Israel

Dryland areas are usually regarded as highly sensitive to climate change. A positive relationship between average annual rainfall and environmental variables is often assumed by many scientists for semi-arid and arid areas. However; existing global models are not yet capable of predicting accurately the evolution of regional climates and their possible impact on the environment. Furthermore, the global models fail to address an important issue: with decreasing average annual rainfall water resources may be highly dependent on the relationships between rainfall and surface properties which greatly influence the degree to which water will percolate or will be transformed into runoff, thereby significantly affecting the spatial redistribution of water resources. In other words, a given climate change would be expected to have differential effects in a rocky area, in a loess covered area or in a sandy area. The northern Negev area offers unique conditions for the study of the possible effects of the foreseen climate change along rainfall gradient under changing surface conditions. Two case studies are considered in the study. The first deals with the environmental effects of loess penetration into the area, during a wet climatic phase. The second considers the differential effects of biological topsoil crusts on the water regime along a rainfall gradient in a sandy area. The rainfall gradient is accompanied by other gradients (geomorphological, pedological, biological, etc). Data obtained draw attention to the complex relationships between annual rainfall, surface properties, water availability and ecosystem structure. The parallel gradients may have negative or positive effects on water resources and environmental quality.

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Areas at risk of the Russian restrictions on agri-food products. The nature of trade relations between Polish regions and Russia

In 2014 the Russian Federation imposed an embargo on the imports of some of the agri-food products (i.e. meat, fruit, vegetables and dairy products) from, among others, the EU countries. Russia is the key trading partner for Poland in the field of agricultural trade. With about 6.2% of the agricultural exports share, Russia is the third most important destination for Polish exports (after Germany and Great Britain). Prior to the restrictions, the volume of agricultural trade has been growing over the past decade. These restrictions may affect agriculture and food sector, however the effects of the embargo may be unevenly distributed between Polish regions.

In order to assess the potential impact of Russian restrictions on Polish regions, the study includes overview of the current state of the trade flows between Polish regions and Russia. Particular importance has been attached to the value and share of Polish regional exports to Russia in order to identify regional diversification of trade linkages. The production of agricultural sector and the food industry units is fragmented with many agricultural producers across the country, whereas food and agricultural producers or intermediaries exporting agri-food products are concentrated only in some regions of the country. The regions, specializing in agri-food products exports at all or mostly with Russia, are the traditional fruit- and vegetable-growing regions as well as the eastern-border regions for decades responsible for significant flow of goods to CIS countries.

Generally, the current economic and political situation may affect the most those of the regions that external trade relations in the field of agri-food products the most largely depends on trade linkages with Russia, which in turn might result in the complete distortion of market patterns (due to the temporary loss of a significant, close geographically market).

These considerations are a contribution (in the case of Poland) to the discussion on the impact of restrictions on the changes of patterns in international trade taking into account the volume and the structure of agri-food products at the regional level and perspectives of trade relations with Russia.

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Polish regions vulnerability to the challenges of contemporary economy

Presentation is based on book edited by Krystyna Gawlikowska-Hueckel and Jacek Szlachta, which was printed in 2014 by Wolters Kluwer business. Globalization and European integration changed role and functions of regions. For Poland after accession to EU in 2004 financing from European Structural and Cohesion Funds was of key importance. Poland applied decentralized model of European cohesion policy, with regional operational programmes as key instrument. Weak and peripheral regions were generally much more vulnerable to the consequences of global economic crises of 2008. The final result are growing regional disparities between richer and poorer regions. It seems that some polish regions are much better equipped to fight with new challenges. Key part of presentation are recommendations concerning EU and Poland's regional policy.

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Rural territories: searching for identity and optimal development strategy

Rural territories, the perception of their identities and different ways of their development potential exploitation is nowadays under the dramatic changes accelerated by the neo-liberal ideology and practices, generally accepted by the economically successful society in the era of globalization. The aim of the presentation is description of influence of these relevant changes for re-understanding of very often pragmatically defined "rural territories" and their different development strategies which are produced also as a re-action on the decreasing of importance of agriculture (primary sector) for the rural economy which can be nowadays characterized by the transition from production function to consumption one. The complementary theoretical and practical approaches to potentially successful rural development strategies (exogenous, (neo)endogenous, top-down, bottom-up, networking and clustering, place-based, people-based) will be presented and critically assessed. The presentation will concentrate on "open" problems associated with the "cacophony" of different (positive and negative) internal or external "development challenges" for rural areas, and the individual responsibility and management behaviour of rural stakeholders and decision-makers during the process of active searching and re-creating the new rural identities (or relatively passive acceptance of "status quo"), and/or during the preparation of win-win negotiating strategies about (economically, socially and environmentally) sustainable development of individual, non-homogeneous, structurally differentiated rural areas with their inhabitants.

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**Depopulation as a chance, not a threat to cities and regions:
a paradigm change**

Outflow of inhabitants along with decreasing rates of natural increase are commonly perceived as threats to social stability and economic welfare of regions and their inhabitants. Governments try to fight depopulation with the use of plentiful economic, social and legal-administrative tools. Interestingly, the increase of population of other cities or regions is also believed to be risky. Although rarely expressed univocally and directly, the present population of a place – a city, a region or a state – is therefore treated as a proper one, while smaller or larger number of inhabitants is recognized as inappropriate. This way the vague concept of demographic optimum is introduced into demographic policies of numerous spatial units. This wordless assumption is largely misleading, as the decrease of population may generate a lot of advantages for a city or region.

The paper examines common tools of active demographic policies along with their results. On the background of usually low effectiveness of these policies, advantages of depopulation are exposed. Regional policies enabling adaptation to changing demographic reality are proposed. Finally, a paradigm transformation in regard of approach to demographic change is postulated.

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**Are we prepared? Analyzing the Slovenian adaptive capacity to climate
change**

Climate change has been one of the factors strongly influencing the planning activity and regional development. Floods, heat and other phenomena stimulate us to take on a different perspective and to plan also for the unpredicted. The concept of resilience has been increasingly used to describe the cities and regions which are adaptive and promptly responsive. However, its introduction has not been carried out by the same speed and with the same meaning in all countries. Since the word resilience seem to be "just another buzzword" and Slovenia epistemic community is very small, the overflow of such concepts is not exactly welcomed. A small Delphi study was done on how well the term has been received in the society. The results show that while there is no general consensus about the translation of the concept into the Slovenian language. However, in the area of tackling the climate change an adaptation process is on-going and there are several relevant transnational projects focusing on studies, development of tools for spatial planning and regional pilot action. But is this enough?

In 2014 ministry, responsible for the environment, commissioned a study on how Slovenian government and regions are prepared for climate change adaptation. The data was gathered in two stages. Firstly, we distributed the questionnaire to relevant ministries, e.g. health, planning, interior; secondly, a workshop with relevant stakeholders (national, regional level; research) was carried out to assess the potential impacts of the climate change on the specific sector and among Slovenian regions. The results of a 6-month study are not inspiring.

Findings show that impacts of climate change are expected in several sectors of which the most exposed are agriculture, forestry, water and health, and will vary across the Slovenian territory – the regions under the highest pressure will be Pomurska, Podravska and Osrednjeslovenska. Several findings call for an immediate policy response: (1) only Osrednjeslovenska region is assessed as having adequate adaptive capacity, (2) basic research is missing such as regional scenarios for the future and (3) there is no systemic research done on the options and the efficiency of the sectoral adaptive processes in most of the sectors, except for the agriculture and forestry. More to that, the awareness about the urgent need for adaptation is very low both by the stakeholders and as expressed in existing policies. Therefore, the guidelines have been provided on how to proceed in the future to lower the level of vulnerability, e.g. by establishing a cross-sectoral government group on the issue and by taking a more proactive role of all the sectors, (in)directly affected by the climate change.

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Rural Development through Tourism: An Area of Conflicts

Research has shown that in Poland a large majority of local self-governments while building their development strategies perceive tourism as a chance to find and – further – to boost local economic growth, regardless of their factual tourist attractiveness. Needless to say, rural areas see their tourist values via the natural components of the environment. The commonness of this way of thinking and acting efface the problem of conflicts that result from human intrusion to the environment. One important issue, still not discussed enough in Poland, is the economic account of the local development through the tourist use of the natural values of the rural area, i.e. there is still a shortage of attempts to answer the question whether it is justified to “sacrifice” the environment for the purpose of the development goals when the number of possible solutions is limited.

Another issue still not well-realised by the local actors is the fragility and resilience of the natural environment. In this context, local components of large natural systems are threatened with destabilisation and breakdown.

In the conditions of the decentralised systems, they are the local entities (self-governments) which are responsible for environmental protection, social and economic development and spatial planning. However, at this level, the self-governments seem to suffer from a shortage of knowledge and skills.

An in-depth case study, constituted by research and empirical observation, was conducted in one of the village in Poland (Mstów, the Śląskie Voivodeship) which possess a high value of the natural environment, whose area is a part of the regional and national environment structures, whose local authorities are very active on the field of the development of tourism and – since being close to the city – is rapidly being built-up due to the outer suburbanisation process.

The main aim of the work was to raise the questions and start/contribute to the discussion on: 1) How should rural self-governments achieve the balance between the economy and the environment? 2) How to make the entities aware of the conflicts of interest? 3) Is the environment a threat to local development or – in opposite – is local development a threat to the environment and its resilience?

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Possibilities of cities in adaptation to climate change on Kecskemét example

Adaptation and mitigation to climate change is probably one of the most urgent tasks for all settlements, especially for bigger cities. This challenge can be approached from a regulatory aspect, where the focus is on energy savings and energy efficiency, or actions taken during heat waves. Another possible approach is to promote climate awareness, which plays an important role in adaptation, and focus on the management of green spaces and green infrastructure.

Keeping these in mind, in our work we attempt to show what options are available for cities in adaptation nowadays. As a starting point we investigate the adaptation capacity and potentials in Kecskemét, which is a relatively large settlement of Hungary with 114 thousand inhabitants. The city is located in the climate sensitive Carpathian basin, on the sand ridges between the Danube and Tisza rivers.

First we examine green infrastructure; which also includes green roofs and green walls besides green spaces. Currently there are no outdoor green walls in Kecskemét. That is why it is a really great opportunity to develop this potential. Assessing potential energy savings from applying green walls on municipal buildings is also part of our work, which put energy efficiency and modernisation to the focus. In connection with these, in our work we analyse the energy consumption of the buildings owned by the local government of Kecskemét, and the potential energy savings which could be achieved with their renovations. In this field consistent achievement of the objectives – like transition to renewable energy sources – also results in reducing greenhouse gas emissions, which contributes to climate protection and not incidentally, leads to economic benefits as well.

Heat waves are one of the most significant signs of climate change nowadays. In these situations there are several actions to take effect. Some of these are part of urban actions, and we try to investigate effectiveness of these actions, and we interpret the possibilities of government intervention. Most importantly, the number of emergency medical interventions will increase during heat waves, causing overloading the health care system.

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Landscape in memories – case study from the South Moravian village Božice

Project Landscape memory as rural heritage aims to map how the inhabitants remember their landscape and its changes during their lives. That is why mainly respondents above 65 years were interviewed. The expected project outcome will be the „Modern chronicle of the village“, that synthesizes acquired knowledge, archive video and audio documents, treasuring original and unique information.

Surveyed area is represented by the community Božice, which is one of the largest settlements (1541 inhabitants) of Hrušovansko microregion. The main factor that influenced the history and landscape of the studied area was a post-war expulsion of most of the German population and the arrival of new Czech colonists. Another contributing factor was collectivization in the 50s and 60s and also vicinity of the border with Austria (restrictions towards inhabitants and transformation to a peripheral region). Landscape of the study area is a gently undulating and intensively farmed Dyje-Svratka valley. Human activity strongly formed this area, mainly by agricultural activities (fields, vineyards, ponds, irrigation channels).

Debate with seniors and art competition for primary school pupils were already held in Božice municipality. Children painted a favourite place in the open countryside. Commonly, they painted the local wetland (Figure 1). Appreciation of the art competition was conceived as a public event presenting the project Landscape memory so the generation of parents of these children were approached and invited to discuss about their relation to landscape.

During the interviews, many surprises are discovered; recordings of the memory of a piece of land that has disappeared and younger residents have no idea about it. To such discoveries the project placed great emphasis, as they can be successfully integrated into local plans, and designed to recovery. The project could help to restore the valuable elements of the landscape as for example, in Božice village it was pointed out the defunct cherry avenue that led from the train station to the village center.



Figure 1: Wetlands near the village – favorite place for walks for residents

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A preliminary approach to the assessment of socio-economic vulnerability to dryness and drought phenomena in Bucharest Metropolitan Area

Over the recent years, the effects of extreme climate phenomena on agricultural crops, infrastructure and human health have become increasingly severe as a result of their complex interactions with the particularities of the urban/rural habitat as well as the social and economic factors. In Romania, these climatic hazards are affecting wide areas in the southern half of the territory. Thus, by its position in the south-eastern part of Romania, Bucharest Metropolitan Area is framing into the most sensitive area in terms of dryness and drought (Lower Danube Plain). The paper aims to develop a multi-criteria vulnerability assessment using both quantitative and qualitative methods. The research is seeking to identify relevant indicators in order to emphasize and assess various components of socio-economic vulnerability to dryness and drought phenomena using the statistical data available at LAU 2 level. As a result, three main categories of statistical variables and indicators were taken into account: demographic and social features (e.g. population, different vulnerable groups, medical care), economy (e.g. unemployment rate, employment in agriculture, the share of land covered with different land use categories) and public utilities (e.g. drinking water supply, sewerage system). Based on the resulted outcomes, the selected indicators will be grouped in three major indexes defining: demographic and social vulnerability, economic vulnerability and infrastructure vulnerability. Finally, an integrated socio-economic vulnerability index to dryness and drought phenomena (using Hull score, average 50 and standard deviation 14) will be computed. In order to point out some aspects related to climatic conditions of dryness and drought phenomena the authors computed some relevant climatic indicators (e.g. Palfai aridity index, Climatic Water Deficit, Thornthwaite Aridity Index) based on the meteorological data of the most representative weather stations in the study-area.

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Usage patterns of provisioning and cultural ecosystem services

The aim of the study was to determine usage patterns of provisioning and cultural services derived from local ecosystems. The paper presents the results of a questionnaire carried out in June 2014 and May 2015 among residents and tourists staying in the selected localities within the Suwałki Lake District in Northeast Poland (area of high conservation value: forests cover 63%, lakes – 10%) (53°56'N, 22°58'E). The method door-to-door was applied, 251 completed questionnaires were collected back. The survey was anonymous. The questionnaire comprised a list of 45 provisioning and cultural ecosystem services divided into 6 groups (e.g. food, recreation). Respondents had to indicate the frequency of use within the last 3 years and fill in basic demographic form regarding age, gender, education, source of income, place of residence etc. We investigated, what are the factors that differentiate respondents in relation to their actual use in the study area. Between-group comparisons and spatial proximity analysis was carried out. Also, the internal consistency of service list was tested (by means of Cronbach's α coefficient and factor analysis).

The results showed that the level of education is the socioeconomic factor that differentiates usage intensity of ecosystem services the most. Better educated benefit more from nature. Proximity analysis showed that spatial accessibility to water and forest ecosystems modifies usage intensity of chosen ecosystem services. Statistical and psychometric analysis revealed that the list of the proposed 45 services (benefits of nature) may serve as a consistent scale of usage intensity of (provisioning and cultural) ecosystem services (Cronbach's $\alpha=0.91$). Weak links with most of the analyzed sociodemographic and spatial variables, high internal consistency and lack of clear subscales suggest that the overall usage intensity of ecosystem services may be a kind of independent feature of personality.

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**International trade patterns of border regions: Dynamics of intermediaries
population and performance**

The performance of regional economies varies within the same country across a range of issues including those concerning foreign trade linkages. In recent years the evolution of Polish borders has been marked twice: firstly – in the early 1990s as a result of the system transition and secondly – due to the accession to the EU and then membership of the Schengen area. Thus over the past decades these changes have caused some evolution in regional economies as well as their level of internationalisation and foreign trade patterns.

Border regions in Poland, among others, are distinguished by the more pronounced intensity of the intermediaries' activity in foreign trade, whilst companies in industrial processing sector are less active in foreign trade compared to non-border regions. The analysis focuses on the process of gradual integration into the world economy of intermediaries located at Polish eastern and western border regions from a comparative perspective (internal vs. external EU border) in 2005 and 2013. The poster investigates the effects of the opportunities and constraints created at border regions over time on enterprise population dynamics as well as foreign trade performance.

The research leading to this poster has been financed from the funds of the National Science Centre – Poland on the research project: 'Regional diversity of intermediaries' activity in foreign trade – competitiveness and role in local economy' on the basis of the decision no. DEC-2014/13/N/HS4/03413.

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Modern chronicle of the village – case study Vysokomytsko microregion in the Czech Republic

The Landscape memory project maps the transformations in cultural landscape of the Czech Republic in the mental image of their inhabitants. It was necessary to identify, analyze and permanently document disappearing testimony in the memories of older generations. This testimony was made as a part of the cultural heritage of the village, in the form of so called “Modern chronicle of the village” using map outputs, field research, photographs and audio recordings of interviews with natives.

Target group were natives or old settlers (living in the village since the age of five) in the age of 65 and over. There were performed 10 interviews to obtain more objective view at the landscape structure. Interviews were performed directly in the field or in a public place with the current map, knowing a background of study area and syllabus issues of semi-standardized interview.

The Vysokomytsko microregion includes 28 municipalities with area nearly 200 km². It is a voluntary association of municipalities in the Pardubice region, which was established in 2001. There are more than 21,000 inhabitants, but the population density is below average. Three quarters of municipalities are villages with more than 500 inhabitants.

Vysokomytsko microregion is predominantly rural type (Figure 1). The Vysokomytsko microregion has the largest percentage of agricultural land in the Pardubice region in the Czech Republic. Arable land is covering more than half of the microregion. Forest area is quite small and widely dispersed, larger area of forests is in the north of the microregion. Permanent grass land covers almost one fifth of agricultural land.

Modern chronicle of the village was made as interactive media; containing recordings of interviews with eyewitnesses, accompanied with visual material locally associated with the described verbally locations or events. The results showed that mental ties to the land are often decisive for the formation of local identity and stabilize the rural population.



Figure 1: Vysokomytsko landscape

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Visualizing spatial development of border regions using GIS

Russia has land boundaries with 16 states (more than any country of the world) and is facing a tremendous variety of challenges related with its borders. It explains the need in spatially differentiated and multi-disciplinary approach to its borders' study. The development of integration in the Eurasian Economic Union and the Customs' Union of Russia, Belorussia and Kazakhstan, the need in cross border interactions with EU countries also determine its importance.

The objective of the poster is to analyze trends and dynamics of post-Soviet economic and spatial development of border regions of Russia and neighboring countries using GIS. The authors investigate the contrasts of natural and socio-economic features between neighboring territories: structure of their economy, dynamics of land use, transport network and communications, development and accessibility of the territory, use of natural resources.

The study comprises an analysis of dynamics and trends in the development of the borderland: the balance between the contact and the barrier functions of each pair of boundaries, the influence of the boundary on the everyday life.

Methodological basis of the study was the use of algorithms and processing of remote sensing data. For thematic data and modeling were used GIS technologies with the functions of spatial analysis, GIS modeling (geomodelling), cartographic data visualization. Complex application of the above methods, tools and data yielded many new results in the framework of the given direction - not only qualitative and quantitative characteristics of the object, but also a new level of understanding of the underlying processes.

The peripherality of the majority border areas issues a serious challenge for the development of Russian borderland. Cross-border cooperation is often difficult because of the depressed economy of neighboring territory. Even in the case of post-Soviet countries where borders shared recently a common economic space, there was a reversal of the national economies from the border.

Active integration and internationalization of economic life and rapid growth of the cross-border flows of people, information, goods, capital and energy leads to the fact that the state borders are losing part of its barrier function. Globalization and liberalization of the economy, the development of new technologies and communication gradually transform national borders from the barriers in the line of integration of social systems. At the same time in some parts of the border because of rising tensions between the neighboring countries, a strengthening of the barriers takes place.

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Example of GTFS data application for visualization and spatial analysis – the case of public transportation in Szczecin

The poster illustrates public transportation accessibility in Szczecin based on the timetables provided by the Road and Urban Transportation Authority in Szczecin (ZDiTM Szczecin). The use of public transportation timetables was possible by adapting them to the GTFS (General Transit Feed Specification) format as well as by applying GIS tools (Network Analyst). Furthermore, in this research vector arrangement has additionally been implemented containing spatial information on the most detailed population number at a given time (on grounds of census enumeration). The analysis is based upon public transportation model, which takes into consideration transit lines (implementing timetables) and pedestrian pathways with the mean velocity of 4.5 km/h. The application of timetables in analysis allows for employing a large number of simulations, which vary depending on the time of departure with public transportation. The destination place of commuters using public transportation is the city center of Szczecin. The poster shows the period of analysis covering time between 6:30 and 8:30 am on a weekday, aiming to apprehend the changes in accessibility during morning peak hours but also obstacles and facilities for individuals using public transportation

at rush hour. The main objective of this paper is to present the changes in public transportation accessibility (in time and space) using intervals of 5 minutes between the referring points and to capture the moment at the morning peak hours when theoretically most people have the highest accessibility to city center.

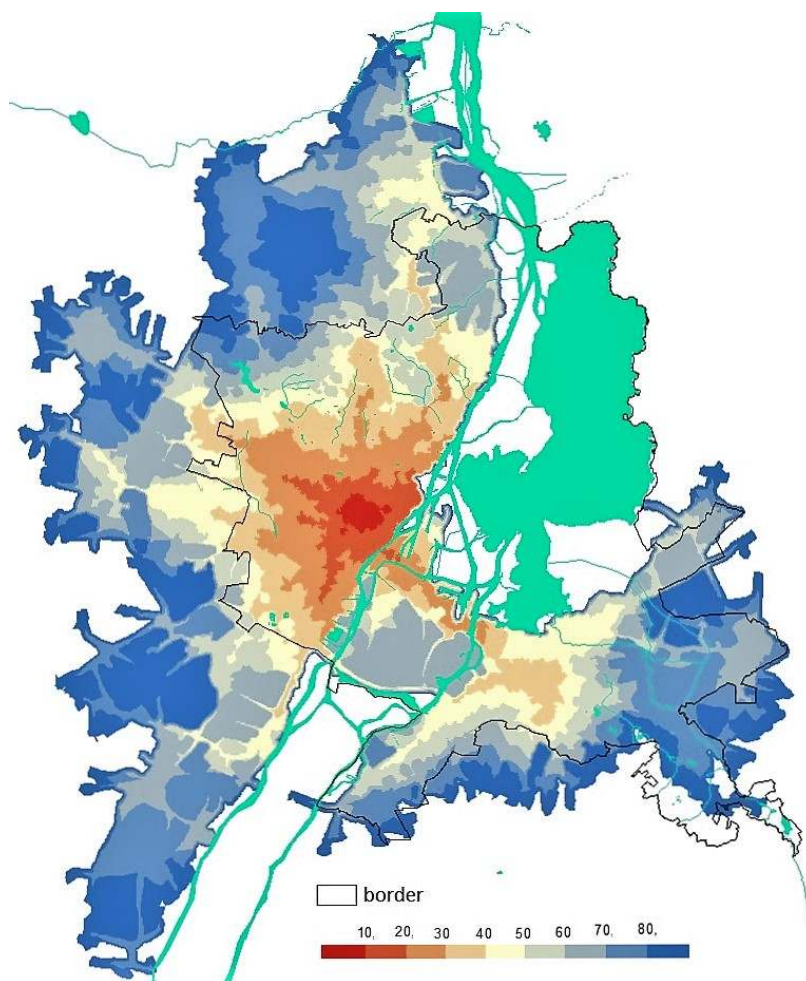


Figure. 1 Public accessibility in Szczecin

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Warsaw's nature reserves – their functioning and benefits for city residents

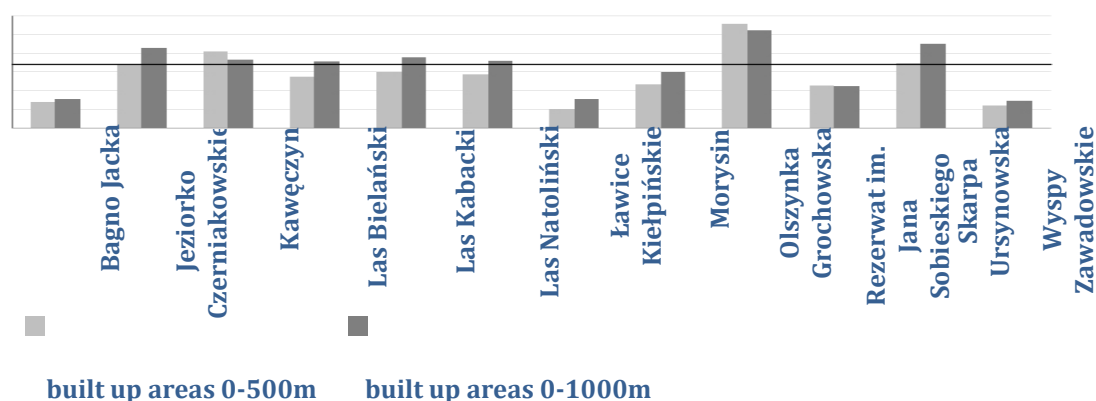
Nature conservation and sustainable urban landscape management can be effectively integrated when it is recognized, why, what and for whom nature is preserved (Borgström, Lindborg, Elmqvist 2010).

There is twelve nature reserves in Warsaw. Based on the protection plans, a literature review and observation, a set of threats was determined. The majority are related to human pressure. The most frequent problems constitute bicycles, horses, dogs, illegal car parking, littering, illegal bonfires and excessive exploitation. A serious threat is a development of new housing in the vicinity of the reserves' borders. It lowers a groundwater level and worsens water quality. Moreover, it brings a rise in a number of users and causes transformation of the landscape. Nature reserves become more isolated and ecological connections are disturbed (Borgström 2011). As a result, in some reserves, e.g. Jeziorko Czerniakowskie, activities such as sport, fishing, trade and dog walking, were allowed. To reduce such a pressure, a proper development of buffer zones is needed. Nature reserves in German cities are often surrounded by landscape protection areas, which are multifunctional and sufficiently equipped for residents' needs, preserving high natural values at the same time (Prominski, Maaß, Funke 2014).

This study investigates the surroundings of the Warsaw's nature reserves in two buffers: 0-500 and 0-1000m. Based on the LANDSAT 5 satellite images and using GIS, a percentage of built up areas was calculated (graph 1). As the results show, there is no significant difference between the percentage of built up areas around nature reserves and in the whole city. It can be concluded, that an existence of a nature reserve does not influence the level of urban development pressure. Such a situation constitutes numerous threats and land use conflicts, and very often also a residents' discontent.

When it is possible, buffer zones should be carefully planned and protected, since they lower direct pressure for nature reserves. To be socially and ecologically viable, they must be related to the protected areas (Borgström 2011). Introduction of various leisure, recreational and educational facilities in the natural surroundings, could be beneficial for people's wellbeing and socializing. The more multifunctional buffer zone (and where it is not possible a nature reserve itself) is, the more secure is a sustainable functioning of such areas (Johntston 1990). Nature areas are important for city residents, as they benefit our emotional, intellectual, social and physical functioning (Mostyn 1979).

Graph 1: The percentage of built up areas in the nature reserves buffer zones.



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