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# How to Attract and Retain Creative Class

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**Abstract**

Nowadays, relatively high attention of public policies, also from the EU point of view, is paid to creative territories and the promotion of the creative class. However, very few published studies have been conducted about the mobility and behaviour of the creative class in the spatial-development context. To contribute to the deeper research of this issue the paper analyses the results of published empirical studies on the behaviour and mobility of the creative class in various types of territories and compares them with the behaviour and location of the creative class in the Slovak Republic. Subsequently, reflecting the key findings it proposes the public policy recommendations that should contribute to attracting and retaining the creative class as an integral driving force of regional or local development.

In the empirical studies, the compared elements were the main research questions/hypotheses and results, the definition of the creative class, used methods, the factors of creative-class migration, and the policy recommendations, if they were proposed. Special attention was devoted to the issues of creative-class behaviour and localisation factors in the Slovak Republic based on the previous research findings as well as our own research results.

All studies confirm that the mobility of the creative class is only a little bit higher than that of non-creatives. Among the key factors playing a dominant role in the selection of the actual place of residence are personal trajectories, followed by good employment opportunities. That is why the strategies of public policy should aim at retaining the creative class, fostering the creative and diverse climate by developing new higher-education institutions, new creative-subject incubators, supporting networks and partnerships; then the economic and social benefits of the creative class for the territories may be expected.

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**Key words:**
Creative class, location factors for creative class, public policy, development

## 1. Introduction

Nowadays, in society the requirements for human capital have been increasing. The territories have to face their competition and look for suitable measurements how to attract and retain quality human capital. Highly skilled human capital in regions is associated with the strategic importance of economic success, but also with non-economic benefits, such as better health, longer lifespans, an active local community etc. With the transformation of the economies from industrial ones to the knowledge-based and creative ones, an innovative concept of human capital and knowledge has appeared – the creative class developed by Florida (2002). During the last two decade only a few experts (e.g. Hansen and Niedomysl 2008; Martin-Brelot et al. 2010; Argent et al. 2013; Faggian et al. 2014) have researched the behaviour of the creative class and the factors that influence their decision to settle in the cities or regions.

The paper deals with the actual and weakly researched topic. The aim of the paper is to analyse the results of empirical studies on the behaviour and mobility of the creative class in cities and regions and compare them with the behaviour and location of the creative class in the Slovak Republic. Subsequently, reflecting the key findings it proposes public-policy recommendations that should contribute to attracting and retaining the creative class as in integral driving force of regional or local development. The paper contributes to the theory of the creative class, especially from the location and public-policy point of view. It explores the behaviour of the creative class and its specifics that can significantly influence the measures of public policy, even open questions if and how it is relevant to realise the actions to attract the creative class. The paper extends the knowledge about the behaviour of the creative class in territories with a dominance of small and medium-sized cities as well as large rural area.

## 2. Creative class as a source of spatial development

The growing interest in research on creative economy is presented by international organisations, strategical development documents at the European and international levels, as well as by international studies that deal with various aspects of creative economy, its development factors and interactions. One of the key pillars in creative economy is a human factor in creative economy – the creative class or creative people.

## 2.1 Definition of the creative class

The "creative class" – as a new class of workers in connection with the development of the creative economy – became a very popular attribute of human capital. The distinguishing characteristic of the creative class is to "create meaningful new forms" that usually generate an economic profit (Howkins 2002, Florida 2002, Hartley 2005, Mundelius 2008). The creative class gives rise to new ideas, mobilises the creative potential of places in the form of new products, services, information, innovations, etc., and that generates creative capital, which is important for the growth of cities and regions (Batabyal and Nijkamp 2016; Florida 2005). According to Florida (2002), it consists of the super-creative core and creative professionals. The super-creative core or bohemians includes scientists and engineers, university professors, poets and novelists, artists, entertainers, actors, designers, and architects, as well as the "thought leadership" of a modern society, namely non-fiction writers, editors, cultural figures, think-tank researchers, analysts, together with other opinion-makers. The super-creative core creates new forms or designs that are readily transferable and broadly useful, such as designing, music composition, performing in theatre. This group differs the most from other creative work forces, both in terms of the role that is plays in economic growth and in terms of how it is treated on the labour market. Beyond this core group, the creative class also includes "creative professionals" who work in a wide range of knowledge-intensive industries, such as high-tech sectors, financial services, legal and healthcare professions, and business management. These people engage in creative problem-solving, drawing on complex bodies of knowledge to solve specific problems. They apply or combine standard approaches in unique ways to fit the situation, exercise a great deal of judgment, and are prone to try out radically new approaches. Florida (2002) also refers to some disadvantages of the growing creative class. For example, a geographical segregation occurs, e.g. in the form of a depopulation of rural areas. It is caused by the emigration of creative staff to bigger cities. Another danger is a weakening of strong social relations.

Florida's creative class theory (2002) has stimulated a great debate in the research field (e.g. Markusen 2006, Hoyman and Faricy 2009). Despite criticism from several directions (see below), Florida, as one of the pioneers of the creative-economy concept, draws attention to the fact that creative human resources are essential for spatial development and quantifies the impact of the creative economy on it. Florida's research (2002) confirmed that the presence of creative people living and working in the city has a direct impact on the attractiveness, economic performance and competitiveness of the city. In his further research (Florida 2005; Florida et al. 2011; Florida and Mellander 2012) he pointed to an increase in the share of the creative class in America from 10 % to 30 % in the last decade of the 20$^{th}$ century. Even though there are other definition of the creative class (Hui et al. 2004; Higgs and Cunnigham 2007), we use Florida's definition as the basis in this paper.

According to Faggian et al. (2014) the common feature of the traditional human-capital theory and the creative class is the assumption that highly talented people are more mobile than the rest of the population and that retaining and attracting them is pivotal for economic growth. The representatives of the creative class, thanks to their talent, new ideas, knowledge, innovation and higher possibilities, help to create new companies or start their own businesses, which support territorial development (Vaňová 2010).

Florida's creative-class approach in the regional and local context criticizes many academic papers (e.g. Malanga 2004; Glaeser 2004, Gibson and Klocker 2005, Peck 2005, Scott 2008 or Krätke 2011). Glaeser (2004) argues that not only is the creative class credited with causing regional growth, but all highly educated workforce brings regional growth, which is also confirmed by the research in the high correlation between the creative class and human capital in Sweden (Hansen 2007) and in Finland, Denmark and Norway (Andersen et al. 2008). On the other hand, Krätke (2011) criticises Florida's definition and division of the creative class. Contrarily, he divides creative individuals or member of the creative class into five basic groups: scientifically and technologically creative workers (occupational groups in the fields of R&D, scientific education, as well as skilled technicians and health care professionals); artistically creative workers (occupational groups of the cultural economy); the dealer class (finance and real estate professionals); the economic management class (executives, business consultants); the political class (members of legislative bodies, politicians, public administrators). Krätke argues that only the first and second groups have specific relevance for regional innovative capacities. The other three groups have no specific impact on prospects for regional growth within the scope of innovation-driven development paths.

Even though there are many pros and cons in creative-class theory, the importance of the creative class, especially its creativity, experience and ideas belongs to the key drivers in spatial development in economic and social context.

### 2.2 Factors of creative class localisation

A range of studies has dealt with the factors that play a significant role in the geographical location of the creative industries and the creative class. We can identify different views on this issue. The first one argues that universities play a key role in the creation of the initial advantages associated with the development of human capital, which then "snowballs" (grows and grows) (Glaeser and Berry 2005). The second theory emphasises that cultural facilities (i.e. infrastructure) play a significant role in attracting attention and keeping highly educated and talented people in the regions (Glaeser and Gyourko 2001, Shapiro et al. 2006). The third approach draws attention to the importance of openness and tolerance of differences within the societies. Moreover, the creative people look for the quality of

a place rich in cultural and recreational facilities, vibrant city life, and cultural diversity (Florida 2002).

Several authors (Florida and Tinagli 2004; Clifton and Cooke 2009; Chantelot et al. 2011; Gordon 2013) confirm the important role of an attractive environment (quality of place) to attract and retain new, high-quality, educated human capital from the external environment, thus contributing to the further development of a certain territory, for example creating new jobs and attracting more such individuals. Furthermore, according to Faggian et al. (2014) a place with a rich and diverse cultural scene signals an environment that attracts other types of talented or high human-capitals individuals. Peck (2005) and Storper and Scott (2009) point out labour-market opportunities as a factor of territory attractiveness for the creative class.

Even though Florida (2004) associates attracting the creative class with the creative city, anyone could be a driving force of development, therefore the relevant stakeholders should improve the attractiveness of a certain territory for a broader group of human capital. As Gertler (2004) claims, the main contribution of a creative city should be the improvement of the quality of life and local economy with a positive impact for the whole community, not only for privileged groups (such as Florida's creative class).

There have already been several elaborate empirical studies that dealt with the definition of creative people, but just a few took the context of their localisation into account. In Sweden, job opportunities and social reasons are among the main factors of creative class localisation (Hansen 2007). In Holland, esthetic features and infrastructure are important for the creative people, beside job opportunities (Marlet and Woerkens in Belvončíková 2014). In Germany, the key localisation factors are ethnical diversity, cultural activities, public expenditures for education and health care (Boschma and Fritsch 2009). According to empirical studies realised in USA, the creative class prefers places with an active local community and amenities (Markusen 2006). Based on theoretical approaches and results of empirical studies the key localisation factors of creative class can be seen in Table 1.

The factors influencing the localisation of creative people are at the core of public policy oriented at attracting them to the territories. In Great Britain, Ireland, Finland and Australia the role of business incubators and business centres was researched as a key incentive to attract and retain the creative people. Sorensen et al. (2010) refer to improving the quality of place as the main strategy to attract creative people, which contributes to creating new products, new firms, and generally to spatial development.

Peck (2005) defined three main problems linked with the implementation of strategies based on the creative-class approach. Firstly, the territories compete for the same group of creative workforces, so they usually implement the same type of strategies and they do not reflect the different conditions in regions. Secondly, the

focus of the strategies is on creating attractive neighborhoods for the creative class, and the local challenges stay behind in the priorities, which causes an increase in socio-economic inequalities. Thirdly, the question appears if the support of the creative class is a development strategy for cities or just a survival strategy for already creative cities.

**Table 1**
Factors influencing creative class localization

| Factors | Soft factors | Hard factors |
|---|---|---|
| Job opportunities | | x |
| Facilities (cafés, restaurants, cinemas…) | | x |
| Public expenditures (education, health care) | | x |
| Esthetic features of environment | x | |
| Ethnic diversity | x | |
| Cultural activities | x | |
| Tolerance (of minorities, gays) | x | |
| Personal highlights (personal trajectories, family, friends, place of birth, place of study) | x | |

Source: studies by Markusen (2006), Montgomery (2007), Sorensen et al. (2010), Marlet and Woerkens (2007), Florida (2002).

## 2.3 State of the art – the creative class in the Slovak Republic

In the Slovak Republic, during the last few decades no research has been conducted aimed directly at creative-class migration or the definition of factors of creative-class localisation. However, we can identify some other relevant research the results of which are comparable with the findings of international empirical studies, because also in the analysed empirical studies the object of the research were highly educated people, not an exactly defined creative class. We identified as relevant the study aimed at internal migration of population in the Slovak Republic published by Branislav Šprocha, a member of the Slovak Academy of Science, in 2011 and the study on creative class and creative cities written by Štefan Rehák in 2014.

According to Šprocha, migration intensity for university graduates at the NUTS 3 level is 3 % of graduates. The migration rate of university graduates at the NUTS 5 level is above 6 % of graduates. In 2001–2003 and 2008–2010, we can observe the increased migration of university graduates at the NUTS 5 level. Authors suppose that the situation is caused by the extension of compulsory school attendance, the increase of students in a distance form of study and increased interest in doctoral studies.

The study investigated also the motives of university graduates to change their place of residence. The authors divided the reasons of migration into 4 groups. Approaching and changing the workplace belong into the first group, "work". The second group, "family", includes reasons such as marriage, divorce, and follow-up of a family member. The third group consists of housing reasons. The last category "other reasons" contains study and health reasons. The research findings show that with increasing distance and achieved education the weight of working reasons increases. For women, family reasons have a higher weight at the inter-regional level. The main reason for university graduates' migration are job opportunities. The main reason for the localization decision for men under 35 is work, in second place is housing and in third place family. For women under 35 years, family is the top reason to migrate, and it is followed by work and housing with the same weight.

To develop the prognostic study of the Slovak Academy of Science we try to identify the indicators on creative people and mutual relationships between creative people, highly educated people and Bohemians. The main source of data were the statistics gain within the Population and the houses census from 2011 as the last implemented and published census in the Slovak Republic. As creative people we define the inhabitants working in the creative and cultural industries, which includes the following codes of SK NACE: 60, 59, 90, 58, 73, 18, 72, 63, 62, 71, 74, 91. As Bohemians we identify the inhabitants working only in art, creative and entertainment areas of creative industries.

Among the main researched indicators are the share of creative people in selected industries from the economically active population, the share of highly educated inhabitants from resident population, the share of bohemians from the creative people in selected creative industries, where are illustrated in Table 2. The presented data demonstrates the situation at the NUT3 level and covers the whole Slovak Republic.

Data on the representation of creative people in individual regions of the SR show the expected result of the dominant position of the Bratislava region (site of the capital city), where 9.2 % of the economically active population work in creative industries. The share of people working in creative industries in the Bratislava region is 3 times higher than the proportion of people working in creative industries in other regions of the Slovak Republic.

An important indicator of creative people is the proportion of university graduates from the total population. According to Hansen and Niedomysl (2008) higher educated people represent creative people, as the correlation between higher education and membership in the creative population is high (the correlation coefficient in the Nordic countries is 0.94). The share of university graduates in Slovakia in 2011 was 14.03 % on the population, with the dominant position of Bratislava region, where live 26.17 % of them. The distribution of the representation of the university population in underdeveloped territories of the Slovak Re-

public is even and represents values from 11.50 % in the Trnava Region to 13.06 % in the Košice Region.

**Table 2**
The creative people in the Slovak regions by the creative-class indicators

| Region | Creative people/economically active population (%) | High educated population/resident population (%) | Bohemians/creative people (%) |
|---|---|---|---|
| BA | 9.20 | 26.17 | 6.99 |
| TR | 3.63 | 11.50 | 5.23 |
| TN | 3.04 | 12.51 | 4.65 |
| NR | 3.44 | 11.99 | 6.10 |
| ZA | 3.69 | 12.96 | 4.74 |
| BB | 3.71 | 12.33 | 5.87 |
| PO | 3.01 | 11.70 | 6.32 |
| KE | 3.86 | 13.06 | 6.06 |
| Slovakia | 4.19 | 14.03 | 5.74 |

Source: Own processing of data of the Slovak Statistical Office – Population and houses census from 2011.

Legend: BA – Bratislava region; TR – Trnava region; TN – Trenčín region; NR – Nitra region; ZA – Žilina region; BB – Banská Bystrica region; PO – Prešov region; KE – Košice region

Moreover, the share of Bohemians on all working population is 5.74 % persons and 4.19 % of the population works in creative industries. In the case of the Bratislava region, the Nitra region, the Prešov region, the Košice region and the Banská Bystrica region, the values of this indicator (Bohemians share) are higher than the national average. The indicator, along with Florida's statement (Bohemians play an important role in attracting other categories of creative people, and this is a sign of urban cultural tolerance), indicates the potential for developing appropriate strategies to attract and stabilise creative people in underdeveloped territories. A deeper analysis and comparison with other research findings are presented in subchapter 4.2.

## 3. Material and Methodology

The paper presents the selected outputs of our continual several-years long research of the creative class, its behaviour and the factors that significantly influence its localisation. The research issue has been more explored in conditions of big cities, but

the Slovak Republic is characterised by the dominance of small and medium-sized cities as well as by large rural area. We suppose that it will also influence the behaviour and location of the creative class. Referring to the theoretical approaches and empirical studies our basic research question is *"Are there significant differences in mobility and location factors of the creative class in various types of territories?"*

To answer the research question, firstly, we define the relationship between the creative class and spatial development, and based on the already published research papers we identify the localisation factors of the creative class. The theoretical part is directly linked with the comparative analysis of 4 selected empirical studies (Hansen and Niedomysl 2008, developed by Asheim and Hansen 2009; Martin-Brelot et al. 2010; Argent et al. 2013; Faggian et al. 2014. The main compared elements are the research questions/hypotheses and results, the definition of the creative class, the methods used, the factors of creative-class migration, and the policy recommendations, if they were proposed. The empirical studies were selected based on the research in databases of Science Direct, WOS and SCOPUS with the key words "creative class migration" in May–June 2019. After the review of all displayed papers, we identified only four relevant studies. We oriented our attention towards researching the creative class in complex manner (in many papers just one or a few professions were researched) and in the spatial-development context, which were our two basic selection criteria. The selected studies observe similar or even identical research issues, with different aims or from different perspectives. They cover various territorial levels (state, regional, local), which brings along the opportunity to compare the main findings, identify the similarities and differences, as well as challenges and limits for the public policy in this area.

Referring to the theory as well as the analysis of the foreign studies, they were compared with the research results in the Slovak Republic. However, we were very limited by the data availability at the NUTS 3 level. At this level, the last complex data came from 2011, from the national census. Partially, we also use the findings from the research aimed at the internal migration of population in the Slovak Republic published in 2011 by Branislav Šprocha, a member of the Slovak Academy of Science. The main objective of the prognostic work was to analyse the internal migration of university graduates in Slovakia from 1996 to 2010. In addition to the main aim of the analysis, the ambition of the research was also to characterize the migration potential and ability of Slovak regions to maintain university graduates and thus provide educational potential for economic, cultural and social life, which corresponds with the aims of foreign empirical studies. To process the limited data we chose a simple correlation analysis by means of the Pearson correlation coefficient. The choice of method was influenced by the character of limited data and the expected linear relationship between the variables. In utilising this method, we were inspired in the studies already published on this topic.

## 4. Research results and discussion

In the first part of this section, we present the comparative analysis of the research findings of four empirical studies oriented at the characterisation of creative-class behaviour, its localisation factors and the policy implications realised in European countries and Australia. The second part deals with the research results in the context of the Slovak Republic, referring to the findings of the prognostic work at the Slovak Academy of Science and our own research.

### 4.1 Results of international research studies and specifics of creative people in the Slovak Republic

For the comparative analysis of creative-class characterisation and the description of their behaviour, we selected four empirical studies. The first study from 2008 elaborated by Hansen and Niedomysl (2008) maps the features of the creative class in Sweden. It works with the official statistical data of the longitudinal database on the Swedish population and the results of a questionnaire survey in 2007. The second compared study was elaborated by Faggian et al. in 2014. The subject of the research are the characteristics of the Bohemian graduates in Great Britain from the behaviour and migration point of view. The third study from 2010 researches the issue in the city context (Martin-Brelot et al. 2010). It tests the hypothesis of Florida regarding the spatial mobility of the creative class and the role of soft factors in their decision about their place of residence. The questionnaire survey was implemented in ten European cities – Amsterdam (the Netherlands), Barcelona (Spain), Budapest (Hungary), Helsinki (Finland), Leipzig (German), Milan (Italy), Munich (Germany), Poznan (Poland), Riga (Latvia), Toulouse (France). The fourth study is oriented towards specific conditions of creative-class mobility in rural areas in Australia (Argent et al. 2013), based on processing the statistical data on creative people and their characteristics. We can see in Figure 2 that the main findings do not differ significantly and can also be very useful to inspire the formulation of recommendations for the public policy to attract and retain the creative class in the territory.

Table 3 compares the selected areas of the research: research questions/hypotheses/aims; definition of creative people; methods and data; main findings; key factors of creative class localisation; and policy recommendations. The object of the researches were the creative people. However, each study works with a different definition of the creative class. In our experience, this is caused by the inequalities in the statistical reporting at various territorial levels, where usually some exact definition of creative people or class is absent. The authors in the observed studies defined the creative class following their previous research or by their own selection of creative representatives based on the Joint Academic Coding System or Classification of Occupation. In all studies, the research sample covers people with a high educational level in creative jobs and with creativity associated.

All studies confirm that the mobility of the creative class is not as high as Florida (2002) assumed. Even though the creative class tends to migrate more than the non-creatives do, the difference is only marginal. According to Hansen and Niedomysl (2008) the migration of the creative class is the highest in their twenties while looking for good job opportunities. On the other hand, the research in Great Britain shows that a large share of graduates in creative areas return home after graduation because of lower wages and the high costs of living in the bigger cities. Among the key factors playing a dominant role in the selection of the actual place of residence are personal trajectories (family, friends), followed by good employment opportunities (Rehák 2014). Only the third most important group of factors comprises living environment, diversity of the leisure and entertainment, cultural and tourism activities, etc. – known as soft factors.

Regarding the public-policy implications, the authors of studies agree that the presence of the creative class in the territory is important for the economic and social development. But they point out that the strategy of public policy should not be oriented towards attracting the creative class, because the soft factors that the state, the regions and the cities can influence by means of their policy do not play so significant a role in this process. The strategy should be aimed at retaining the creative class, fostering the creative and diverse climate by developing new higher-education institutions, opening new creative-subject degrees and supporting networks and partnerships.

When we use the same research methodology and compare the findings presented in the empirical studies above, in the Slovak Republic the main findings include:

- a direct positive relationship between the amount of creative people and the migration balance as a result of a correlation analysis (£=5 %) of data for all Slovak regions in 2011 (Table 4). The result could indicate that the creative population is attracting additional workforce from a Florida perspective. The results are limited by the fact that the migration balance data are processed for all Slovak citizens and we do not have information on the migration of the creative population. To complement and look deeper it would be necessary to carry out primary research into the migration of people working in selected CCI sectors and to critically examine the differences between creative people and ones with a university education.

**Table 3**
Comparison of selected empirical studies on behaviour and migration of creative class

| Authors | Hansen, Niedomysl | Martin-Brelot, Grossetti, Eckert, Gritsai, Kovács | Argent, Tonts, Jones, Holmes | Faggian, Comunian, Cher Li |
|---|---|---|---|---|
| Year of publication | 2008 | 2010 | 2013 | 2014 |
| Territory | Sweden | Selected European cities: Amsterdam, Barcelona, Budapest, Helsinki, Leipzig, Milan, Munich, Poznan, Riga, Toulouse | Rural areas of Australia | Great Britain |
| Research questions/hypotheses/aims | 1. Do members of the creative class move more often compared to other migrant groups?<br>2. Are they more selective in their destination choices, favouring regions with a favourable people climate?<br>3. Do their reasons for migration differ from those of other migrant groups? | 1. Are members of the creative class geographically mobile?<br>2. Are members of the creative class mainly attracted by soft factors, thus cities should rather focus on these if they want to attract creative people? | 1. High amenity rural areas are able to attract disproportionate numbers of putatively creative workers, a high proportion of whom are likely to be ex-capital city migrants.<br>2. The larger the size of the creative class, the more entrepreneurial and innovative the local economy will become manifested by number of local businesses and growth in these over times. | To analyse the migration behaviour of the creative class focusing specifically on the more artistic, Bohemian graduates.<br>1. How might migration provide a coping strategy for Bohemian graduates to respond to uncertainty and career opportunities? |
| Definition of creative people | People with high educational level (following Hansen 2007). | Higher educated people having graduated from a creative or knowledge discipline. Workers in the knowledge intensive and creative industries. | Professionals and managers employed in non-agricultural and mining industries. | Bohemian graduates (arts and design, media, others). |

**Table 3** (continuation)

| | | | | |
|---|---|---|---|---|
| Methods and data | • Statistics of longitudinal database on Swedish population.<br>• Questionnaire survey (4909 respondents).<br>• Descriptive mathematical and statistical methods. | • Questionnaire survey (2300 respondents).<br>• Descriptive mathematical and statistical methods. | • Data at the Census Collector District level.<br>• Data at the Statistical Local Area level.<br>• Census data.<br>• Correlations and multiple regression analysis. | • Data of UK Higher Educational Statistical Agency.<br>• Descriptive mathematical and statistical methods.<br>• Multinominal logit model. |
| Main findings | • Creative class tends to migrate more than the non-creatives, but the difference is marginal.<br>• Creative class moves towards regions with lower-ranking people climate.<br>• Exception is the creative class in their twenties. They move towards regions with a better people climate than where they originated.<br>• There are minor differences between the motives of creative-class localisation and non-creatives (just the order of housing and education is exchanged). | • European creative workers do not seem to be much more mobile than the continental average.<br>• Personal trajectory factors play the most dominant role in the selection of actual place of residence among creative people.<br>• For the creative people searching for a location, hard factors (e g. 3, 4) are the reasons why they choose a particular city, and soft factors determine why they choose a certain district. | • There are only weak relationships between counter-urbanisation migration and the presence of the creative class and of change therein over time.<br>• How creative a community is, in terms of the relative composition of its labour force, depends somewhat on its local excitement factor, relative wealth and local population density.<br>• Creative workers tended to have relatively little stimulatory effect on local economies as measured by employment growth. | • The most common migration pattern of Bohemian graduates is return migration (staying away from the parental domicile but going back to work in their original domicile area after graduation).<br>• Return migration and staying around the University are the most common choices of Bohemian graduates suggesting that networks and peer-to-peer support are crucial for their success.<br>• Bohemians are the most likely to have to settle for non-graduate-type jobs.<br>• Lower financial opportunities for Bohemian graduates. |

**Table 3** (continuation)

| Authors | Hansen, Niedomysl | Martin-Brelot, Grossetti, Eckert, Gritsai, Kovács | Argent, Tonts, Jones, Holmes | Faggian, Comunian, Cher Li |
|---|---|---|---|---|
| Key factors of creative class localisation | Employment (1.) | Family lives here (1.) | Rural density (1.) | Family |
| | Social reasons (2.) | Proximity to friends (2.) | High household incomes (2.) | Level of wages |
| | Housing (3.) | Good employment opportunity (3.) | Concentration of creative class (3.) | Costs of living |
| | Education (4.) | Moved because of job (4.) | Tourism and related services employment and facilities (4.) | Concentration of higher education institutions and specialised higher education institutions |
| | Living environment (5.) | Born in region (5.) | | |
| | Other reasons (6.) | Study in city (6.) | | |
| | | Diversity of leisure and entertainment (7.) | | |
| Policy recommend-dations | The study indicates that the people climate may not be considered as having as much impact on the location of talent as theory predicts. | The soft factors (such as social and cultural facilities, tolerance, diversity etc.) play only a marginal role in the attraction of members of the creative class to a city. However, they play a more important role in retaining them in a city. | It is not necessary to warrant special attention to the creative class in terms of economic development. The strategies should maintain or improve social structures, community cohesion and the development of external networks bringing less tangible socio-cultural benefits. | A strategic policy intervention for cities and localities interested in fostering the creative and diverse climate might be developing new higher-education institutions and opening new creative-subject degrees.<br>A suitable local development strategy should establish links between higher-education institutions, local policy and the creative industries.<br>Mobility and migration could be read as strategies for resilience for Bohemian graduates trying to enter a creative career.<br>The fundamental role of networks for creative careers has been widely acknowledged. |

Source: Hansen and Niedomysl 2008; Martin-Brelot et al. 2010; Argent et al. 2013; Faggian et al. 2014

**Table 4**
Relationship between creative people and selected indicators of the Slovak Republic

| | | Creative people | Economically active population | Highly educated population | Resident population | Migration balance | Bohemians |
|---|---|---|---|---|---|---|---|
| Creative people | Person coefficient | 1 | 0.074 | 0.958 | –0.153 | 0.852 | 0.993 |
| | p-value Sig. (2-tailed) | | 0.862 | 0.000 | 0.717 | 0.007 | 0.000 |
| | Number of observations | 8 | 8 | 8 | 8 | 8 | 8 |

Source: Own processing of data

- by excluding the dominant Bratislava Region the correlation analysis (£=5 %) confirmed a direct positive relationship with people with a university education and representatives of Bohemians in less developed regions in Slovak Republic (Table 5). It confirms the research findings in Sweden (2009) and Florida's claims (2002) on the Bohemian group attracting creative people in underdeveloped areas.
- an indirect weak and insignificant dependence between the size of the creative population and the migration balance (correlation coefficient –0.235).

**Table 5**

Relationship between creative people and selected indicators of the Slovak Republic excluding the Bratislava Region

| | | Creative people | Economically active population | Highly educated population | Resident population | Migration balance | Bohemians |
|---|---|---|---|---|---|---|---|
| Creative people | Person coefficient | 1 | 0.716 | 0.792 | 0.701 | –0.235 | 0.888 |
| | p-value Sig. (2-tailed) | | 0.070 | 0.034 | 0.079 | 0.612 | 0.009 |
| | Number of observations | 7 | 7 | 7 | 7 | 7 | 7 |

Source: Own processing of data

## 4.2 Discussion

For the last decade, the research on creative class mobility and behaviour has belonged to the great challenges in the spatial development context. Generally, there is a lack of relevant studies covering the creative class complexly as well as secondary data that would help analyse their specific features. This problem is evident also in the Slovak Republic. Slovakia lacks proper methodology, measurement and mapping for the creative industries, in other words also to find some relevant information on creative class is a real challenge. The availability of secondary data for lower territorial levels (NUTS 3 or NUTS 4) is poor; they are not collected, or they are old. Our findings are a first step to highlight this gap and move the research forward.

When we compare critically the theory and results of the research in the Slovak Republic with the international empirical studies, there are similar features of creative people's behaviour. There is a high correlation between creative people and highly educated people. The rate of migration depends on the age of the creative people. The peak of migration is evident in the 20s of the creative people, mainly after university graduation, when they look for good job opportunities.

In the Slovak Republic, the Bratislava region is dominant in the localisation of creative people. The region is the site of the capital city, the smallest by area, but with the highest level of wages. A remarkable finding is the confirmation of Florida's claims (2002) of the group of Bohemians attracting creative people in underdeveloped areas, which can be useful for public-policy strategies.

Among the main reasons to migrate are work, family and friends, which is almost identical with the factors of creative people localisation in foreign studies. It is possible to identify also significant migration activity to the big cities with facilities for university graduates. This confirms again that the most significant factors of creative-class localisation are job opportunities and personal trajectories.

These findings allow us to answer the research question *"Are there significant differences in mobility and location factors of the creative class in various type of territories?"* The empirical studies as well as our own research point out that creative people are not much more mobile than non-creative ones in each type of territory, and when they migrate the hard factors and personal trajectories are more important than soft ones. The ability of creative people to attract other creatives is not generally confirmed. That is why the public policy should be more aimed at retaining creative people in regions. However, when we compare Florida's unique creative-class concept (USA), empirical studies from Europe and Australia and our results, we can see that one universal model of creative-class behaviour and mobility cannot be applied.

According to academics, the public and practice, the creative class is a driving force for spatial development, mainly because the territories where it is located are attractive to investors and companies. Therefore, it should be in the interest of cities

to attract and retain it. As research shows, it is particularly important to create an attractive environment for an active life that creates space for networking, promoting diversity, openness and tolerance. Our research confirms these facts and adds that the strategy on attracting the creative class is more suitable for underdeveloped regions. From this point of view, public policies should pay attention to the creative class, mainly because of its ability to attract new business activities to the territory and to boost economic development.

## 5. Conclusions

The paper comprehensively analyses and compares the empirical studies on the behaviour and localisation of creative people. Even though they were conducted on different territorial levels, they provide interesting and comparable findings and common conclusions.

Following the research results from the Slovak Republic the strategy for attracting the creative class could be more suitable for underdeveloped regions, because it can be a potential source of economic and social boosting. In each territory the public policy oriented towards the creative class should reflect the specifics of the territory, especially its potential and large (e.g. big metropolitan regions, cities, or middle-sized and small cities, eventually rural localities). The studies point out that the creative class itself migrates to metropolitan centres "naturally" because of the presence of the factors defined by Florida (2002). In smaller, rural areas or even less interesting areas the public policy should be aimed at improving the quality of living, outdoor amenities (McGranahan and Wojan 2007), cultural amenities, etc., in other words the soft factors, which can influence the selection of the creative class's location and its remaining in the territory. Following the research results, we agree, and we recommend for the public policy makers to implement the measures in creative-class support as a supplement to the traditionally defined development factors of territories. For the localisation and retaining of creative people it is very important to find the place that is fully equipped with the hard infrastructure which is supplemented by a super-infrastructure in the form of various cultural amenities, a multicultural diversified society, tolerance and an inspiring environment.

The research results presented in the paper contribute to the discussion on the behaviour and the localisation factors of the creative class in the specific conditions of the Central European area, which is characterised by a lower level of urbanisation except for the areas of capital cities.

The research opens many new possible research question, e.g. what the differences are in how creative people behave in developed and underdeveloped regions; what the migration patterns of creative people and bohemians are, or how beneficial the strategy of attracting creative people is in comparison with the strategy of retaining them, and many others. Moreover, the paper can be at least a starting

point for establishing the suitable public policy in creative industries in the Slovak Republic.

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