

SPATIAL DYNAMICS OF THE CREATIVE ECONOMIES IN ROMANIA

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ABSTRACT

Creative economies are today an impressive transforming force and one of the fastest-growing economic sectors. The study aims to realize a spatial projection of the creative economies as well as to identify the determinants of spatial patterns of evolution. Quantification of the role of creative economies in the economic profile was achieved by creating a database, including the number of companies, number of employees, turnover and profit, for the creative economies, according to the NACE classification, for the period 2000-2015, at the level of administrative-territorial unit. The results of this analysis show the shaping of real poles of creativity, and the selective analysis of the dynamics of economic profiles shows a superior adaptive capacity for territorial systems that have a high share of creative economies.

KEYWORDS: *creative economies, territorial systems, spatial dynamics, territorial management*

JEL CLASSIFICATION: *R 12*

1. INTRODUCTION

The last decades have witnessed the emergence and development of creative economies around the world. Creativity is the main feature of these economic activities, and their importance is given by the expansion of knowledge-based economies (Seltzer and Bentley, 1999).

The "old" (industrial) economy is increasingly being replaced by the "new" (creative) economy, an economy dominated by the digital revolution in the use of information, creativity and knowledge. Thus, the creative economy has been the subject of numerous studies, debates and discussions at a global and European level (Weckerle et al., 2016).

Ever since their appearance, the concepts of "creative economy" and "creative industries" have generated various research on definition and significance, purpose, historical, measurement, or impact. The term "industrial creations" came into force when Britain's Department of Culture, Media and Sport released its first document on the creative industry in 1998. The document set the list of creative industries where advertising, architecture, antiques, computer and video games,

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crafts, design, fashion designer, film and video, music, shows, publications, software, television and radio.

In the last two decades, many studies have explained and developed the concepts of "creative industry" and "creative economy" from different perspectives (Howkins, 2001; Hesmondhalgh, 2008; Roodhouse, 2006). A first line of research focuses on the hypothesis of the importance of creative and cultural activities in the local, regional or national economy, but also on the creation and maintenance of a significant number of jobs (EC, 2010). The creative industry is becoming a key concept in the knowledge economy that contributes to the increase of territorial competitiveness by implementing coherent policies, development strategies and inter-institutional cooperation for the development of creative activities (Comunian et al., 2010; Banks and Hesmondhalgh, 2009). Today, one of the fastest growing economic sectors in the globalized economy, the creative economy promotes human development, social inclusion and cohesion and cultural diversity (UNCTAD, 2008; Hajkowicz, 2015), stimulates entrepreneurship (Henry, 2007; Henry and Bruin, 2011), business and investment (UNESCO, 2009), attracts a high-quality workforce (Bakhshi and Windsor, 2015) and is a pathway to economic success in generating revenue (European Commission, 2010; UNDP, 2013).

Many authors consider creative economies as generating functional complexity and implicitly the growth of local economies (Drake, 2003; Florida, 2005; Stoian et al. 2014; Pintilii et al., 2014). Also, the creative economy has shown great resistance during the last economic and financial crisis (Ernst and Young, 2014), contributes to general prosperity and works in synergy with the knowledge-based economy (Veselá and Klimová, 2014).

The creative economy contributes to increasing territorial, regional or national competitiveness and therefore leads to long-term economic growth and development. In this direction it is necessary to identify and analyze the creative elements of the economic system in relation to other components of the territorial systems. After joining the European Union (EU) in 2007, Romania decided to make fundamental transformations of the national economy by implementing profound structural changes in all areas of activity. One of them is related to how Romania has managed to design and develop a creative economy as a major factor in its economic integration in the EU, given the importance of creativity at European level (EESC, 2013).

2. METHODOLOGY

The study is based on an ample bibliography that deals with hypotheses, theories, debates about activities included in the "creative industries". In this paper, the concept of creative economics was considered to be the most appropriate for analyzing and creating spatial models that highlight the relationship between regional development and creative economies.

The analysis of the role of the creative economies in the economic profile was achieved through the creation of a database containing the number of companies, the number of employees, the profit and the turnover for creative economic activities according to the Classification of National Economy Activities (NACE), at four-digit level (Table 1). The database was conceived within the Territorial Management project based on the growth poles theory (UB / 1357) with the support of BorgDesign. The cartographic models highlight three important periods for analyzing the spatial dynamics of the share of the number of firms and the number of employees in the creative economy in the total economy in Romania, thus providing a model for the beginning of the analysis period (2000) and the end of the period (2014); a third model for 2008 that was considered a pick of economic development. The analysis of the 2008-2014 period deserves particular attention because the effects of the economic crisis are highlighted.

For mapping, was used an ArcGIS platform. Has been conceived a five-point color classification for administrative-territorial units in Romania, where there are creative economic activities.

Table 1. NACE Codes, belonging to creative economies

1811	Printing of newspapers
1812	Other printing activities
1813	Prepress services
1814	Binding and related services
5811	Book publishing activities
5812	Guidebooks, compendiums, mailing lists and similar activities
5813	Newspapers publishing activities
5814	Journals and periodicals publishing activities
5819	Other publishing activities
5821	Computer games publishing activities
5829	Other software publishing activities
5911	Motion pictures, video and television program activities
5912	Post-production, Motion picture, video and television program activities
5920	Sound developing, recording and music publishing activities
6010	Radio broadcasting activities
6020	Television broadcasting activities
6110	Telecommunications activities through cable networks
6120	Telecommunications activities Wireless network (excluding satellite)
6130	Satellite telecommunications activities
6190	Other telecommunications activities
6201	Custom software development activities (software-oriented client)
6202	Information technology consultancy activities
6203	Management activities (management and operation) of computing
6209	Other information technology and computer service activities
6311	Data processing, hosting and related activities
6312	Web portals activities
6391	News agency activities
6399	Other information service activities
7111	Architectural activities
7112	Engineering activities and related technical consultancy
7120	Technical testing and analysis activities
7311	Activities of advertising agencies
7312	Media representation
7320	Activities market research and public opinion polling
7410	Specialized design activities
7420	Photographic activities
7430	Activities of oral and written translation (interpreting)
7490	Other professional, scientific and technical activities
9001	Artistic interpretation activities (performances)
9002	Support activities for artistic interpretation
9003	Activities of artistic creation
9101	Libraries and archives activities
9311	Operation of sports
9312	Activities of sports clubs
9313	Activities of fitness centers
9319	Other sport activities

Source: adapted from European Commission data (n.d.)

3. RESULTS

3.1. The dynamics of economic profile

The detailed analyzes of the four economic indicators: firms, employees, turnover and profit show a trend of permanent growth of creative economies.

The evolution of the number of companies (Figure 1) reveals an upward trend, with a maximum value of 60,633 firms in 2009, against the economic crisis, after 2009, a slight decrease followed by a growth with a maximum of 66,329 firms in 2014.

The analysis of the evolution of the number of employees in the creative field (Figure 2) shows an increase until 2008, with a value of 336,717 employees, the effects of the economic crisis are observed in 2009 and 2010, and from 2011 a slight recovery with a value in the year 2014 by 258,859 employees in the creative sector.

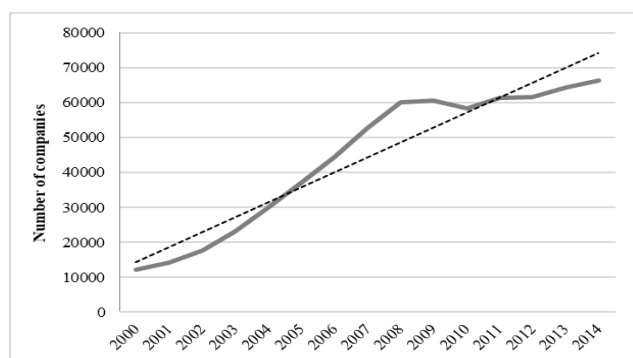


Figure 1. Evolution of number of companies in Creative Sector
 Source: project UB/1375

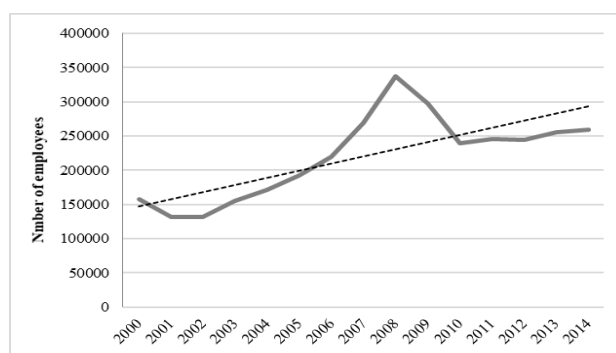


Figure 2. Evolution of number of employees in Creative Sector
 Source: project UB/1375

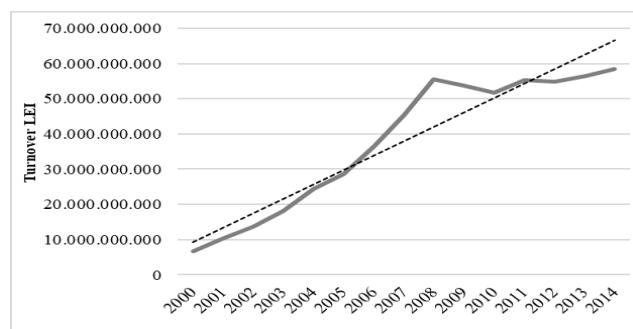


Figure 3. Evolution of turnover in Creative Sector
 Source: project UB/1375

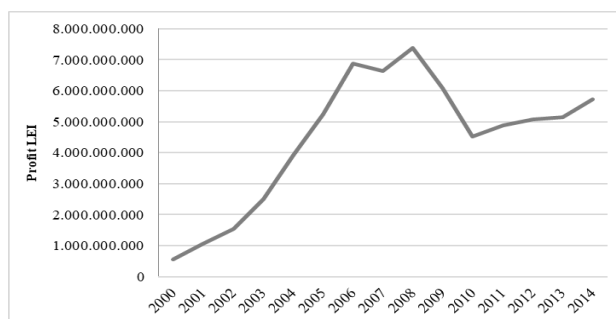


Figure 4. Evolution of profit in Creative Sector
 Source: project UB/1375

Turnover in the period 2000-2014 (Figure 3) is a steady evolution with a slight upward trend, reaching the maximum in 2008, by 55.484.270.030 lei. Against the background of the economic crisis, slight decreases were observed in 2009 and 2010, followed by increases in the following period with a maximum value in 2014, precisely 58.443.338.111 lei.

The evolution of the profit in the creative sector in the period 2000-2014 (Figure 4), has a general upward trend until 2008, with a maximum value of 73.901.850.83 lei, followed by a decrease of 28.57.391.275 lei until 2010. After 2010 the evolution of profit registered a slight increase reaching 57.23.564.821 lei in 2014.

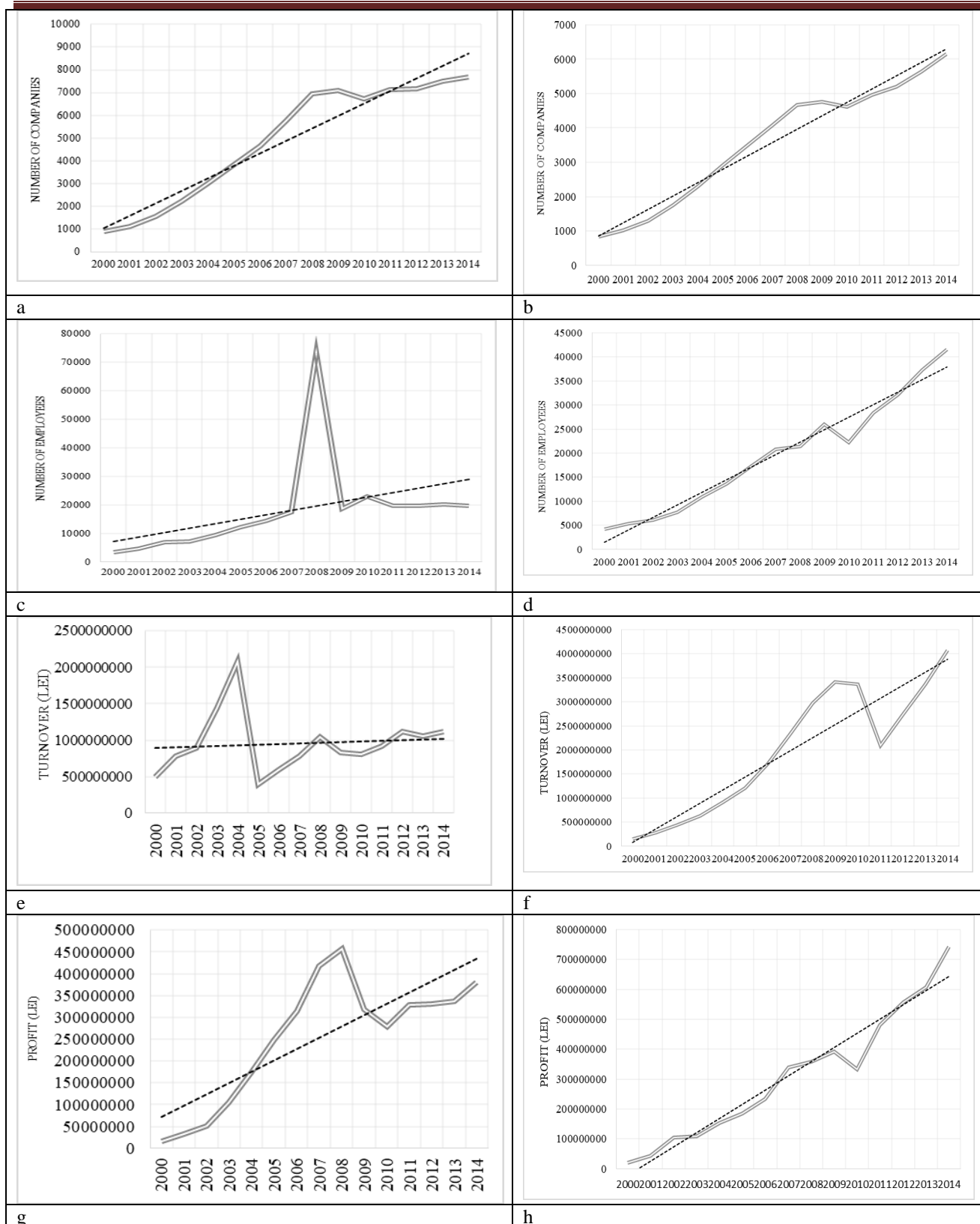


Figure 5. Evolution of economic indicators in all major creative sectors: a. evolution of the number of companies NACE 6201, b. evolution of the number of companies NACE 7311, c. evolution of turnover (thousands E) - NACE 6201, d. evolution of turnover (thousands E) - NACE 7311, e. evolution of profit (thousands E) - NACE 6201, f. evolution of profit (thousands E) - NACE 7311, g. evolution of the number of employees NACE 6201, h. evolution of the number of employees NACE 7311.

Data source: project UB/1375

Analysis of the dynamics of the structural profile of creative economies reveals the dominance of two creative economic activities: activities of advertising agencies (7311) and custom software development activities (software-oriented client) (6201). It is noticed how the two activities follow a similar trajectory, bringing their contribution to the development of the local economy.

As regards the number of firms (Figure 5 a, b), a similar trajectory is observed, with decreases in 2010 and increases after this year, reaching 7,678 firms for activities of advertising agencies and 6.152 firms for custom software development activities (software-oriented client).

The evolution of the number of employees (Figure 5 c, d) of the two creative economic activities recorded different trajectories after 2008. For the custom software development activities (software-oriented client) (6201), the number of employees increased by 41.533 employees in 2014, while the number of employees in the activities of advertising agencies (7311) fluctuated, having a maximum of 73.448 employees in 2008, followed by a fall due to the diminishing of advertising budgets.

Turnover (Figure 5 e, f) and profit (Figure 5 g, h) of these two activities had the same path, except for the fact that activities of advertising agencies (7311) this decrease may be the decision to reduce advertising budgets.

3.2. Spatial distribution of creative economies

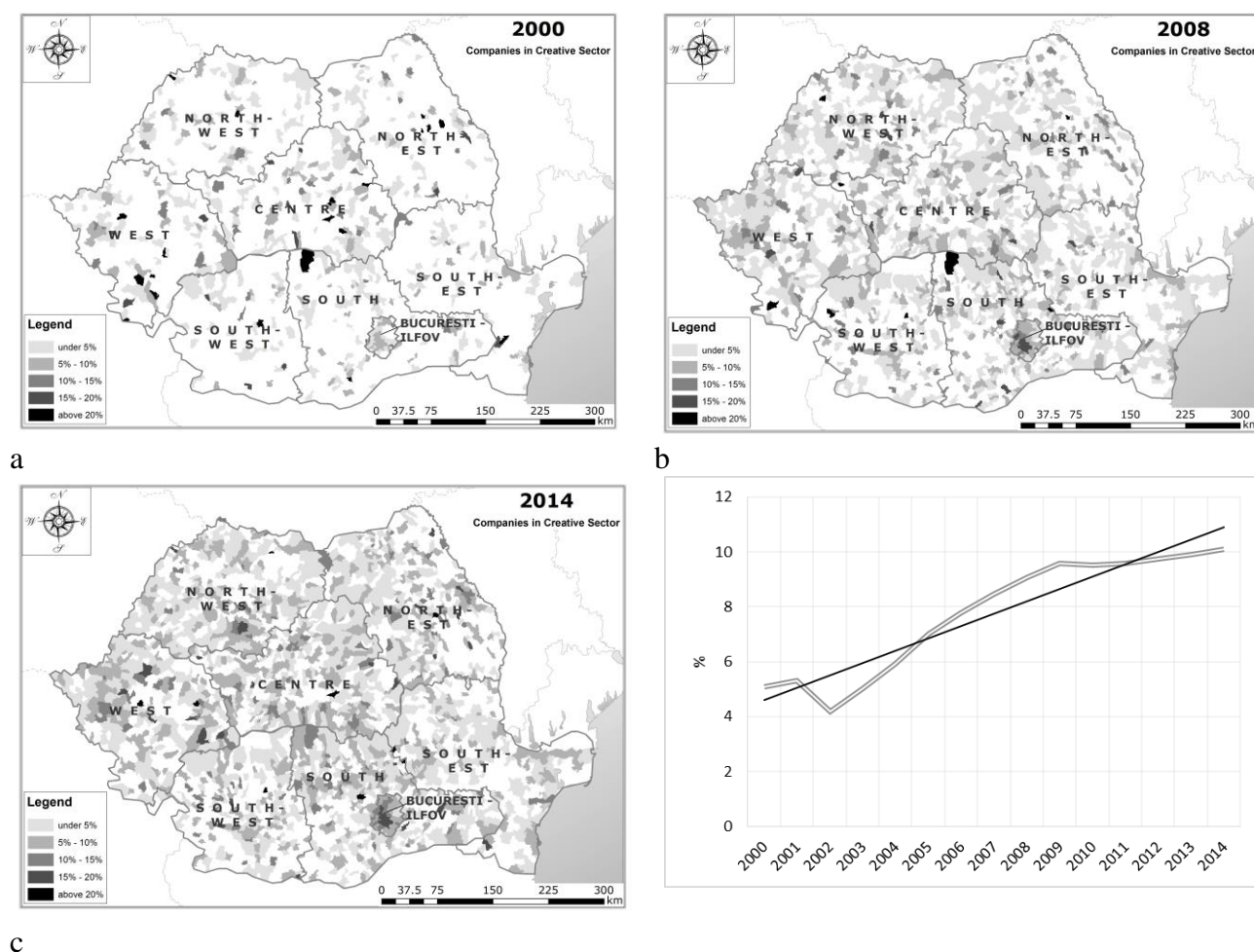


Figure 6 a,b,c. Evolution of the number of companies share, 2000, 2008, 2014;
 Data source: project UB/1375

Figure 7. Evolution of the number of companies in the creative sector of the total number of companies;
 Data source: project UB/1375

The creative sector tends to become an important component of the national economy. From the analyzes carried out for the period 2000-2014, it is noted that the activities of the creative sector have an upward trend compared to the other economic sectors.

The analysis of the number of companies in the creative sector in the total number of companies (Figure 7) shows an upward trend with a value of 9.60% in 2009 reaching 10.09% in 2014.

Analyzes of the share of the number of companies in the creative economy across the economy (Figures 6 a, b, c) highlight the growth of activities in the creative sector for the 3 years considered the most relevant (2000, 2008 and 2014) across the country.

The spatial distribution of the creative sector activities for the year 2000, lists the Bucharest-Ilfov region as having the largest shares (Bucharest - 8% and Ilfov - 9.06%), the opposite is the South-West region has the lowest weights of the number of companies.

For year 2008 (Figure 6 b) there is a greater concentration of creative activities in Romania. The areas with the highest concentrations of the number of firms are West (Arad - 8,15%, Timisoara - 12,2% and Resita - 8,4%), North West (Cluj - 14,95% and Satu Mare - 7,59%) and the Bucharest-Ilfov area.

In the last year of the analysis, the above-mentioned areas make a bigger contribution to creative economies by expanding localities that focus activities in this sector.

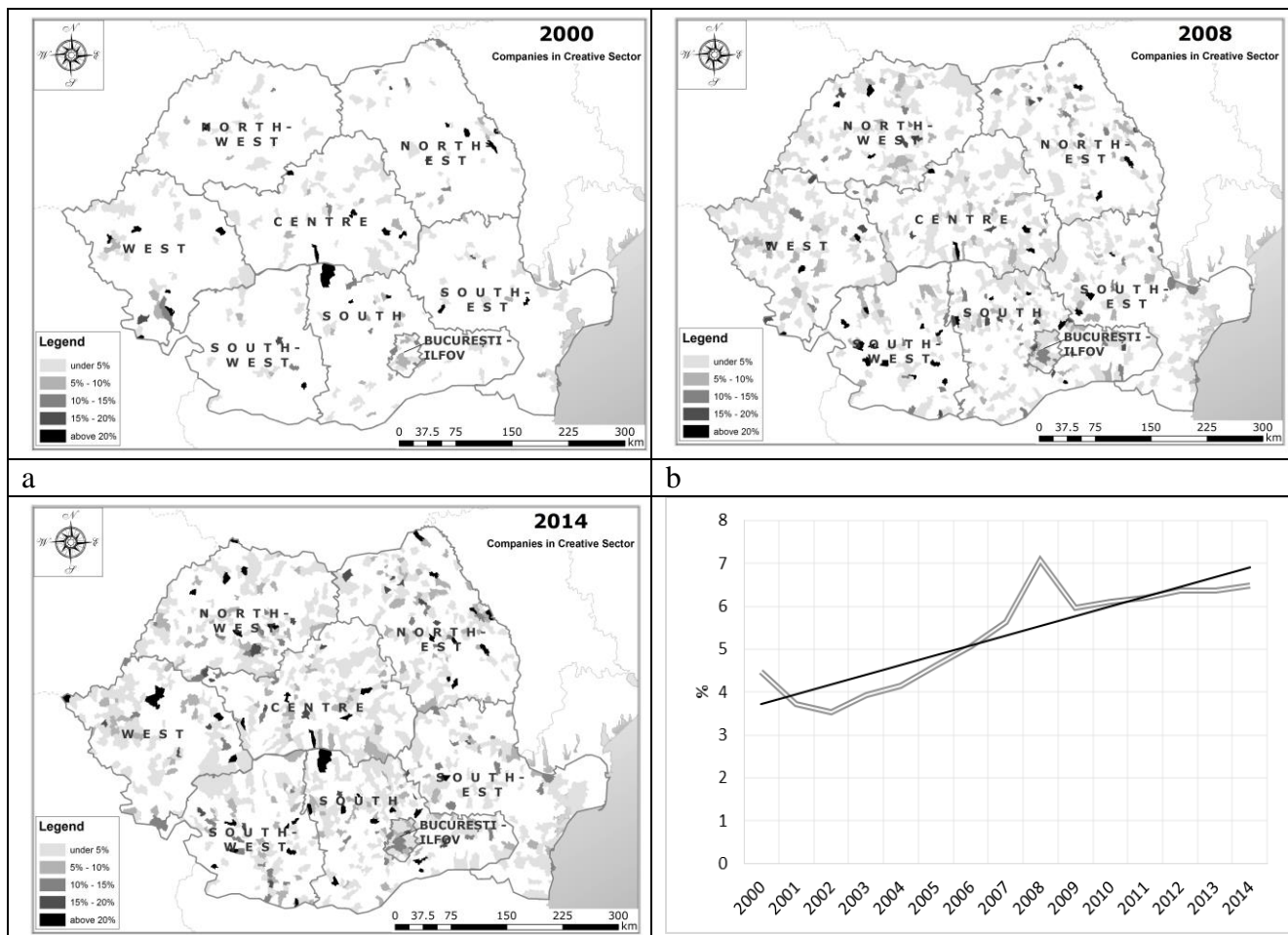


Figure 8 a,b,c. Evolution of the number of employees share, 2000, 2008, 2014;
 Data source: project UB/1375

Figure 9. Evolution of the number of employees in the creative sector of the total number of employees;
 Data source: project UB/1375

The evolution of the share of the number of employees is closely related to the evolution of the share of the number of firms showing an upward trend.

In 2000, the regions with the largest share of the number of employees are West, Center and the Bucharest-Ilfov region (Figure 8 a).

For 2008, (Figure 8 b) there is an increase in the share of employees in activities belonging to the creative sector due to the increase in the number of companies at the local level.

Analyzing the share of the number of employees in the creative sector, for the year 2014 (Figure 8c), is observed an increase in the number of localities with values between 15-20% and over 20%. Compared with other sectors that have declined since the economic crisis, the creative sector has seen upward trends.

The analysis of the evolution of the number of employees in the creative sector in the total number of employees (Figure 9) shows an upward trend with a maximum weight in 2008, precisely 7.08%, due to the economic crisis, a decrease after 2008 and a slight recovery after 2010.

4. CONCLUSIONS

Researching creative economies is an important step in analyzing functional complexity at local economy level (Peptenatu et al., 2012). The detailed analysis of the complex relationships between the components of the territorial systems can be made in a research that assists with the decisions regarding the sustainable development (Andronache et al., 2016; Braghină et al., 2011; Braghină et al., 2012; Prăvălie et al., 2014; Pintilii et al., 2016; Pintilii and Simion, 2016).

The creative economy has become today, one of the most important resources for economic development and economic growth.

Analyze of the dynamics of economic profiles reveals a tendency to increase the share of creative economies in the national economy. This upward trend is shaped by both corporate and employee developments, profits and turnover in creative economies.

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