



Creative Industries and Innovation in Romania: The Case Study of Timișoara City

Ramona Ișfănescu-Ivan ¹

¹ West University of Timișoara, Department of Geography, Romania

Abstract: Creative industries (CIs) constitute a new dynamic sector in world economy, among the most innovative sectors in the economy, based upon individual creativeness, especially artistically, cultural or scientifically. In Romania, the sector of CIs has made remarkable progress in the last years, contributing with 7% of its GDP. This sector tends to be dominated by small but flexible and dynamic enterprises, very much user- and service-oriented. The most developed CIs are software, video and computer games, publishing, architecture and advertising. Creative activities are polarized around Romania's large cities, many of these cities developing new tools and facilities to foster the sustainable development and the internationalization of CIs. Known as a city with a remarkable entrepreneurial dynamism, with many entrepreneurs who have put into practice the most daring ideas, the City of Timișoara is a real hub of CIs in Romania, together with Bucharest and the City of Cluj-Napoca. In this context, the paper aims to analyze the dimension of CIs in Timișoara City through indicators such as number of companies, volume of turnover or number of employees and, also, to highlight the main factors that contribute to the development of this sector and its impact in the economy of the city.

Keywords: creative industries (CIs), innovation, economic growth, Timișoara

1. Introduction

A quite relatively new concept, which has more coverage in practice than in theory, the creative industries (CIs) gather under their umbrella all the activities that arise from the implementation of creative ideas. Situated at the cross of art, culture,

CORRESPONDENCE:

✉ Bd. V.Pârvan, nr.4, Timișoara, România

✉ ramona.ivan@e-uvt.ro

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business and technologies, CIs include activities related to design, production and distribution of goods and services that use intellectual capital as main input (Bobircă, Drăghici, 2011).

An entrepreneur in CIs transforms ideas into creative products or services for society, so creative activities are closely linked to innovation in various sectors. The promotion of creative and innovative entrepreneurship offers an important stimulus to the emergence of new economic activities thus generating new employment opportunities and economic growth at local and regional level (Caves, 2000, Garnham, 2005, Potts et al., 2008, Comunian et al., 2010, Marco-Serrano et al., 2014, Fleischmann et al., 2017). CIs contribute significantly to youth employment and careers in CIs are relatively open to people of all ages and backgrounds. For example, in Europe, CIs sector typically employed more people aged 15–29 years than any other sector (19.1% of total employment in CIs vs. 18.6% in the rest of the economy in 2013) (UNESCO, 2015).

Being interlinked with a large number of other sectors as well as public organizations and consumers, the CIs may stimulate growth in a variety of other industries by providing creative inputs (Bobircă, Miclăuș, 2013).

There is a growing interest in the study of the factors that explain the higher level of agglomeration of creative industries in some places. Florida (2002, 2005) explains the development of creative industries in a particular region through its ability to attract and retain creative human capital. This fact is underlined by the theory of 3T: tolerance, talent and technology. Tolerance was defined as openness, inclusiveness, and diversity to all ethnicities and races. Talent was defined as those with a bachelor's degree and above. And technology is a function of both innovation and high-technology concentrations in a region (Florida, 2005). In order to attract creative people, generate innovation and stimulate the economic development, the region must have all these three critical factors. Lazzeretti (2009) underlined the role of cultural heritage in the creation of CIs in some places and the fact that cultural and historic environments can influence creativity of people living in these places.

The United Kingdom was the first country to pioneer the concept of creative industries and the term mapping refers to the characteristics of the sector. In 2001, the United Kingdom's Department of Culture, Media and Sport (UK DCMS) defines the CIs as activities which requiring creativity, skill and talent, with the potential for wealth and job creation (DCMS, 2001). There are 13 industries included in the DCMS classification: advertising, architecture, art and antiques market, crafts, design, fashion, film and video, music, performing arts, publishing, software, television and radio, video and computer games.

In 2010, The United Nations Conference on Trade and Development (UNCTAD) defines the CIs as a set of knowledge-based activities, focused on but not limited to arts, potentially generating revenues from trade and intellectual property

rights. The UNCTAD classification of CIs is divided into four broad groups: *heritage* (art crafts, festivals), *arts* (painting, sculpture, photography, antiques, live music, theatre, dance, opera), *media* (publishing and printed media, audiovisuals) and *functional creations* (design, architectural, advertising, cultural and recreational, creative research and development (R&D), digital and other related creative services) (UNCTAD, 2008, UNCTAD, 2010).

Although it is a relatively new concept in Romania, CIs have gradually developed in the national economy, generating profit and acting as an engine for the economic development of some regions and, especially, in increasing their competitiveness (Dumitrescu, Niculescu, 2011, Bobircă, Miclăuş, 2013, Croitoru et al., 2016, Pintilii et al., 2017). At territorial level the CIs have developed in territorial systems with the highest polarizing capacity. Bucharest is the most important creative pole in Romania, followed by the main urban poles of the country (Stoian et al., 2014, Volintiru, Dumitru, 2015). The challenges created for the Romanian's cities by the CIs sector are becoming opportunities for a sustainable development, so it is important that the cities identify and capitalize all the opportunities created by this sector of the economy (Suciu, 2009).

2. Methodology

The present paper focuses on the CIs sector analysis in Timișoara, a city recognized at national level for the high entrepreneurial spirit of its inhabitants and for its great creative potential.

The definition of the concept of CIs and the presentation of its main features was carried out by studying a relevant bibliography. The analyses of CIs was performed for the 2008-2016 period and it was based on the statistical data obtained from the National Institute of Statistics and from other public documents about CIs at local and national level.

The main indicators selected and analysed to characterize the development level of CIs and their dynamics were: the number of companies, the number of employees, and the turnover.

In order to emphasize the dynamics of the representative domains for the CIs sector to Timișoara's economy, a hierarchy of the creative activities was made according to the number of companies and the number of employees, for each year of the analyzed period (2008-2016). Special attention was given to highlighting the main factors that contributed to the development of CIs in Timișoara.

Starting from the various classifications of the CIs at the international level (UNCTAD, 2010, DCMS, 2011), we extracted from the list of NACE revised at the beginning of 2008, at two digit level, only those activities which belong to the CIs and which are representative for Romania (table 1).

Table 1 Areas of specialization of the Romanian CIs sector, by NACE codes

NACE Codes	Areas of specialization
18	Printing activities
58	Editing activities
59	Cinematography, video and television programs activities
60	Activities of broadcastings television programs
61	Telecommunication activities
62	Information technology service activities
63	Computer service activities
71	Architecture and engineering activities
73	Advertising and market research activities
74	Other professional, scientific and technical activities
90	Creative and artistic interpreting activities
91	Activities of the libraries, archives, museums and other cultural activities
93	Sport, amusement and recreation activities

Source: National Institute of Statistics

3. Results

Timișoara is the biggest city (331 004 inhabitants in 2017) and the most important economic pole in the West part of Romania.

During the last years, the city of Timișoara has developed in an intelligent manner, by increasing the CIs sector, which are competitive at national and international level, the majority of the CIs being based on new technologies.

The explosive growth of this sector is due in an overwhelming proportion by the activities which are developed in the IT&C domain (including software and video games) with a contribution of 36,4% to the turnover of CIs in 2016, respectively 163,2 mil. Euros, followed by telecommunications (23,8% ; 106,4 mil. Euros), architecture and engineering activities (17,4% ; 77,9 mil. Euros), advertising (5,8%; 25,8 mil. Euros) and other professional and technical activities (4,1%; 18,3 mil. Euros) such as: specialized design, photographic activities, translating activities etc.

At the national level, excluding Bucharest from the analysis, which is the Romania's most important creative pole, concentrating the biggest number of companies in CIs sector, as well as the biggest number of employees (Stoian et al., 2014, Volintiru, Miron, 2014, Pintilii et al., 2017), the city of Timișoara placed itself on the first place taking into account the number of employees in CIs sector in 2016 (12758 employees), followed by Cluj-Napoca (11672), Iași (8874) and Brașov (7772) and on the second place, considering the number of companies in CIs sector (2285 companies) after Cluj-Napoca (3700), but surpassing the city of Iași (1935), Brașov (1923) and Craiova (1051) (Figure 1, Figure 2).

The interesting fact is that, considering the average number of employees per company, the city of Craiova holds the first place, with an average of 6 employees, followed by Timișoara (5,6), Iași (4,6), Brașov (4), Cluj-Napoca (3,2) and Constanța (2,9) (Figure 2).

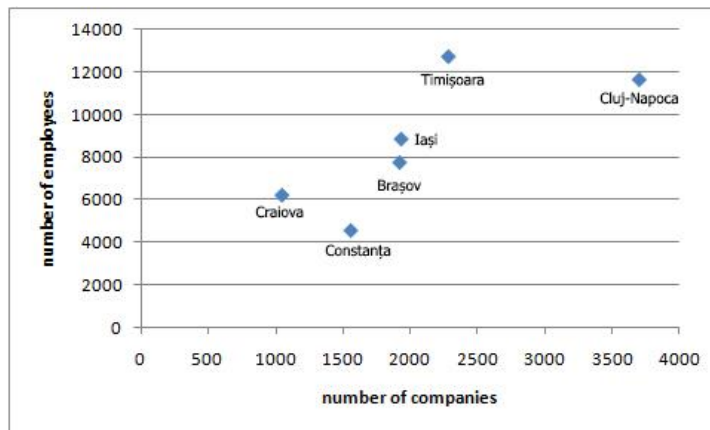


Figure 1 Position of Timișoara in relation with the main Romania's cities, after the no. of companies and the no. of employees in CIs sector, 2016

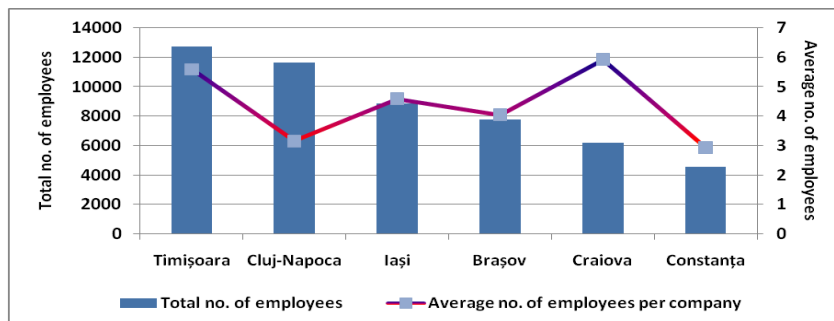


Figure 2 Total no. of employees and the average no. of employees per company in CIs sector in the main Romania's cities, 2016

Among the factors that contributed to the development of the CIs in the city of Timișoara, it is important to firstly highlight the capacity of the city to attract and retain creative human capital through the presence of the 3T (tolerance, talent and technology) just as how Florida (2005) had defined it. The multicultural dimension of the city, given by the high number of ethnical groups that live together in harmony, the high entrepreneurial spirit of the population and its openness towards the new (Işfănescu, 2005), the presence of the university education adapted to the

requirements of the local creative market are decisive factors in the growth of the local creative potential and in the development of CIs.

In the context in which innovation and creativity are fundamental in the economic development of any city, the local authorities have permanently tried to encourage the creative entrepreneurship by offering start-up funding and support for spaces of creation. The most investments in the science of management, of leadership, and of the market assessment have been made especially in the sectors of IT, software, gaming, product design or interior design. Thus, starting from 2004, the Technological and Industrial Park Timișoara (PITT) was created with the purpose of supporting the small and medium-sized enterprises (SMEs), including those from the creative sectors: software, IT & communication, design, research and development activities. The Scientific and Technologic Park 'Tim Science Park' is another structure which has the mission of using the results of the research activities and the application of the advanced technologies in economy, and, at the same time, it also pursues the growth of the participation of higher education and the research-development units to the process of economic and social development (PMT, 2016). Also within the regional IT & C business infrastructure, we mention the business incubator Incubooxx, which supports the start-ups in the domain by offering all the facilities it has. Moreover, the future entrepreneurs of the IT sector have the possibility to participate at certified courses offered by the Romanian-Swiss Multimedia Institute and the entrepreneurs of the software domain can participate at networking and know-how transfer meetings, or at variety of creative competitions at StartUp Hub, a co-working place for creative start-ups (Neamu, 2014).

The clustering phenomenon in the CIs domains has strongly developed at the local and regional level. The clusters have a positive influence not only on innovation and competitiveness, but also on the increase of business dynamics on a long term. Integrated in a network, the companies have greater chances of survival in a competition environment, than if they were to remain isolated (Ișfănescu, 2010). Thus, starting with this spatial concentration effect of the ICT companies and in order to promote and support them to become players on the global market, in 2011, the Regional Cluster for Technological Information and Communications West Region Romania was established. Another cluster that aims to increase the competitiveness in the field of Advertising, Printing, and Packaging is the APP Cluster, which brings together 25 companies with a total turnover of over 15 million Euros. The Regional Innovation and Technology Transfer Center 'Tehimpuls', set up in 2006, is another cluster structure that provides, among other things, training in the field of innovation and valorization of intellectual property rights.

The analysis of the CIs sector in the city of Timișoara during the 2008-2016 period highlights the increasing trend of the number of companies (from 2164

companies in 2008 to 2238 companies in 2016) and a slight decrease of the number of employees (from 13699 to 12758) and of the turnover (from 561,1 mil. Euros to 532,4 mil. Euros). There were also higher fluctuations, as they occurred in 2009-2011, deeply marked by the financial crisis, when there were significant decreases of CIs sector, but overall the growth was constant from year to year (Figure 3).

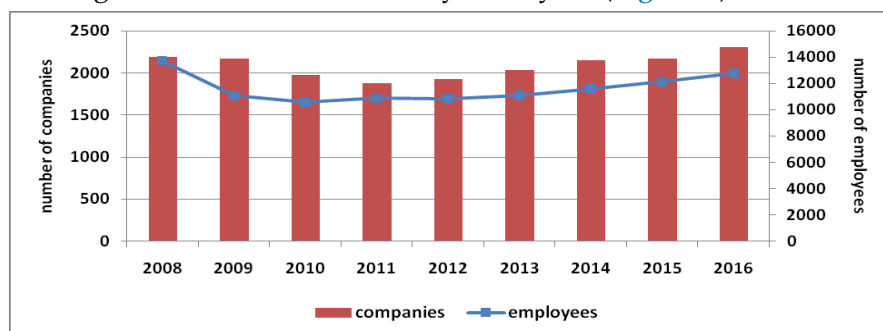


Figure 3 Evolution of number of companies and employees in CIs sector

Regarding the number of companies, the most representative CIs in 2016 were the information technology (NACE code 62), computer service activities (63), architecture and engineering activities (71), advertising (73), editing activities (58), sport, amusement and recreation activities (93) and other professional, scientific and technical activities (74). If we analyse the evolution of the CIs in the 2008-2016 period, the most creative industries in terms of the positive trend of the number of companies are the following ones: sports, amusement and recreation activities (60%), creative and artistic interpreting activities (53,5%), computer service activities (49,3%), information technology (28,5%) (Figure 4). The activities gathered in the NACE 74 code registered the highest increase (125%). Receiving the title of European Capital of Culture 2021 will boost the development of new creative activities in Timișoara city, especially in the cultural sector, in the entertainment one, and artistic one as well.

The evolution of the number of employees during the 2008-2016 period was strongly influenced by the economic environment in Romania. Because of the economic crisis, in 2009, the entire sector of CIs was affected by the massive reductions of the number of employees (Figure 5). The most affected sectors were activities of the libraries, archives, museums and other cultural activities (91), which lost 90,9% of their employees in just one year (from 110 employees in 2008 to 10 employees in 2009), followed by activities of broadcastings television program (60), 65%, (from 233 to 80 employees), information technology service activities (62), 48% (from 4272 to 2211 employees) and editing activities (58), 38% (from 1304 to 940 employees). In exchange, the financial crisis did not affect sectors such as advertising and market research activities (73), specialized design activities, photographic

activities and other professional activities (74). After 2011, there was a slight increase in number of employees due to the growth of entire regional and national economy. Noteworthy that in 2016, a number of areas still have fewer employees than in 2008: telecommunications (61), information technology (62) (although the number of companies increased), editing activities (58), printing activities (18), cinematography, video and television programs (59) and activities of broadcastings television programs (60). The only domains that have made remarkable increases in the number of employees in 2008-2016 periods were: computer service activities (345%), sport, amusement and recreation activities (60%) and advertising (30%).

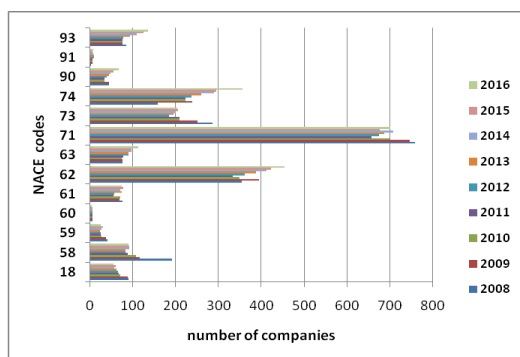


Figure 4 Evolution of companies in CIs sector, by NACE codes, 2008-2016

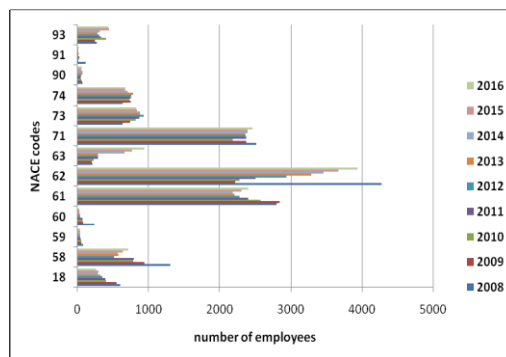


Figure 4 Evolution of companies in CIs sector, by NACE codes, 2008-2016

The evolution of the performance of each sector in the CIs sector can be analysed in terms of volume of turnover and its evolution in the 2008-2016 period (Figure 6). The domains that registered an increase of the turnover were computer services (63), with an explosive boost of over 600%, advertising and market research (73), 80%, creative and artistic interpreting activities (90), 38,8%, architecture (71), 21,5% and information technology (62), 18%.

Although the telecommunications sector recorded a strong regress, which can be easily observed because of the decrease of the turnover with 43,8%, mainly due to the withdrawal of an important investor in this domain (Alcatel-Lucent), Timișoara managed to attract in recent years remarkable international operators. To give an example in this sense, starting from 2016, Nokia established a centre of research and development of telecommunications at Timișoara, the biggest one in Romania. This centre develops broadband wireless technologies, which are used in domains such as internet of things, big data and in the new technologies of mobile communications. The media sector (59 and 60) and the printing activities (18) became less important as volume of turnover, highlighting an obvious regress.

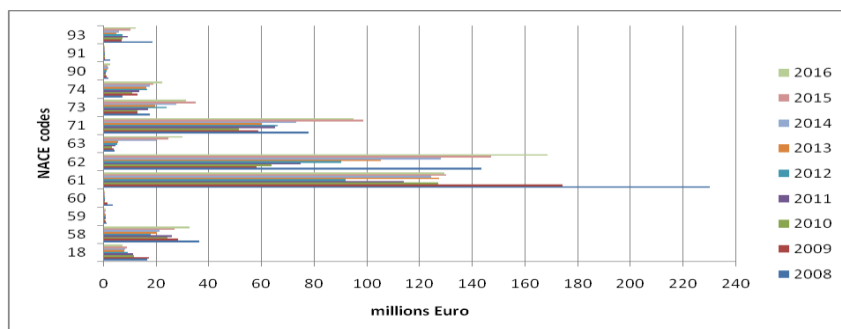


Figure 6 Evolution of turnover in CIs sector, by NACE codes, 2008-2016

The distribution of ranks of the CIs activities according to the number of companies in the 2008-2016 period highlights the constant maintaining at the top of the hierarchy of some creative economic activities: architecture and engineering (71), information technology (62), advertising and market research (73), specialized design and other professional activities (74), computer services (63) and the decline of others: printing activities (18) and editing activities (58) (table 2). The decline of these activities, not only at the local level, but on the national level as well, was caused by high costs of business incorporation and operation, market shrinkage and low added value (Pintilii et al., 2017). In contrast to this, certain domains such as the media (59 and 60), arts, and culture (90 and 91) have maintained their rankings. The analysis of the evolution of ranks according to the number of employees highlights some small differences in the top of the hierarchy (table 3).

Table 2 Evolution of ranks according to the number of companies in CIs, 2008-2016

NACE Codes	2008	2010	2012	2014	2016
71	1	1	1	1	1
62	2	2	2	2	2
73	3	4	4	4	4
58	4	5	6	7	7
74	5	3	3	3	3
18	6	8	8	9	10
93	7	6	7	5	5
61	8	9	9	8	8
63	9	7	5	6	6
90	10	10	10	10	9
59	11	11	11	11	11
60	12	12	13	13	13
91	13	13	12	12	12

Table 3 Evolution of ranks according to the number of employees in CIs, 2008-2016

NACE Codes	2008	2010	2012	2014	2016
62	1	2	1	1	1
61	2	1	3	3	3
71	3	3	2	2	2
58	4	5	6	7	6
74	5	6	5	5	7
73	6	4	4	4	5
18	7	7	7	9	9
93	8	8	8	8	8
60	9	10	12	12	12
63	10	9	9	6	4
91	11	13	13	13	13
59	12	12	11	11	11
90	13	11	10	10	10

Source: compiled by the author based on data from National Institute of Statistics

Along with the information technology activities (62) and architecture (71), the third biggest employer in CIs is the telecommunications sector (61), followed by computer services (63), which occupied one of the last positions in 2008, and advertising (73).

In order to increase the importance of art and culture (90), sport, and entertainment (93) sectors, it is necessary that the local authorities use the public space in a creative manner by supporting open projects which can trigger the entire community of architects, artists and designers. Unconventional spaces are the best ones for experimenting and artistic and cultural innovations, such as, for example, some abandoned industrial sites which could be converted into creative-cultural areas (Neamu, 2014). Also, by assuming the concept of Open Art City, Timișoara has a chance of visibility and affirmation on the European cultural map, and the cultural actors, who will act under this concept, will have more opportunities to develop creative projects, including innovative ones in arts, with the support of external financing instruments as well.

4. Conclusions

The city of Timișoara has a very high creative and business potential and an emerging market of CIs, which has a positive dynamics, these elements contributing to the increase of the CIs sector to the city's economy. The emergence of CIs has been connected to various factors such as intellectual and creative capital, entrepreneurial spirit, universities and research institutions tailored to the requirements of the local creative market, the high quality of life that attracts creative human capital, infrastructure to support creative activities. At the same time, there are a lot of abandoned industrial spaces which can be rehabilitated and transformed into a conglomerate of studios for creation and engines for business in the CIs area.

The IT industry, with a strong external market and international visibility, as well as the telecommunication, architecture and engineering sector, the advertising and market research sector represent the dominant CIs of the city, absorbing together more than 82% of the sector's employees and contributing with 85% to the forming of turnover of CIs.

Assuming the concept of Open Art City and obtaining the title of European Capital of Culture in 2021 represent an outstanding opportunity for the economic development of Timisoara city, especially for the development of CIs in the sectors such as arts and culture, sports, amusement and recreation.

References

- BOBIRCĂ, A., DRAGHICI, A., (2011). Creativity and Economic Development, *International Journal of Economics and Management Engineering*, Word Academy of Science, Engineering and Technology, 5 (11), pp. 1447-1452.
- BOBIRCĂ, A., MICLĂUŞ, P.G., (2013). Benchmarking Romania's Creative Competitiveness, *Journal of International Studies*, 6(1), pp. 22-37.
- CAVES, E. R., (2000). Creative industries. Contracts between Art and Commerce, *Harvard University Press*.
- COMUNIAN, R., CHAPAIN, C., CLIFTON, N., (2010). Location, location, location: exploring the complex relationship between creative industries and place. *Creative Industries Journal*, 3(1), pp. 5-10.
- CROITORU, C., COJANU, V., MUCICA, D., BECUȚ, A., (2016). Cartea albă pentru activarea potențialului economic al sectoarelor culturale si creative din România. *Pro Universitaria*, București.
- DUMITRESCU-TOMESCU, C., NICULESCU, G., (2011). Modele pentru industriile creative si implicațiile lor în politicile economice și culturale ale unei regiuni. *Analele Universității "Constantin Brâncuși" din Târgu Jiu, Seria Litere și Științe Sociale*, 2, pp.33-43.
- DCMS (DEPARTMENT OF CULTURE, MEDIA AND SPORT, UK GOVERNMENT), (2001). Creative industries mapping document. *HMSO: London*.
- FLEISCHMANN, K., WELTERS, R., DANIEL, R., (2017). Creative Industries and Regional Economic Development: Can a Creative Industries Hub spark New Ways to Grow a Regional Economy? *Australasian Journal of Regional Studies*, 23 (2), pp.217-242.
- FLORIDA R., (2002). The Rise of the Creative Class. *Basic Books*, New York.
- FLORIDA, R., (2005). Cities and the creative class. *Routledge*, New York.
- GARNHAM, N., (2005). From cultural to creative industries: an analysis of the implications of the 'creative industries' approach to arts and media policy making in the United Kingdom, *International Journal of Cultural Policy*, 11(1), pp.15-29.
- IȘFĂNESCU, R., (2005). Dinamism antreprenorial și dezvoltare economică în județul Timiș, *Lucrările Seminarului geografic 'Dimitrie Cantemir'-'100 de ani de învățământ geografic ieșean'*. 25, pp. 339-346.
- IȘFĂNESCU, R., (2010). Potential clusters in Banat and their role in regional economic development. *Journal of Urban and Regional Analysis*, 2 (1) , pp. 15-24.
- LAZZERETTI, L., BOIX, R., CAPONE, F., (2009). Why do creative industries cluster? An analysis of the determinants of clustering of creative industries, *IERMB Working Paper in Economics*, n° 09.02, Barcelona Institute of Regional and Metropolitan Studies.
- MARCO-SERRANO, F., RAUSELL-KOSTER, P., ABELEDO-SANCHIS, R., (2014). Economic Development and the Creative Industries: A Tale of Causality. *Creative Industries Journal*, 7(2), 81-91. DOI: <http://dx.doi.org/10.1080/17510694.2014.958383>.
- NEAMU, D., (2014). Industrii culturale și creative, în Marin, V., Pop, R. (coord.), *Strategia culturală a Municipiului Timișoara 2014-2024*, Primăria Municipiului Timișoara, Timișoara.
- PINTILII, R.D, PEPTENATU, D., DRĂGHICI, C., SAGHIN, I., STOIAN, D.I, 2015. Structural changes in the entrepreneurial profile of the creative industries in Romania. *Procedia Economics and Finance*, 23, pp. 1147-1151.

- PINTILII, R.D., PEPTENATU, D., CIOBOTARU, A.M., TOMA, S.G., GRIGORE, A.M., DRĂGHICI, C.C., DOBREA, R.C., SIMION, A.G., ANDRONACHE, I., TEODORESCU, C., DIACONU, C.D., (2017). Creative economies in Romania - spatial projections and trends. In: Środa-Murawska, S. and Szymańska, D. editors, *Bulletin of Geography. Socio-economic Series*, No. 37, Toruń: Nicolaus Copernicus University, pp. 95–108. DOI: <http://dx.doi.org/10.1515/bog-2017-0027>
- POTTS, J. D., CUNNINGHAM, S. D., HARTLEY, J., ORMEROD, P., (2008). Social network markets: a new definition of the creative industries, *Journal of Cultural Economics*, 32(3), pp. 166–185.
- PRIMARIA MUNICIPIULUI TIMIȘOARA (PMT), (2016). Strategia Integrată de Dezvoltare a Polului de Creștere Timișoara 2015-2020, Timișoara.
- STOIAN, D., PEPTENATU, D., PINTILII, R., SCHVAB, A., (2014). Territorial Distribution of Creative Poles in Romania. *Procedia Social and Behavioral Sciences*, 122, pp. 184–188.
- SUCIU, M.C., (2009). Creative economy and creative cities, *Romanian Journal of Regional Science*, 2 (1), pp. 82 – 91.
- UNITED NATIONS CONFERENCE ON TRADE AND DEVELOPMENT (UNCTAD), (2008). Creative Economy Report 2008. The Challenge of Assessing the Creative Economy: towards Informed Policy-making. Available at http://unctad.org/en/Docs/ditc20082cer_en.pdf (accessed on September, 10th 2018).
- UNITED NATIONS CONFERENCE ON TRADE AND DEVELOPMENT (UNCTAD), (2010). Creative Economy Report 2010. Creative Economy: A Feasible Development Option. Available at http://unctad.org/en/Docs/ditctab20103_en.pdf (accessed on September, 10th 2018)
- UNESCO, (2015). Cultural times. The first global map of cultural and creative industries. Available at <http://unesdoc.unesco.org/images/0023/002357/235710E.pdf> (accessed on September 16th 2018).
- VOLINTIRU, C., DUMITRU, M., (2015). Business Environment and Creative Industries in Romania, *Amfiteatru Economic*, 17(38), pp. 258–369.