

Revista Română de Geografie Politică

**Anul XVIII nr. 1
2016**



Editura Universității din Oradea



REVISTA ROMÂNĂ DE GEOGRAFIE POLITICĂ
Romanian Review on Political Geography

Year XVIII, no. 1, May 2016

Editor-in-Chief:

Alexandru ILIEȘ, University of Oradea, Romania

Associate Editors:

Voicu BODOCAN, "*Babeș-Bolyai*" University of Cluj-Napoca, Romania

Milan BUFON, "Primorska" University of Koper, Slovenia

Jan WENDT, University of Gdansk, Poland

Scientific Committee:

Silviu COSTACHIE, University of Bucharest, Romania

Remus CREȚAN, West University of Timișoara, Romania

Olivier DEHOORNE, University of the French Antilles and Guyana, France

Anton GOSAR, "*Primorska*" University of Koper, Slovenia

Ioan HORGA, University of Oradea, Romania

Ioan IANOȘ, University of Bucharest, Romania

Corneliu IAȚU, "*Al. I. Cuza*" University of Iași, Romania

Vladimir KOLOSSOV, Russian Academy of Science, Russia

Gheorghe MĂHĂRA, University of Oradea, Romania

Ionel MUNTELE, "*Al. I. Cuza*" University of Iași, Romania

Silviu NEGUȚ, Academy of Economical Studies of Bucharest, Romania

John O'LOUGHLIN, University of Colorado at Boulder, U.S.A.

Ronan PADDISON, University of Glasgow, United Kingdom

Grigor P. POP, University "*Babeș-Bolyai*" of Cluj-Napoca, Romania

Lia POP, University of Oradea, Romania

Nicolae POPA, West University of Timișoara, Romania

Stéphane ROSIÈRE, University of Reims Champagne-Ardenne, France

Andre-Louis SANGUIN, University of Paris-Sorbonne, France

Radu SĂGEATĂ, Romanian Academy, Institute of Geography, Romania

Marcin Wojciech SOLARZ, University of Warsaw, Poland

István SÜLI-ZAKAR, University of Debrecen, Hungary

Alexandru UNGUREANU – Romanian Academy Member, "*Al. I. Cuza*" University of Iași, Romania

Luca ZARRILLI, "*G. D'Annunzio*" University, Chieti-Pescara, Italy

Assistant Editor

Vasile GRAMA, University of Oradea, Romania

Technical Editor:

Marius STUPARIU, University of Oradea, Romania

Foreign Language Supervisor:

Corina TĂTAR, University of Oradea, Romania

Secretary On-line Version:

Ștefan BAIAS, University of Oradea, Romania

Grigore HERMAN, University of Oradea, Romania

The content of the published material falls under the authors' responsibility exclusively.

The manuscripts and exchange reviews, as well as any correspondence will be sent on the address of the Editorial Office.

Address of the Editorial Office:

Universitatea din Oradea, Departamentul de Geografie, Turism și Amenajarea Teritoriului

Str. Universității, nr. 1, 410087 Oradea, România

Tel./fax: 0040.259.408.475, e-mail: rrgp.uoradea@yahoo.ro, <http://rrgp.uoradea.ro>

The review is issued under the aegis and with the support
of the **University of Oradea, The Territorial Studies and Analyses Centre**
and the **IGU – Commission on Political Geography**

C O N T E N T S

TRADITION AND HISTORICAL CONTINUITY OF ADMINISTRATIVE FUNCTIONS IN THE FORMER PROVINCIAL CITIES IN POLAND

Wioletta SZYMANSKA
(Art#181101-297) 5

THE EMERGENCE OF LABOUR FORCE RESILIENCE. A CASE-STUDY: ROMANIA

Paul-Răzvan ȘERBAN, Ioan IANOȘ, Cristian TĂLĂNGĂ
(Art#181102-298) 18

* * * * *

"B+" Category (since 2007)

[http://vechi.cncsis.ro/cenaposs/2008/Arhiva/reviste cat B+ 08.pdf](http://vechi.cncsis.ro/cenaposs/2008/Arhiva/reviste%20cat%20B%2008.pdf)

**The Romanian Review on Political Geography
is indexed in:**

INDEX COPERNICUS

<http://journals.indexcopernicus.com/karta.php?action=masterlist&id=3944>

DOAJ - DIRECTORY OF OPEN ACCESS JOURNALS

https://doaj.org/toc/2065-1619?source=%7B%22query%22%3A%7B%22filtered%22%3A%7B%22filter%22%3A%7B%22bool%22%3A%7B%22must%22%3A%5B%7B%22term%22%3A%7B%22index.issn_exact%22%3A%222065-1619%22%7D%7D%2C%7B%22term%22%3A%7B%22_type%22%3A%22article%22%7D%7D%5D%7D%7D%2C%22query%22%3A%7B%22match_all%22%3A%7B%7D%7D%7D%2C%22from%22%3A0%2C%22size%22%3A100%7D

ULRICHSWEB – GLOBAL SERIALS DIRECTORY

http://www.ulrichsweb.com/ulrichsweb/ulrichsweb_news/uu/newTitles.asp?uuMonthlyFile=uu201003/new_title_s.txt&Letter=G&navPage=9&

TRADITION AND HISTORICAL CONTINUITY OF ADMINISTRATIVE FUNCTIONS IN THE FORMER PROVINCIAL CITIES IN POLAND

Wioletta SZYMAŃSKA

Pomeranian University in Słupsk, Faculty of Mathematics and Natural Sciences,
Institute of Geography and Regional Studies,
Partyzantów Str. 27, 76-200 Słupsk, Poland, e-mail: szymanskaw@apsl.edu.pl

Abstract: The tradition of the function of an administrative center in terms of historical background on the various territorial divisions is essential for understanding the formation of the culture of the organization and management of the city, for making its development and for creating a sense of civic identity. These factors may condition the socio-economic development and the functioning of the city despite the loss of prestigious positions in certain historical periods. The speech will discuss the historical conditions and the tradition of performing administrative functions according to its rank in the currently degraded provincial cities. Retrospective analysis will address the 31 urban centers, since their formal establishment. The aim of the study is to identify the differences and similarities of the former provincial cities by the time the highest performing administrative functions and administrative functions according to the rank of the center in a historical perspective. Consequently, the attempt is made to identify opportunities for further development of these degraded administratively cities due to the factor of administrative traditions.

Key words: administrative function, historical rank administrative functions, relegated cities, Poland

* * * * *

INTRODUCTION

The administrative function in political and historical geography is incorporated into scientific consideration as a socio-political factor in the concepts of territorial divisions and structuring of power, and now the role of local government in shaping the civil society with the criticism of local government weakening is also emphasized (Koter 1996; Koter, Liszewski, Suliborski 1996; Eberhard 1997; Bagdziński, Szczepkowski 1998; Stasiak 1999, Heffner, Rykała 1999, Hopfer, Suchta, Żebrowski 1999, Kaczmarek 2012, Wendt 2007).

However, there is current research in geography emphasizing the role of administrative functions in social and economic development of settlement

units. Many researchers on the basis of empirical research and theoretical considerations recognizes that administrative functions stimulate the socio-economic development (Dziewoński, Jerczyński 1971, Dutkowski 2006, Wendt 2001). It is assumed that the higher the position of the city in the administrative hierarchy, the more favorable conditions for development it has in relation to the city of similar size, but deprived of administrative functions (Kaczmarek 1992). The hierarchical features in this sense are quite heavily accentuated. The important role that the greater decisiveness and thus - the power (Kaczmarek 1996; Wendt 2001, 2007) manifested in major development opportunities other than the administrative functions of the city. In relation to the different sizes of settlements, the administrative functionality therefore has a different impact on their development. In this sense, the importance of stability and historicity of the administrative functions is also highlighted (Górka 1992; Węclawowicz 1992), and especially – the central functions. Similarly, the strong role of supra-local centers in the outermost regions was pointed out by E. Rydz (1990). He defined the administrative function as an important field of stimulating the development of other urban functions, including economic and a wide range of social functions in the context of the impact on the surrounding area, understood as a network of socio-economic relations. Some researchers verify this thesis, referring to the negative effects of the loss of the prestige administrative functions, which was related to the degradation of the rank of an administrative center, but also with the increase of economic and social problems and economic (Kupiec 1992; Jasiulewicz 2001; Szwichtenberg 2002). A completely different kind of hypothesis in their deliberations about the development of Łódź formulated S. Liszewski and A. Wolaniuk (1992). They demonstrated that the economic development of the city took place without a significant share of administrative functions, and even historically, these functions were reluctant to be located by the structure of administrative power in this city. The industrial function was the deciding development factor. The demographic and economic development of the city, as a consequence, forced the placement in it the administrative function of the level corresponding to the size of the city, which was a peculiar “inversion of urban functions.”

A similar view was expressed by A. Jelonek (1992), claiming that from a historical point of view, in the nineteenth and twentieth centuries, there were often cases of relocation of administration headquarters (particularly the central ones) to the centers of favorable transportation position, with well developing, thanks to this, industry and crafts. Rarely, however, the significant administrative functions were located in the less developed cities or cities built all over again.

An example of the former provincial cities in Poland shows that there is still political decision-making hierarchy, which is more important than social, economic, or historical justification. As a consequence of such decisions, the status of provincial cities in 1975 was received by cities that had not have so far any tradition of performing important administrative functions. After 23 years, they have lost their prestigious status. Was such a move justified from a historical point of view? The answer to this question is partly the purpose of this publication.

In Poland after World War II, the introduction of new administrative divisions has become a necessity, as never before Poland did not exist in the

current boundaries. In the first years after the war due to the lack of definitive findings as to the state border, the pre-war structure of administrative authorities were restored, and the northern and western lands adopted the common name of the Regained Territories areas. In the history of administrative divisions in Poland, the most important reform started 14th March 1945, when the Regained Territories were divided into 4 districts, acting the beginnings of new provinces (Gawryszewski 2005; Szymańska 2015).

Since that time, there have been many changes in the administrative division of the country. From the point of view of development of the highest level administrative functions, there were six major changes. The first change was made on April 6, 1945, when new Gdańsk province was separated from the structures of Pomeranian province with capital city of Gdańsk. At the same time, capital of the Pomeranian province was moved from Toruń to Bydgoszcz. At that moment, there were 10 provincial cities in Poland. More than a year later, on June 28, 1946, the existing administrative division of the country was corrected. Three new provinces were established in the area of the Recovered Territories: Olsztyn, Szczecin, and Wrocław, and boundaries of others were changed. Eventually, 14 provinces and 2 separated cities with the rights of provincial cities (Warsaw, Łódź) were proclaimed. The next reform concerned the changes in areas of the Recovered Territories. On July 6, 1950, three new provinces were created, while establishing Koszalin and Opole as the provincial cities. At this point, Poland consisted of 17 provincial cities and 2 separated cities with the rights of provincial cities. In 1957, another change was made by administrative extracting of additional 3 cities and giving them the status of provinces. The administrative structure developed and gave greater powers to 5 cities having higher status than the capital of the province. This relatively stable state of administrative division at the highest level was maintained until 1975. In this year, the three-level administrative division of the country was abolished. Counties were abolished and municipality was introduced as the basic unit of the local division, while province became the second level. There have been a large fragmentation of the provincial structures by establishing 49 provinces. As a result of this reform, 32 new city acquired the status of provincial cities. This organizational structure lasted for 23 years. Since January 1, 1999, the three-level territorial division of the country was restored, establishing 16 provinces, 380 counties (including 66 cities with the rights of county). Of the 49 provincial cities, 18 did not lose their rank (two provinces maintained double capitals: Kujawsko-Pomorskie - Bydgoszcz and Toruń, Lubuskie - Gorzów Wielkopolski and Zielona Góra), while 31 have been degraded to the cities with functions of the district level (figure 1).

The article analyzes cities, that as a result of recent Polish administrative reform of 1999, lost their important administrative functions of the first level, i.e. provincial city functions. These cities are a diverse collection in terms of historical continuity of performed administrative functions. Among them, there are those that have a rich tradition of acting as regional centers and such that obtained these functions in 1975. Nevertheless, the situation of ennoblement to an important regional center was an important development impulse and, in a sense, the historic decision shaping contemporary territorial identity of residents of many of these cities.

The objective of the analysis was to determine the traditions and continuity of administrative functions from the moment of obtaining municipal

rights by the city to the present, in the context of historical conditions and validity of their functions. The aim of the study was to indicate the diversity of a set of degraded cities, their typology according to the criterion of administrative traditions length, rank of the performed administrative functions, and continuity of the highest rank functions. The publication aims to discuss the role the historical factor may play in a development of the city and formation of its territorial identity, despite the loss of prestigious positions in certain historical periods.

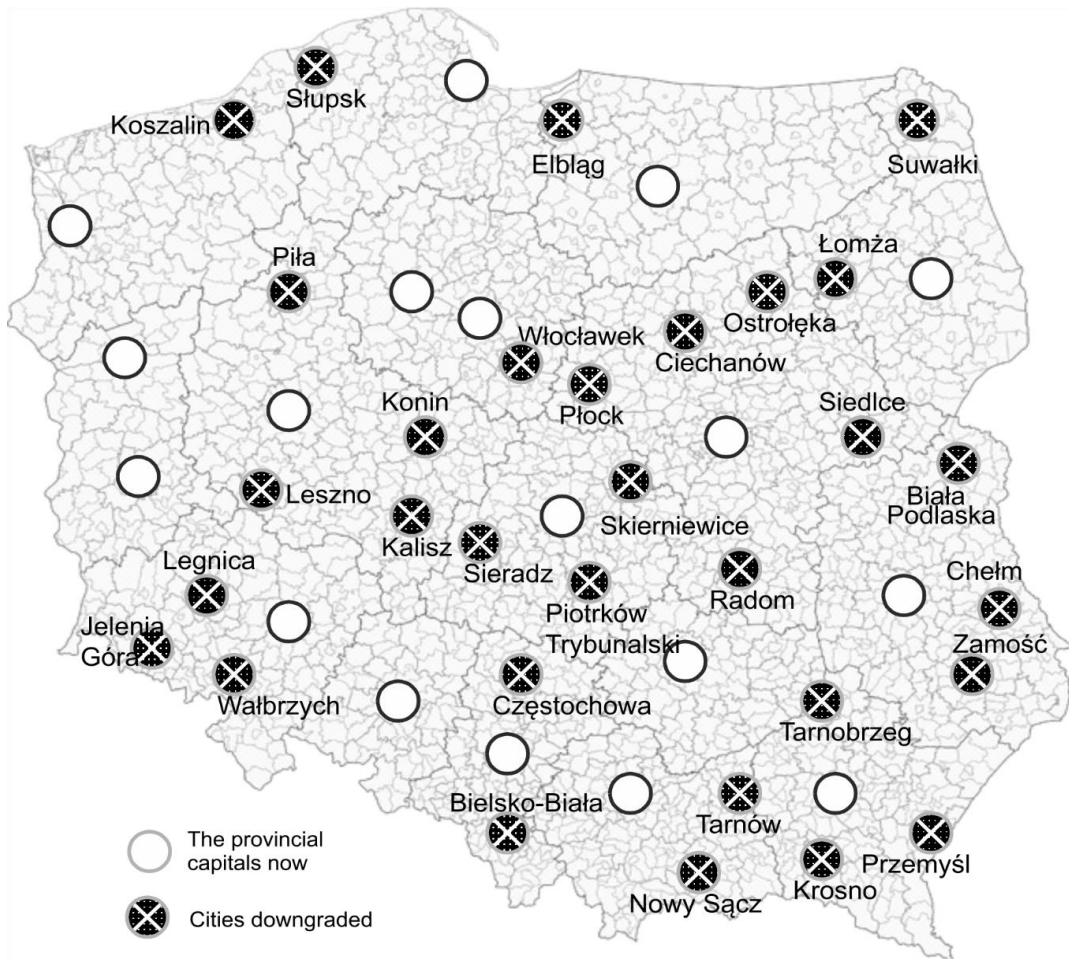


Figure 1. Cities downgraded according the administrative division in Poland dated January 1, 1999
(Source: Szymańska 2015)

METODOLOGY

The adopted methodology consisted in determination, on the basis of historical documents and available scientific studies, several groups of indicators, which were then summarized in a table of characters and classification of the analyzed cities was performed. Classifying factors were: the period of obtaining municipal rights, rank of administrative functions, and continuity of the administrative functions of the highest levels.

The historical approach of this analysis was based on the periods before 1975, accepting that this is the date, since when all test cities, for a period of 23 years, had the status of provincial capital. This factor was the choice of objects to study, thus it cannot be considered a determinant of historical aspects of administrative functions.

In the first step, the date of obtaining municipal rights of each city was determined. Then, referring to the historical view of political doctrines, including the development of statehood (Jakubowski, Sulowski, Wojtaszczyk 2003), analyzed cities were divided into three groups of centers according to obtaining municipal rights in a particular historical period, i.e. medieval cities (to XVth century), modern cities (XVI-XVII centuries), contemporary cities (since XVIIIth century). Therefore, the length of the administrative traditions of a given city was defined.

In the second step, the rank of the performed administrative functions according to the three levels of I, II and III order, was indicated, where: Level I – administrative centers of the first level (the capitals of voivodeships, provinces, territories or governorates); Level II – administrative centers of the second level (the capitals of counties, circuits, regencies, departments) and Level III – administrative centers of the third level (local centers).

In the third step, the reference to the sustainability of the administrative functions performance of the highest order, i.e. I and II, was made. Cities were divided into those with continued high administrative functions, periodic or episodic administrative functions, and cities without any episode of the high order administrative function.

Based on these three factors, degraded provincial cities were classified into 2 groups and three subgroups. There were: I. cities with a long administrative tradition (medieval cities) and II. cities with a short administrative tradition (modern and contemporary cities). In each of these groups, cities were classified according to: A) permanent high rank, B) periodic/episodic high rank, C) low rank.

ANALYSIS

The role of history in the development of power and governance centers is emphasized in many scientific discussions (Kaczmarek 1996; Wendt 2001), but also is used in practice during making decisions about changes in territorial divisions. The historic tradition of administrative functions becomes an important argument in the territorial consciousness of residents at every level of territorial divisions (Bartkowski 2003).

Administrative functions belong to the oldest forms of activity in the city (Kaczmarek 1996; Suliborski 2001). They determined other social and economic activity before establishing the statehood on Polish territory. However, the organizational structure of administrative tasks was shaped from period of gaining the municipal rights. Particularly important for the development of the city was acting as a supra-local, which according to T. Kaczmarek (1996), gave the cities the prestige of an important political, social and religious center.

In order to determine the length of administrative traditions performed by cities in the analyzed group, their age structure according to the municipal rights, was identified. The locations acts were given to all the analyzed cities in the past (figure 2).

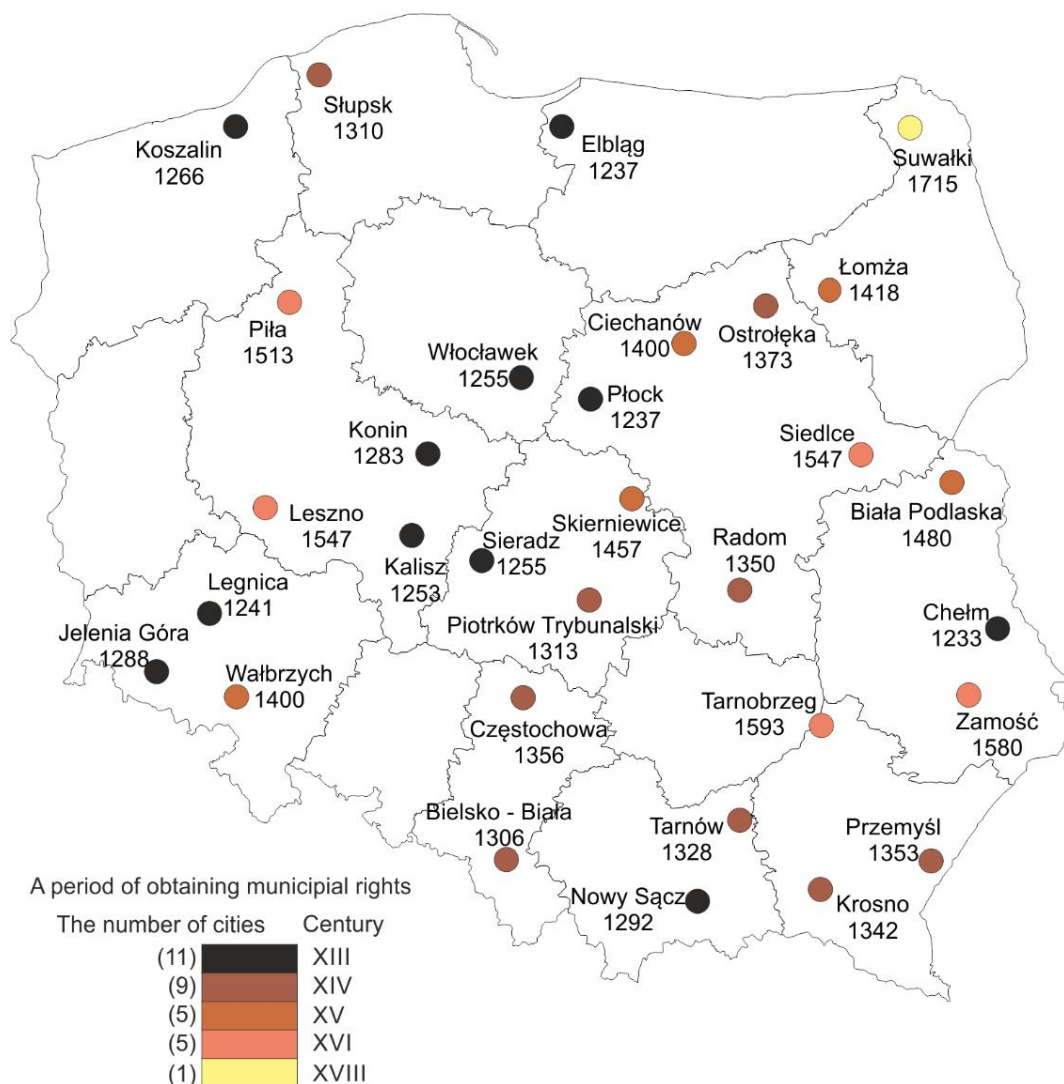


Figure 2. A period of obtaining municipal rights by degraded cities in Poland
(Source: Own elaboration based on Krzysztofik 2007 and Gawryszewski 2005)

Among cities with the longest administrative tradition, there is Chełm, which received the municipal rights in 1233. It is a city which is now situated in the Lublin province and has the status of a city with county rights. In its rich history, Chełm was the capital of Chełm province in 1793-1795 and 1975-1998. In addition, it played the role of capital of the historic Chełm Land and Chełm Governorate. It was also a royal city of the Crown of the Polish Kingdom.

The youngest city in this category is Suwałki, which received the municipal rights nearly 500 years later, i.e. in 1715. The city is located in north-eastern Poland in Podlaskie province. From a historical point of view, it is the capital of Suwałki region. The region in the period 1569-1795, within the Polish-Lithuanian Commonwealth, was part of the Grand Duchy of Lithuania. The city was founded relatively late, because in fact arose from a settlement founded by the Order of the Camaldolese, who received the town privileges from King

Augustus II. In subsequent historical periods, Suwałki has remained within the Kingdom of Prussia since 1795, and has been included in the Duchy of Warsaw since 1807. During the existence of the Polish Kingdom, for a short time in 1816-1837, the Augustów province was created with its capital in Suwałki. Later, the town was the capital of the governorate, and since 1863, once again became the capital of the Augustów province. The city retained this status until the First World War.

In the classification of studied cities according to historical duration, the reference to the classical doctrines of political development of the state was made (Jakubowski, Sulowski, Wojtaszczyk 2003). Cities were divided into 3 groups: medieval cities (to XVth century), modern cities (XVI-XVII century), and contemporary cities (since XVIIIth century).

Among the tested set of former provincial cities, the age structure indicates that this are relatively old cities (table 1). Over 35% of them received municipal rights in the XIIIth century, 29% in the XIVth century, and about 16% in the XVth century. In general, 25 cities received important municipal privileges in the Middle Ages (80.6%). This fact makes these cities have a sense of a long-term urbanity tradition.

Due to the low representation of cities in the next two groups, they have been combined as contemporary cities. This group is formed by only 6 youngest cities of Leszno, Piła, Siedlce, Tarnobrzeg, Zamość and the already mentioned Suwałki. They represent 19.3% of the analyzed set of cities and have relatively shortest traditions of performing the administrative functions.

Table 1. The age structure of degraded cities in Poland
(Data source: Own elaboration based on Krzysztofik 2007 and Gawryszewski 2005)

Century of obtaining the municipal rigts	The number of former provincial cities	
	N	%
The medieval towns/cities		
XIII	11	35.5
XIV	9	29.0
XV	5	16.1
The modern towns/cities		
XVI	5	16.1
XVIII	1	3.2

Analyzed cities were assessed in terms of the rank of the administrative functions performed. Three importance levels were distinguished: Level I, Level II, and Level III (figure 3). In different historical periods, studied cities changed both their nationality and functioned in different structures of the territorial divisions. The study took into account the level of territorial divisions for the contemporary historical period and nationality. As a result, investigated cities were classified to 3 groups, of which the first two were considered important supra-regional functions, while the third level was considered to be the local rank. In the first group of the first order functions, there were cities that played functions corresponding to the today's administrative functions of provincial cities and higher. The second group included cities of the rank of today's district towns (middle-level rank), while in group 3, there were cities corresponding to the functions of today's municipalities.

In addition, historical period, in which given functions were performed by specifying their durability, were marked. This category also included three

groups of classification: cities with a sustainable continuity of administrative functions of the I or II order, cities of periodic or episodic durability of administrative functions of the I or II order, and cities that did not have a function of the I or II order before 1975, playing only the III order functions (figure 3).

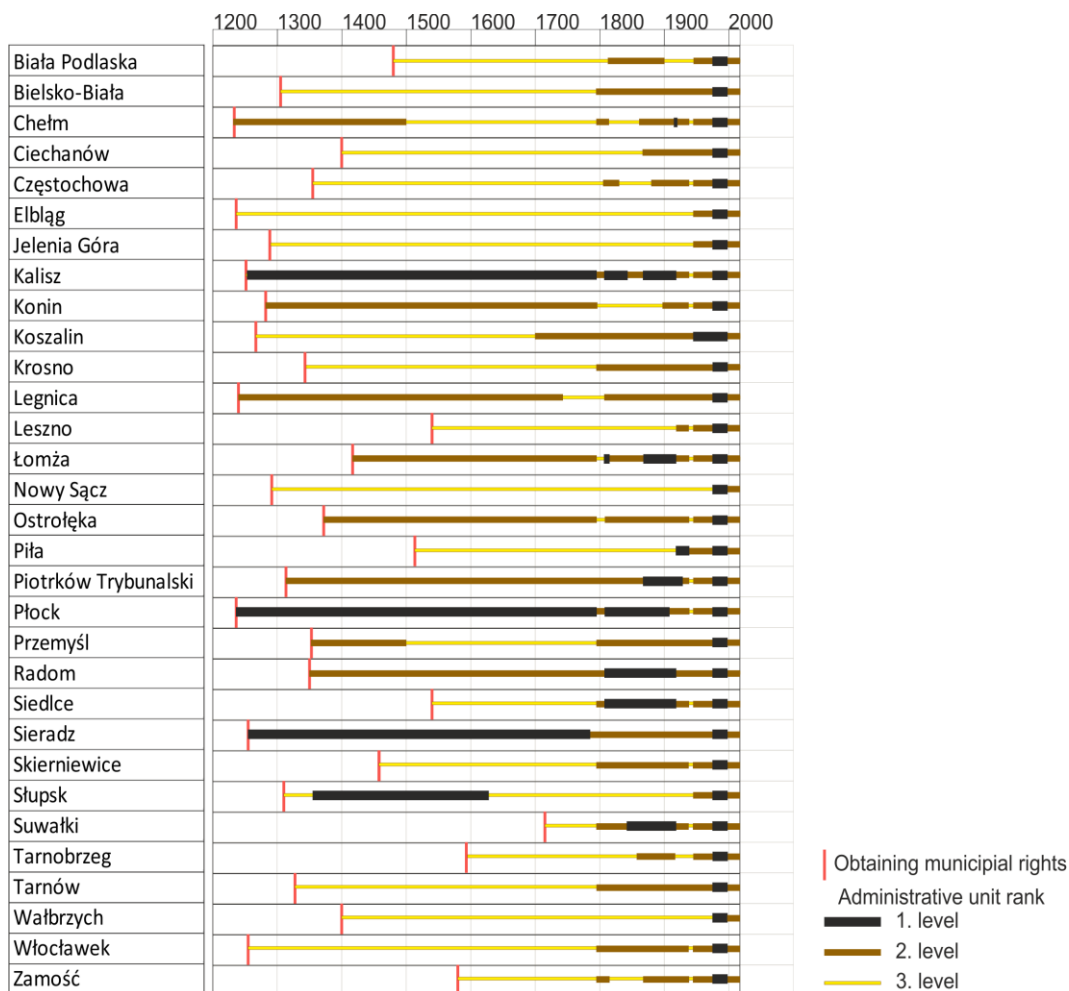


Figure 3. The continuity of the administrative rank by degraded cities in Poland
(Source: Own elaboration based on Walkiewicz 2006, *Miasta polskie... 1965-1967*)

Historical analysis of the rank of administrative functions of the former provincial cities in Poland indicated that most of these cities (61.3%), before ennoblement in 1975 to the rank of provincial capital, has never played as high administrative functions in the past (table 2). the historical administrative divisions, they were the capitals of the second order units (regencies, districts, circulations, circuits, departments). Some of them relatively late become even provincial centers such as Leszno in 1887, Skierniewice in 1867, or Krosno in 1865. Within this group, two of the cities, i.e. Nowy Sącz and Wałbrzych, did not play even the second order functions before. Their establishment of provincial cities had no historical justification, although they were old town, which received

the municipal rights relatively early, i.e. in the XIIIth and XVth centuries, respectively.

Among 31 former provincial cities, only 12 played a role of administrative centers of the highest degree in the past. They were Chełm, Kalisz, Koszalin, Łomża, Piła, Piotrków Trybunalski, Płock, Radom, Siedlce, Sieradz, Słupsk, and Suwałki. This argument was eagerly cited in discussions over the last territorial division of Poland (in 1999). The authorities of these cities tried to prove the necessity of leaving their province in a new administrative structure due to the historical tradition of administrative functions.

Table 2. The administrative rank of degraded cities in Poland before 1975
(Data source: Own elaboration based on Walkiewicz 2006, *Miasta polskie...* 1965-1967)

The administrative rank	The number of former provincial cities	
	N	%
level I	12	38.7
level II	17	54.8
level III	2	6.5

Two cities had the highest and longest administrative rank in this group: Kalisz and Płock. These were the headquarters of provinces in pre-partition Poland, then during the partitions, they played functions of, e.g. capitals of the departments of the Duchy of Warsaw, capitals of provinces in the Polish Kingdom, or governorate capitals in the Russian zone. They have lost their high administrative rank in 1916. In this group, also Sieradz, which was the capital of the province in the administrative structure of the country during the pre-partition period, and at the time of partition became the center of a lower level, should be mentioned. Łomża, Ciechanów, Przemyśl, and Chełm, before partition of Poland, were the administrative centers of lands – units equivalent to today's provinces. In turn, Radom and Siedlce had the highest rank during the occupation. Legnica and Słupsk were the capitals of the duchy. Piła was the unit of the highest level for a short period in 1922-1938 as the capital of the province Nowa Marchia Graniczna. In this group, Koszalin achieved the highest status as last one; it was established as the provincial city in Poland after World War II.

The third relevant factor was the durability of important administrative functions performance. In this perspective, it was assumed that the variability of the history of Polish lands authorizes to recognize that the administrative function was stable if it was performed during the entire period of the city existence at the function level of the I or II order, with the exception of World War II (table 3).

Table 3. The stability administrative functions of the first and second level of degraded cities in Poland
(Data source: Own elaboration)

The stability administrative functions	The number of former provincial cities	
	N	%
permanent	8	29.0
periodic/episodic	21	67.7
lack	2	6.5

Analysis of this factor indicates a slight stability in the performance of the highest administrative functions of analyzed cities. Nearly 68% of them (21

cities) played these functions periodically or episodically, 2 cities did not have them at all, while only 8 cities were distinguished by relative stability of these functions. These include the previously mentioned: Kalisz, Łomża, Ostrołęka, Piotrków Trybunalski, Płock, Radom and Sieradz. From this point of view, these are the cities that should have the most well-established administrative traditions. This should greatly facilitate the efficient management of the city and identify with the region in terms of the management characteristics.

Summarizing conducted analysis, cities were classified taking into account the above variables. Two groups of centers in terms of the length of administrative traditions were specified. Among them, 3 subgroups taking into account the durability and the rank of administrative functions, were distinguished (table 4).

Table 4. The classification of former provincial cities in Poland in terms of tradition and continuity of administrative functions

(Data source: Own elaboration)

The tradition and stability of administrative functions	The former provincial cities		
	N	%	Name
I. The medieval towns/cities			
A. Cities with permanent high rank administrative function	8	29.0	Kalisz, Legnica, Łomża, Ostrołęka, Piotrków Trybunalski, Płock, Radom, Sieradz
B. Cities with periodic/episodic high rank administrative function	15	43.4	Biała Podlaska, Bielsko-Biała, Chełm, Ciechanów, Częstochowa, Elbląg, Jelenia Góra, Konin, Koszalin, Krosno, Przemyśl, Skierniewice, Słupsk, Tarnów, Włocławek
C. Cities without administrative function of high rank	2	6.5	Nowy Sącz, Wałbrzych
II. The modern towns/cities			
A. Cities with permanent high rank administrative function	-	-	x
B. Cities with periodic/episodic high rank administrative function	6	19.3	Leszno, Piła, Siedlce, Suwałki, Tanobrzeg, Zamość
C. Cities without administrative function of high rank	-	-	x

In classification of the former provincial cities, mainly cities of group I.B. occurred - Medieval cities with periodic or episodic periods of high-ranking administrative functions performed. These are the cities located in different Polish regions, both in central Poland, as well as on its borders.

Group I.C. contained two old cities situated in the southern Poland at the foot of mountains and located due to the large defensive qualities. Certainly, the lack of tradition and continuity of high-ranking administrative functions did not justify the ennoblement of these cities to the level of provincial capitals.

The most visible and stable administrative functions characterized cities from I.A. group. These are the cities situated in the central part of Poland on the territory for the longest time historically associated with Polish lands. These are centers, which have the richest tradition of administrative functions and can

therefore be considered the most experienced in shaping the culture of city management, city development and territorial identity organization.

Among the contemporary cities, all centers have been classified to II.B. group. Their relatively high administrative rank was shaped periodically and relatively late, since at the end of XIXth century or early XXth century. Only two of them (Siedlce and Suwałki) have played in the past functions of the I order. It can be assumed that these are young cities with poorly shaped tradition of performing the administrative functions.

CONCLUSIONS AND DISCUSSION

In the post-war Polish history, many administrative changes occurred. These changes concerned both adjustments of territorial divisions, as well as changes in the administrative rank of many cities. As a result of these reforms in 1975-1998, there was a territorial fragmentation of created units with the rank of a province. Forty-nine provinces were created giving the new administrative functions at the highest level to 32 cities. Since 1999, some of them lost its prestigious function and was degraded to the rank of district towns. The analysis included 31 administratively degraded provincial cities.

Among these cities, there were mostly old ones, which received municipal rights in the Middle Ages (80.6%). Not all of them had, however, historically documented tradition of performing the high-ranking administrative functions. Only 12 centers from the test set of cities played the role of the highest level administrative center, and only 8 showed the continuity of administrative functions.

Classification of the former provincial cities in Poland indicated that the majority of them (43.4% - group I.B) b were the old cities with periodic or episodic traditions of performing the administrative functions of the highest rank. The second important group (29% - group I.A) included old cities with enduring high administrative rank. In terms of tradition and continuity of administrative functions, this was a collection of the most experienced centers. The rich tradition should reflect the organizational culture of city management. Cities from the group I.C (6.5%) were the least significant in terms of historical factors. These were old cities that never played any significant administrative functions. They acquired this status for the first time in 1975. Likewise, little importance of historical administrative traditions can locate a city in group II.B (19.3%). In this case, they are cities located in late years, and administrative features of the highest level (rather the II level) were played periodically or episodically. They did not develop any permanent administrative traditions, and ennoblement to the role of a regional center was a great opportunity.

Currently degraded provincial capitals, as a result of administrative reform in 1975, received a very important function, which has become a factor for social and economic recovery. Their demographic and economic development in this period was more intense than in present provincial cities performing this function since the beginning of the post-war Polish history. However, after the loss of the highest rank function, studied cities began to experience a demographic crisis much harder. At the same time, not all of them experienced a similar setback in the economic sphere (Walkiewicz 2006, Szymańska 2015). May tradition and continuity of important administrative functions be a factor in regulating the development trends of units of urban settlements? Example of the former provincial cities in Poland does not give a clear answer. Certainly, some of

these cities should more than other ones keep the ability to manage the city, maintaining territorial influence because of its long administrative tradition.

However, a conclusion arises that, from the point of view of historical factors, giving a high administrative rank to most of these cities was unauthorized and did not bring the expected development results.

REFERENCES

- BAGDZIŃSKI S.L., SZCZEPKOWSKI J., (1998), *Próba oceny proponowanych podziałów terytorialnych Polski*, In: *Polska ojczyzn czy regionów*, ed. Z. Jabłoński, A. Potoczek, 78-86. Wydawnictwo Regionalnego Ośrodka Studiów i Ochrony Środowiska Kulturowego, Toruń;
- BARTKOWSKI J., (2003), *Tradycja i polityka. Wpływ tradycji kulturowych polskich regionów na współczesne zachowania społeczne i polityczne*, Wydawnictwo Akademickie Żak, Warszawa;
- DUTKOWSKI M., (2006), *Europejskie funkcjonalne obszary metropolitalne w Europie Bałtyckiej*, In: *Wybrane problemy przekształceń miast Polski Północnej*, ed. M. Pacuk, Regiony Nadmorskie, 12, 25-34. Uniwersytet Gdański, Gdańsk;
- DZIEWOŃSKI K., JERCZYŃSKI M., (1971), *Tarnów, jego funkcje w sieci osadniczej kraju i regionu*, Prace Geograficzne, 82, 55-80;
- EBERHARDT P., (1997), *Historyczne, współczesne i projektowane podziały administracyjne na pograniczu białorusko-polsko-ukraińskim*, In: *Zagadnienia wielokryterialnej delimitacji euroregionu na pograniczu polsko-białorusko-ukraińskim*, ed. A. Miszczuk, 62-83. Norbertinum, Lublin;
- GAWRYSZEWSKI A., (2005), *Ludność Polski w XX wieku*, PAN IGiPZ, Monografie, 5. Warszawa;
- GÓRKA Z., (1992), *Lokalizacja funkcji administracyjnej w nowych siedzibach wojewódzkich*, Acta Universitatis Lodzensis, Folia Geographica, 17, 199-204;
- HEFFNER K., RYKAŁA I., (1999), *Praszka – miasto w strefie dawnego pogranicza nad górą Prosną w koncepcjach nowego podziału administracyjnego Polski*, Śląsk Opolski, 9, 1, 23-26;
- HOPFER A., SUCHTA J., ŻEBROWSKI W., (1999), *Warianty podziału Polski na region administracyjne i oceana ich potencjału ekonomicznego*, In: *Transformacja polskiej przestrzeni w perspektywie integracji europejskiej*, ed. J. Kołodziejski, 289-303. Wydawnictwo Naukowe PWN, Warszawa;
- JAKUBOWSKI W., SUŁOWSKI S., WOJTASZCZYK K.A., (2003), *Historyczny rozwój państw*, In: *Spółczesność i polityka. Podstawy nauk politycznych*, ed. K.A. Wojtaszczyk, W. Jakubowski, 195-218. Oficyna Wydawnicza ASPRA-JR, Warszawa;
- JASIULEWICZ M., (2001), *Pomorze Środkowe w dwa lata po reformie administracyjnej (oczekiwania, nadzieje, efekty)*, In: *Integracja i rozwój Pomorza Środkowego*, 83-93. Politechnika Koszalińska, Koszalin;
- JELONEK A., (1992), *Funkcja administracyjna miast – uwagi dyskusyjne*, Acta Universitatis Lodzensis, Folia Geographica, 17, 267-271;
- KACZMAREK T., (1992), *Wybrane problemy rozwoju społeczno-gospodarczego Gniezna w aspekcie zmian funkcji administracyjnych*, Acta Universitatis Lodzensis, Folia Geographica, 17, 181-198;
- KACZMAREK T., (1996), *Rola funkcji administracyjnych w rozwoju średnich miast Wielkopolski (Gniezno, Kalisz, Konin, Leszno, Ostrów Wlkp., Piła)*, Bogucki Wydawnictwo Naukowe, Poznań;
- KACZMAREK T., (2005), *Struktury terytorialno-administracyjne i ich reformy w krajach europejskich*, Uniwersytet im. Adama Mickiewicza w Poznaniu, Poznań, Seria Geografia, 70;
- KACZMAREK T., (2012), *Podział terytorialny Polski – stan i perspektywy zmian*, In: *Ustrój terytorialny państwa a decentralizacja systemu władzy publicznej*, ed. A. Lutrzykowski, Seria Samorząd Terytorialny w XXI wieku, 125-153. Wydawnictwo Adam Marszałek, Toruń;
- KORCELLI P., POTRYKOWSKA A., (1979), *Rozwój funkcji usługowych a hierarchia administracyjna miast w Polsce*, Przegląd Geograficzny, 51, 2, 209-234;
- KOTER M., (1996), *Porównanie regionów europejskich z propozycją podziału terytorialnego Polski*, In: *Łódź stolicą makroregionu*, 59-74, ed. J. Kraszewski. Sejmik Samorządowy Województwa Łódzkiego;
- KOTER M., LISZEWSKI S., SULIBORSKI A., (1996), *Delimitacja potencjalnego obszaru województwa łódzkiego. Studium wiedzy o regionie łódzkim*, ŁTN, Łódź;
- KRZYSZTOFIK R., (2007), *Lokacje miejskie na obszarze Polski. Dokumentacja geograficzno-historyczna*, Wydawnictwo Uniwersytetu Śląskiego, Katowice;
- KUPIEC L., (1992), *Wpływ zmian administracyjnych z 1975 r. na rozwój miast makroregionu północno-wschodniego*, Acta Universitatis Lodzensis, Folia Geographica, 17, 49-65;

- LISZEWSKI S., WOLANIUK A., (1992), *Wpływ funkcji administracyjnej na powstanie i rozwój Łodzi*, Acta Universitatis Lodziensis, Folia Geographica, 17, 137-155;
- RYDZ E., (1990), *Funkcje Koszalina i Słupska w regionalnej sieci osadniczej*, Wyższa Szkoła Pedagogiczna w Słupsku, Słupsk;
- STASIAK A., (1999), *Nowy podział administracyjny Polski (obowiązujący od 1.01.1999 r.)*, Optimum – Studia Ekonomiczne, 4, 7-20;
- SULIBORSKI A., (2001), *Funkcje i struktura funkcjonalna miast*, Uniwersytet Łódzki, Łódź;
- SZWICHTENBERG A., (2002), *Transformacje funkcjonalne i przestrzenne Koszalina w gospodarce rynkowej*, In: *Przemiany bazy ekonomicznej i struktury przestrzennej miast*, ed. J. Słodczyk, 193-203. Uniwersytet Opolski, Opole;
- SZYMAŃSKA W., (2015), *The role of the administrative functions in the development of the city in Poland (by example of degraded towns)*, In: *Regional development and public administration in the context of general tendencies of XXI century*, ed. W. Szymańska, 5-18. Publishing House ADNDU, Słupsk-Kharkiv;
- WALKIEWICZ D., (2006), *Przemiany struktury funkcjonalnej miast wojewódzkich w latach 1975-1995*, Wydawnictwo Uniwersytetu Łódzkiego, Łódź;
- WECLAWOWICZ G., (1992), *Centralne funkcje a rozwój aglomeracji warszawskiej*, Acta Universitatis Lodziensis, Folia Geographica, 17, 67-77;
- WENDT J., (2001), *Geografia władzy w Polsce*, Wydawnictwo Uniwersytetu Gdańskiego, Gdańsk;
- WENDT J., (2007), *Wymiar przestrzenny struktur i aktywności społeczeństwa obywatelskiego w Polsce*, Prace Geograficzne, 208, IGiPZK PAN, Warszawa;
- *** (1965-1967), *Miasta polskie w tysiącleciu*, ed. M. Siuchniński, Zakład Narodowy im. Ossolińskich.

Submitted:
February 10, 2016

Revised:
March 10, 2016

Accepted:
May 1, 2016

Published online:
May 1, 2016

THE EMERGENCE OF LABOUR FORCE RESILIENCE. A CASE-STUDY: ROMANIA

Paul-Răzvan ȘERBAN

University of Bucharest, Faculty of Geography
1 Nicolae Bălcescu Av, 011953 Bucharest, Romania, e-mail: paulrazvanserban@yahoo.co.uk

Ioan IANOȘ

University of Bucharest, Faculty of Geography
1 Nicolae Bălcescu Av, 011953 Bucharest, Romania, e-mail: ianos50@yahoo.com

Cristian TĂLÂNGĂ

University of Bucharest, Faculty of Geography
1 Nicolae Bălcescu Av, 011953 Bucharest, Romania, e-mail: cristian.talanga@geo.unibuc.ro

Abstract: This study aims at validating a new type of social resilience analysis focused on the interaction of each social and economic component within the social-economic system. We have decided to divide the two general components, namely social and economic, analyze them in their interaction, social resilience meaning social adaptation to the economic dynamics. How do decision-makers act within the system seems, at first glance, coherent and self-evident: the social component targeting a higher living standard and the economic component trying to maximize its profit. But the social-economic system is a complex one, involving underlying relationships between the two components, interactions being difficult to determine. In order to emphasize the links between the social and the economic component we shall resort to the Principal Component Analysis (PCA) and the Hierarchical Ascendent Classification (HAC). HAC starts from spatial units, from similarities in the profiles of regions (counties or development regions) seen *a priori* as groups of variables, while PCA considers each variable distribution and compares it to each other. The data used are grouped by 23 variables: 10 social variables - the resident population, urban population, settling of domicile, departures from the domicile, net settling of domicile, settling of residence, departures from the residence, net settling of residence, emigrants, immigrants; 12 economic variables - employment by national economic activities (agriculture, industry, construction, and trade), economically active population by national economic activities (agriculture, industry, construction, and trade) and the average monthly salary by national economic activities (agriculture, industry, construction, and trade); 1 independent variable - the unemployment rate. The analysis is focused on two territorial levels in Romania: county and development region, over the 1991-2012 period.

Key words: labour force, resilience, Romania

* * * * *

INTRODUCTION

Adaptability and transformability are two key concepts analysing the resilience of social systems. The first one is the ability of a social-economic system to adjust its responses to the changing internal and external processes and, thus, helps development within the current stability domain by following the current trend (Folke et al., 2010). Transformability is the ability to create new stable domains for development, a new stability landscape and to cross the threshold towards a new dynamics trend (Folke et al., 2010). Deliberate transformation requires thinking based on resilience, firstly in assessing the relative advantages of the current domain versus alternative domains, potentially more favourable for stability and, secondly, to promote the resilience on a new evolution path, or a new basin of attraction.

Changes do not occur in a vacuum, but are approaching resilience in the light of many scales, making use of crises as opportunities and recombining experience and knowledge sources to direct social-economic transitions to another stability stage. Transformation involves novelty and innovation. Small-scale transformations enable resilience at broader scales. Thus, deliberate transformation implies interruption of the resilience of the old and construction of the resilience of the new (Folke et al., 2010).

Somewhat similar, the process of regional and local economic development is far from being smooth and up going, being subjected to all kind of disruptions and disturbances: periodical economic recession, unpredictable major competitors rising elsewhere, unscheduled closure of enterprises, the challenge of changing technology and the like. How regional and local economies respond and adapt to such disturbances and interruptions can exercise also a formative influence on how they develop and evolve (Simmie, Martin, 2010).

It is a problem whether resilience refers to the capacity of a regional or urban economy to preserve its structure and function, despite impact or disruption, or the ability of a region or urban system to change its structure and function quickly and successfully as a shock response (Simmie, Martin, 2010). The two meanings are often combined, as in Hill et al. (2008), suggesting that the resilience of a region refers to the extent to which the social structure of accumulation was stable, or the extent to which it has been able to make a rapid transition from one social structure of accumulation to another.

The ambiguity surrounding regional economic resilience is enhanced by the fact that two definitions of the concept can be found in the ecological literature, where this idea was most debated.

The first and most traditional definition, the so-called "technique resilience", focuses on the stability of a system close to a steady state, where disturbance resistance and speed of return to pre-existing equilibrium is used to define resilience (Holling, 1973; Pimm, 1984). This meaning seems closest to the concept of "elasticity," or the ability of a system to accommodate disturbance without experiencing a major structural transformation (McGlade et al., 2006). According to this definition regional economic resilience would involve maintaining the structure and function of the region previous to the shock. The implication is that the more resilient the regional economy, the less will it change over time, even in the face of various shocks. So, this point of view on

resilience would generate an evolutionary model based on maintaining the structure and stability (Simmie, Martin, 2010).

The second definition, the so-called "ecological resilience", focuses on the hypothesis of disruptions and shocks causing a system to move in another condition of behaviour (Simmie, Martin, 2010). In this case, resilience refers to the magnitude of the disturbance shock that can be absorbed before the system changes its structure and function and is shaped by a different set of processes (Holling, 1973). According to some authors, this definition opens space to connect resilience with adaptability and is, therefore, much richer in evolutionary purpose (McGlade et al., 2006).

Therefore, the system's response to change can be: a) transformation of the components' structure and functions; b) adaptation and resilience (keeping the components' structure and functions) by absorbing a large amount of change (Holling, 1973). This point of view direct us to observe that the adaptation is supplementary for resilience.

Inside of each social-economic system there is a closed connection between three basic components: spatial structure (spatial arrangement of enterprises), function (employment by economic activities) and resilience (Figure 1). Between function and resilience there is a mutual relationship: resilience aims at the preservation of the function and a diversified function ensures resilience. The same kind of relationship is identified between structure and resilience.

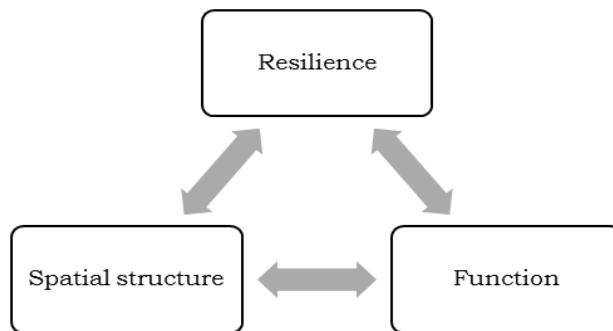


Figure 1. The interrelation between structure, function and resilience in social-economic systems

While adaptation in natural systems usually requires a genetic evolution, enterprises can anticipate change and respond faster. A form of structural resilience is dispersed geographical linked by telecommunications, the workforce being less vulnerable to catastrophic events than a concentrated workforce could disable. Functional resilience involves understanding the threats or strategic opportunities and developing creative and strong responses (eg. innovative products) (<http://www.resiliencescale.com>).

The literature describes community resilience as multi-dimensional and dynamic. Dimensions include the types of disruption in the system that triggers community resilience, community responses to disruptions, capacity development, the relationship between risk factors and resilience and renewal of the system and new trajectories (Smit, Wandel, 2006).

Wilbanks (2006) recommends using the multi-scale analysis. Different types of information can be obtained at different scales. Independently used information, could lead to a narrow and incomplete representation of the

situation. The combination of various information will result in a more complete representation and, in addition, show the interdependencies that are not visible at one single scale. We shall try to achieve such a representation of the system by analyzing the links of components at two different spatial levels in Romania: the county and the development region.

MATERIALS AND METHODS

Identifying the moments when the evolution of the social-economic system had undergone important changes, we analyzed the unemployment rate in the 1991-2012 period. Thus, we identified the years when the highest values of this variables were recorded in order to use them in our research. What we wished to know was how the variables of the social and economic components behaved with these temporal landmarks in order to restore the social-economic system's evolution.

Furthermore, to analyze the evolution and spatial links between them, we divided the social-economic system into the social and the economic component. The social variables we used: the resident population, urban population, settling of domicile, departures from the domicile, net settling of domicile, settling of residence, departures from the residence, net settling of residence, emigrants, immigrants. The economic variables are represented by: employment by the national economic activities (agriculture, industry, constructions, and trade), economically active population by the national economic activities (agriculture, industry, constructions, and trade), the average monthly salary by activities of the national economy (agriculture, industry, construction, trade). The last used variable was unemployment rate. The analysis is made over 1991-2011 interval and on two territorial levels: county and development region.

The methodology used was the Principal Components Analysis (PCA) and the Hierarchical Ascending Classification (HAC) for variables gathered by principal components and classes respectively, using specific analysis criteria which each method involves to highlight spatial, temporal, and causal connections among variables. PCA takes into account the principal components variances which are Eigen value and weights (coefficients of linear combinations) which are eigenvectors, to obtain uncorrelated groups of variables. Regarding these principal components, it is important to detach the highest loaded values of the variables (found in Rotated Component Matrix Table). By running HAC we achieved regional typologies based on the spatial distribution of the social and economic variables. It becomes easy to compare the evolutions of the variables of the two components by analyzing each regional type.

Determining how variables interact we assumed that must be reflected in the spatial distribution, concentration or dispersion of some variables is due to the spatial distribution of others (some variables showing causal links). This was the idea from which we started to assess social resilience, seen as correlation in the spatial distribution, by further comparing the evolution of the social and the economic variables.

RESULTS AND DISCUSSIONS

The first step is to identify the moments when the evolution trend of the socio-economic system has changed. To this end, we analyzed the evolution of the unemployment rate as an indicator located at the junction of the two system components, social and economic. In the case of the economic component

unemployment is seen as a decision to reduce the workforce during the crisis, as a result of a lower demand for products; for the social component, unemployment means job loss and a decision of whether to look or not for another job. So, we identified times when social resilience was manifest, because we believe that social resilience represents adaptation of the social component to economic changes. Therefore, the years 1995, 2000 and 2010 are actually moments of the onset of social resilience, and the unemployment rate has the maximum values. After the peak, registered one year before of the mentioned ones, the unemployment rate trend reversing, and the unemployed people started to be reintegrated into the labour market (Figure 2).

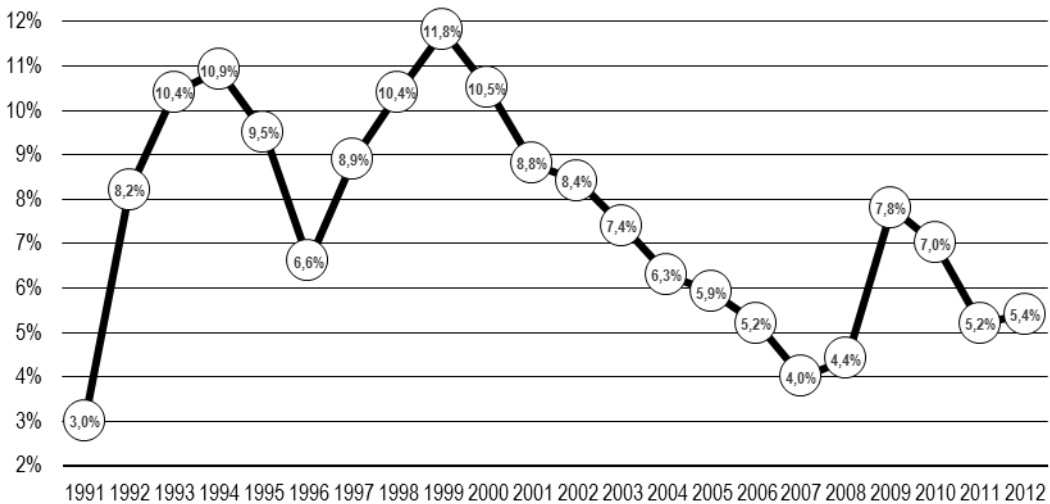


Figure 2. Evolution of the unemployment rate during the 1991-2012 period
(Data source: National Institute of Statistics, www.insse.ro)

The second step is to run the Principal Component Analysis (PCA) for the three reference years: 1995, 2000 and 2010. The values of the variables used in the analysis refer to the evolutions of variables in selected years (not raw data). Therefore, we calculated the difference between the value of the variable in the reference year and the value of the variable in the previous year. This calculation was applied to all the economic variables and to part of the social variables, except for those related to population movement in the territory that is data referring to population dynamics. This analysis was run both at county level and development region level in order to observe the spatial structure of relations between the social and the economic component at these spatial levels. We have in mind that social resilience (the correlation between the spatial distribution and/or evolution of the social and the economic component) is different from one social variable to another. To determine the number of the principal components extracted we used the information provided by Screen Plot and Rotated Component Matrix.

PCA results at **county** level are the followings:

- in 1995, variables were grouped around four principal components (loading 74% of the total variance): immigrants, evolution of employment in trade, net settling of residence, and

evolution of employees in agriculture. Situated within the same principal component, the next social and economic variables showed connections in matters of social variables evolution: immigrants, departures from domicile, settling of domicile, evolution of the urban population, emigrants, settling of residence, evolution of the resident population; and the economic variables: evolution of employees in construction, and industry, evolution of the economically active population in construction, and industry, evolution of salary in construction. Departures from residence were correlated with the evolution of the economically active population in trade and evolution of employees in trade. Net settling of domicile and net settling of residence were correlated with the evolution of the average monthly salary in trade. The last principal component comprises only economic variables: evolution of employees in agriculture, evolution of the economically active population in agriculture, evolution of the average monthly salary in agriculture, and evolution of the average monthly salary in industry. Therefore, social resilience was manifest only in these binomial social and economic variables.

- in 2000, five principal components (77.6% of total variance) were identified: immigrants, evolution of urban population, evolution of employees in industry, evolution of employees in agriculture, and departures from residence. The links between the social and the economic were manifest through the following social variables: immigrants, departures from domicile, settling of domicile, emigrants, settling of residence, and net settling of residence; and economic variables: evolution of employees in construction, evolution of the economically active population in construction, and trade, evolution of employees in trade, and evolution of the monthly salary in construction,. The evolution of urban population, the evolution of resident population and net settling of domicile were correlated with the evolution of monthly salary in trade. Departures from residence were correlated with the evolution of the economically active population in agriculture. The other two principal components grouped only economic variables: evolution of employees in industry, evolution of the economically active population in industry, evolution of the monthly salary in industry, evolution of employees in agriculture, and evolution of the monthly salary in agriculture.

- in 2010, three principal components (70% of total variance) were depicted: departures from domicile, evolution of the resident population, and evolution of the economically active population in construction. The links between the social and the economic components were manifest through next social variables: departures from domicile, settling of domicile, emigrants, immigrants, settling of residence, net settling of residence, departures from residence and economic variables: evolution of employees in construction and trade, evolution of the economically active population in trade, and industry, evolution of employees in industry, evolution of the average monthly salary in agriculture, and trade, evolution of employees in agriculture. The evolution of urban population, the evolution of resident population and the net settling of domicile were correlated

with the evolution of the average monthly salary in construction. The last principal component groups only economic variables: evolution of the economically active population in construction, in agriculture, and evolution of the average monthly salary in industry.

In the case of **development regions**, PCA results over the three study years were as follows:

- in 1995 we identified four principal components (92% of total variance): evolution of the average monthly salary in construction, settling of domicile, evolution of the average monthly salary in trade, and evolution of the urban population. The links between the social and the economic component were manifest through the following social variables: immigrants, departures from residence, net settling of residence and economic variables: evolution of the average monthly salary in construction, evolution of employees in construction, evolution of the economically active population in construction, industry, and trade, evolution of employees in industry, evolution of the economically active population in agriculture, evolution of employees in agricultural, and trade. The net settling of domicile was correlated with the evolution of average monthly salary in trade, evolution of the average monthly salary in agriculture, in industry. The other social variables were grouped by two principal components (least economic variables): settling of domicile and departures from domicile in a component, and the evolution of the urban population, evolution of the resident population, settling of residence, and emigrants in the other principal component.

- in 2000 we identified five principal components (96% of total variance): evolution of the average monthly salary in construction, departures from domicile, settling of residence, evolution of the economically active population in industry, evolution of the urban population. The links between social and economic components were manifest through the following social variables: immigrants, net settling of domicile, and economic variables: evolution of the average monthly salary in construction, evolution of employees in construction, evolution of the economically active population in construction, evolution of employees in agriculture, and trade, evolution of the economically active population in trade, evolution of the average monthly salary in industry. Departures from domicile, setting of domicile, evolution of the resident population, departures from residence, and net settling of residence were correlated with evolution of the economically active population in agriculture, evolution of employees in industry. The settling of residence and emigrants was correlated with the evolution of employees in trade. The other variables, either economic (evolution of the economically active population in industry, evolution of the average monthly salary in agriculture), or social (evolution of the urban population) were grouped by different principal components.

- in 2010 we identified six principal components (98% of total variance): evolution of the average monthly salary in agriculture, departures from domicile, emigrants, evolution of the average

monthly salary in industry, evolution of the economically active population in construction, and agriculture. The links between the social and the economic components were manifest through the following social variables: evolution of the urban population, net settling of residence, net settling of domicile, and economic variables: evolution of the average monthly salary in agriculture, evolution of employees in agriculture, evolution of the average monthly salary in trade. Departure from domicile and settling of domicile were correlated with evolution of employees in industry, evolution of the economically active population in industry, and evolution of employees in trade. Emigrants, evolution of resident population, settling of residence, and immigrants were correlated with evolution of employees in construction. Departures from residence were correlated with evolution of the average monthly salary in industry and evolution of the economically active population in trade. The other economic variables were grouped by different principal components: evolution of the economically active population in construction and evolution of the average monthly salary in construction, that is, evolution of the economically active population in agriculture.

By running the PCA at the two territorial levels, a certain conformity was found in the number of components, namely, four in 1995 and five in 2000, principal components being extracted, both at county and development region level. The situation was different only in 2010, when three principal components were extracted at county level and six components at regional level. As regards the name and composition of the principal components significant differences occurred at the two levels both in 1995 and 2000, and especially in 2010. Differences in the evolution of variables are quite normal when we report at two territorial levels. By incorporating counties with different economic profiles, which during the transformation of the socio-economic system behaved differently, the development regions have distinct social and economic features.

Thus, models at different scales and in different periods of the socio-economic system were created by selecting the principal components. A dynamic model of a system organizes, clarifies and unifies knowledge. The model enables to better understand a system that previously had a puzzling or controversial behaviour. Generally speaking, influential projects of system dynamics are those that change the way people think the system (Forrester, 1986).

To create such a model we resorted to a data mining techniques: Principal Component Analysis (PCA) which aims to:

- reduce the number of variables (the principal components analysis is based on the reduction of two or more variables to one factor or component)
- identify the link structure between variables and classify the variables (to single out the most representative economic and social ones which decision-makers can act upon; in order to adjust undesirable developments in the socio-economic system it is necessary to determine the Eigen values of the correlation matrix of all variables selected for the study; the Eigen values reflect the amount of information that the principal components will recover, namely, the variance explained).

Using small models is based on the strategy often referred to as "Ockham's razor". In modern science, describing a system in terms of a small number of parameters, variables, equations, etc. was considered an ideal approach.

In the third stage we looked at the behaviour of each county and region when the trend of the Romanian socio-economic systems' evolution was changing. In view of it, we ran the Hierarchical Ascending Classification, a data-mining technique that helps us achieve regional typologies (be it county, or development region). In the above step, PCA results on how the behaviour of each variable is compared with that of other variables at the level of counties and development regions. Here we wished to get information on each county, or region seen as combinations of variables, grouping them according to the similarities/dissimilarities of size/evolution of the values of these variables.

To analyze social resilience at regional level (county or development region) we compare the evolution of the economic and the social variables. Considering this correlation as due to social resilience, the economic transformations determine the population to act, by consequences. Before beginning this analysis we should specify that the data-mining techniques (HAC) employed variables averages and calculate the standard deviation numbers. HAC allows for a precise hierarchy over a vast set of data using a certain data aggregation strategy: minimum link, minimum diameter, average distance, and variance. This helps the rapid creation of partitions nested in a dataset (Bruynooghe, 1977). Unlike other data-mining techniques, HAC performed a hierarchy that does not depend on the threshold stratification sequence *a priori* chosen, or determined by a classification procedure.

We have to analyze the data set and especially the variable averages because there are cases where a positive departure of one standard deviation may entail a negative evolution of some variable included into a certain class (when the variable average has a significant negative value) and a negative departure of one standard deviation could mean a positive evolution for another variable (when the variable average has a significant positive value).

Across all of the 42 counties of Romania, significant economic transformations took place in 1995: the primary and secondary sectors dismissed many of their employees (an average of over 9,000 employees lost their jobs). Only some half of them (4,000) succeeded in finding employment in the tertiary sector. However, the situation was different from one county to another. In what follows counties are grouped by their capacity to cope with these changes, this capacity (social resilience) varying in terms of degrees, that is the extent to which how many of these actions (changing jobs within the same county, changing residence or domicile place to accept a job in another county) did combine or not.

By running HAC, 7 types of counties were obtained (Figure 3). Correlating them with the national average county values for each variable, in order to correct differences of positive or negative evolutions, revealed the following:

- evolution of the economically active population in the four economic activities (agriculture, industry, construction and trade) as a whole, was negative for most counties, except for one class that had a positive evolution (class 1).
- evolution of the salary (in US dollars) by economic activity was generally positive, not affecting the population's decision to change residence or place of domicile.

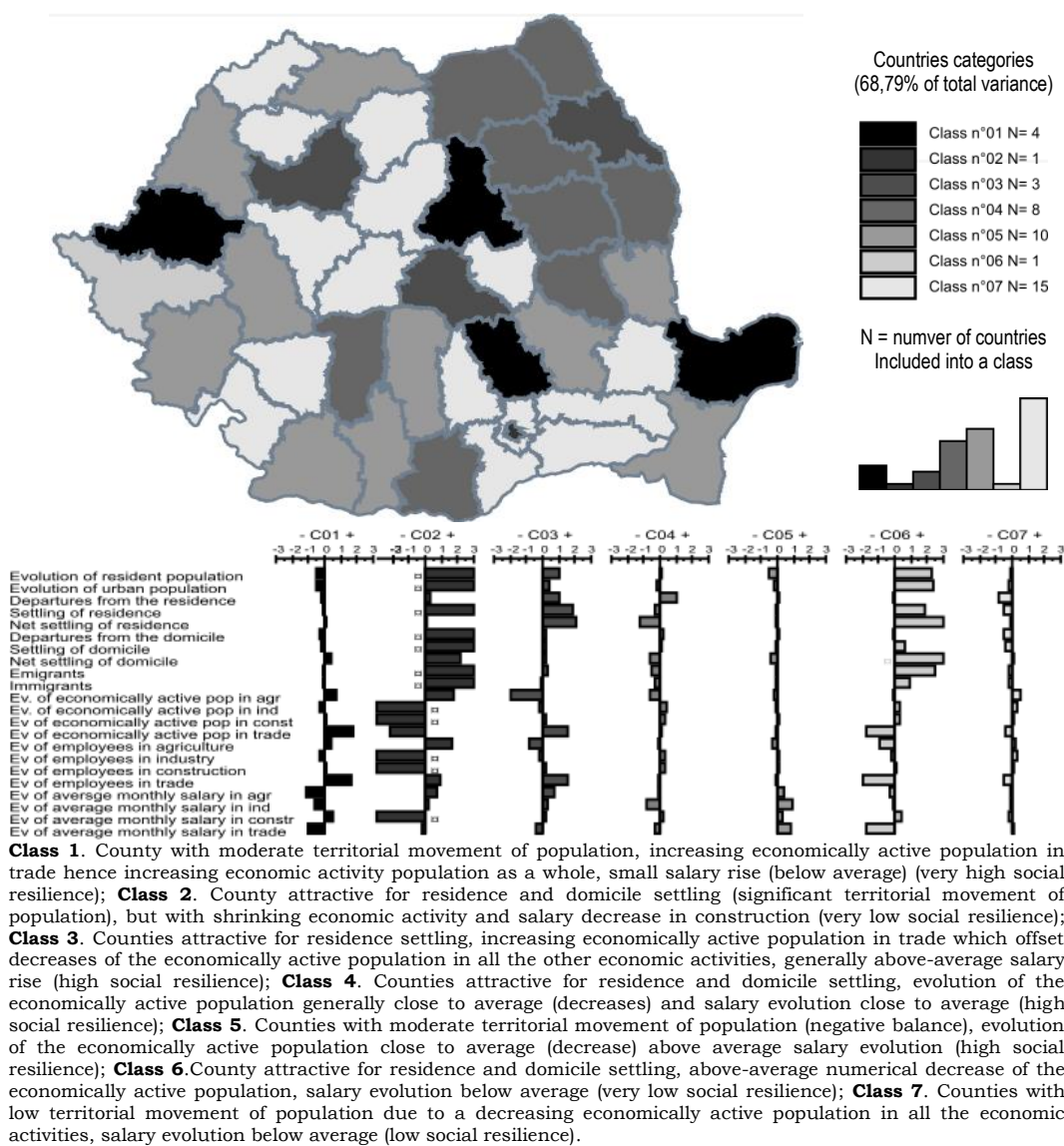


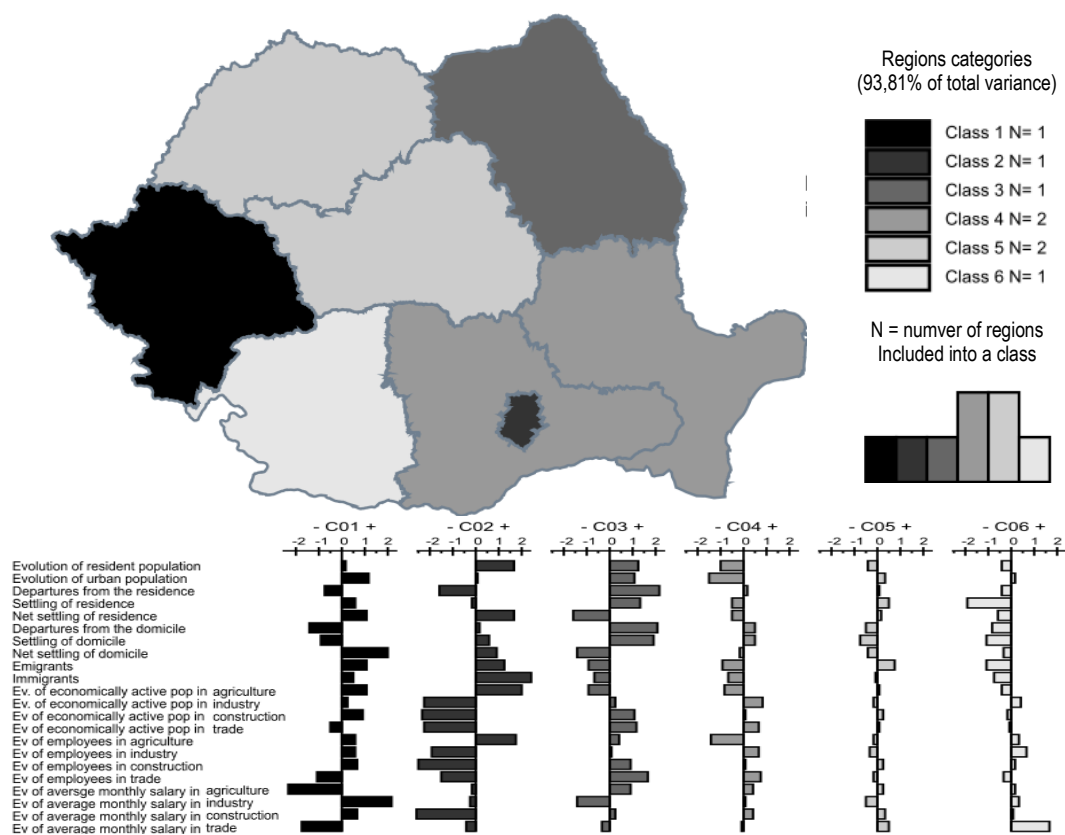
Figure 3. Typology of counties by economically active population, number of unemployed and average profile of classes (1995)
(Data source: National Institute of Statistics, www.insse.ro)

In 1995, an average of some 50,000 people lost their job in the primary and secondary sectors of each development region. Only 30,000 people managed to find a work-place in the tertiary sector. In these conditions changing the place of residence or domicile was an option for nearly 50,000 people that are 35,000 people, (on average) in the development regions.

In the development regions the situation locked as follows (Figure 4):

- evolution of the economically active population in the four economic activities (agriculture, industry, construction and trade) as a whole, was negative in most development regions, except for one class where evolution was close to zero (class 3).

- salary evolution (in US dollars) in all economic activities was positive, not affecting the population's decision to change residence or place of domicile.

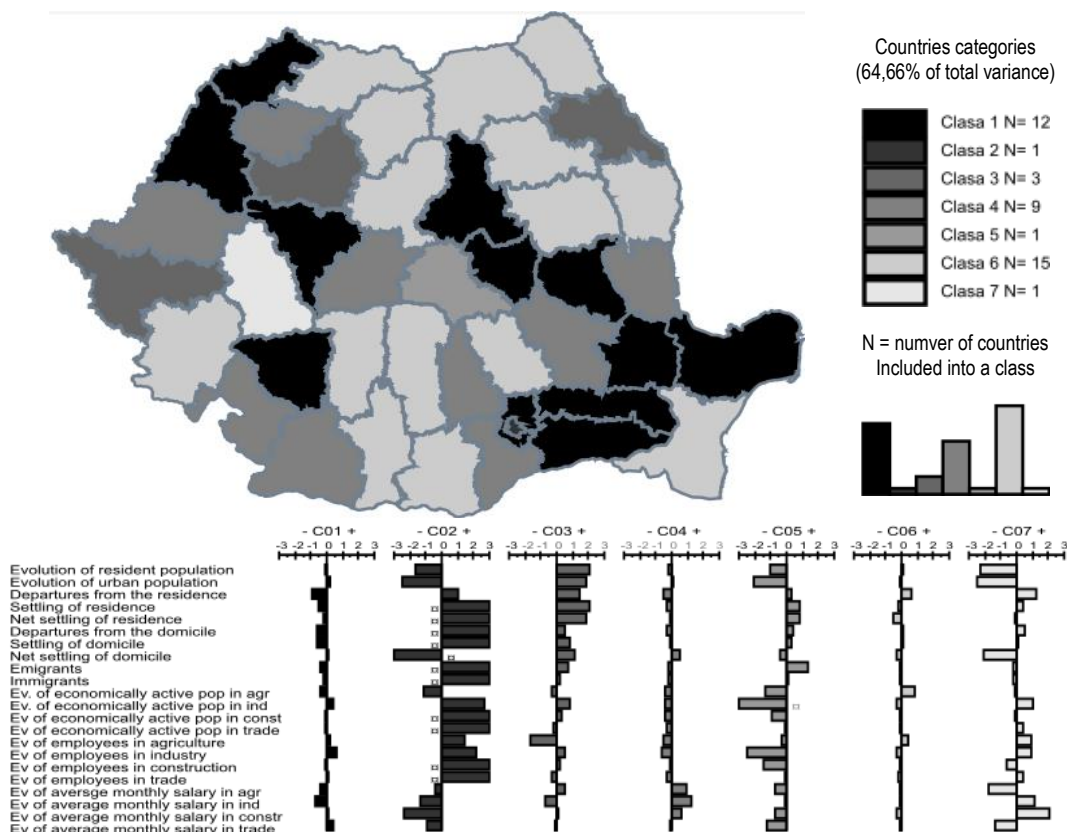


Class 1. Region attractive for residence and domicile settling, generally numerical decrease of the economically active population, salary evolution close to average, except for industry, where it grew significantly (very low social resilience); **Class 2.** Region attractive for residence and domicile settling, significant decreases in the number of economically active population except for agriculture, moderate decreases of salary except for construction which fell significantly (very low social resilience); **Class 3.** Region unattractive for residence and domicile settling, the numerical increase of the economically active population in trade and construction of setting the decline of the economically active population in industry and agriculture, overall salary evolution close to average except for industry where it decreased significantly (high social resilience); **Class 4.** Regions with moderate territorial movement of population, significant decrease of the economically active population in agriculture, overall salary evolution close to average (high social resilience); **Class 5.** Regions attractive for residence settling and unattractive for domicile settling, numerical evolution of the overall economically active population close to average (decreases), salary evolution slightly above the average in construction and trade (low social resilience); **Class 6.** Region unattractive for residence and domicile settling, evolution of overall economically active population close to average(decrease), salary increase in trade above average (high social resilience).

Figure 4. Types of development regions by economically active population and the number of unemployed and average profile of classes (1995)
(Data source: National Institute of Statistics, www.insse.ro)

By comparing the results at county and development region level one may notice space differences of social resilience. The counties with the highest social resilience are dispersed in all development regions. But, looking at the highest resilience region one finds it located in northeast of Romania. Also, the counties belonging to one and the same development region are assigned to two or more types of classes, sometimes antagonistic in regard of the magnitude of social

resilience. Moreover, the differences between counties and development regions in terms of high-resilience population distribution, reveals that values are referred to a different average. By calculating the standard deviation referred to different averages we obtained different results. Therefore it is necessary for economic development decisions to be made at every territorial level, and higher-level decisions should not be made by amassing the data provided by the lower levels, because simply summing up the data is not relevant to higher level decision-makers.



Class 1. Counties with moderate territorial movement of population, slightly negative numerical trend in the overall economically active population, overall salary evolution close to average (high social resilience); **Class 2.** County attractive for residence settling, but not attractive for domicile settling, significant numerical increase of the overall economically active population and significant salary decrease in all economic activities (high social resilience); **Class 3.** Counties attractive for residence and domicile settling, negative numerical evolution of the economically active population, especially in agriculture, salary evolution close to average (very low social resilience); **Class 4.** Counties with moderate territorial movement of population, numerical evolution of the economically active population generally slightly below average, above-average salary evolution in all the economic activities slightly (low social resilience); **Class 5.** Counties attractive for residence settling but with strong negative numerical evolution of the economically active population in all economic activities, significantly negative salary evolution (very low social resilience); **Class 6.** Counties with moderate territorial movement of population, numerical evolution of the economically active population generally close to average, also salary evolution close to average (low social resilience); **Class 7.** Counties unattractive for residence and domicile settling, generally positive numerical evolution of the economically active population, salary increases in industry and construction (very low social resilience).

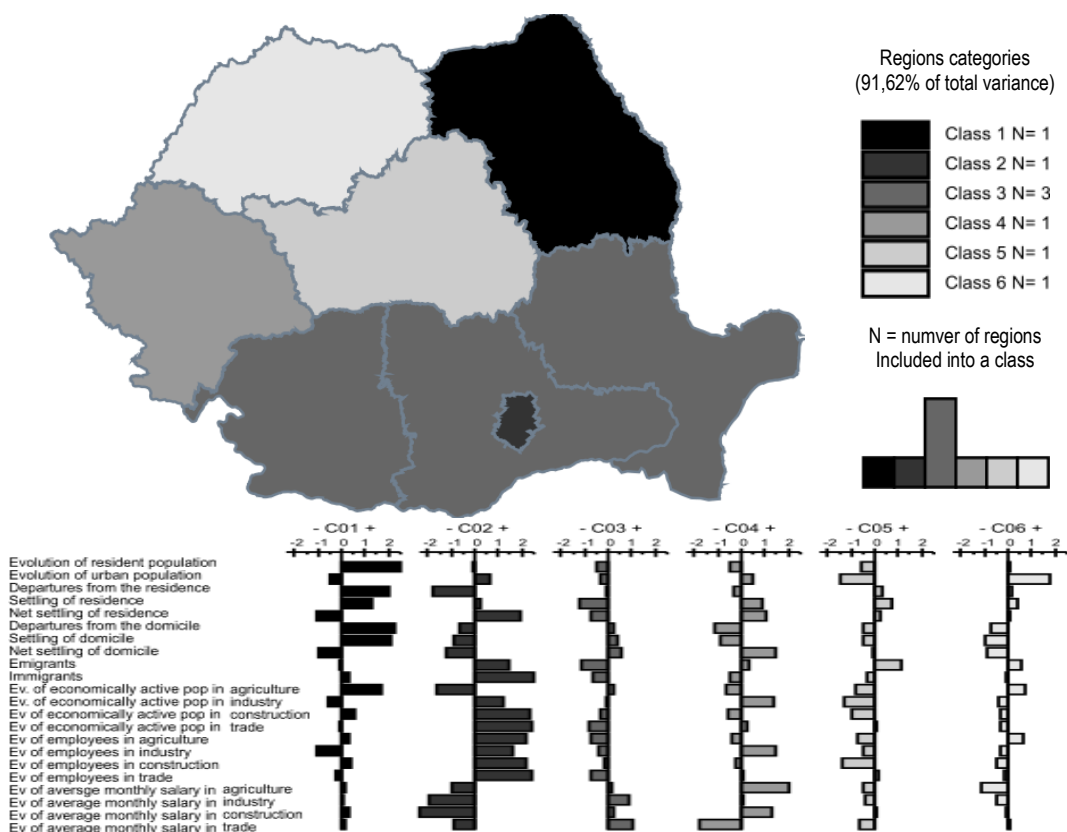
Figure 5. Typology of counties by economically active population, number of unemployed and average profile of classes, 2000
(Data source: National Institute of Statistics, www.insse.ro)

In 2000, the economic situation changed compared to 1995, the commercial activity ceased to develop, even falling, while construction activity

began increasing. The other two economic activities were slightly decreasing at national level, compared to 1995.

HAC running resulted in 7 types of counties (Figure 5) with the following characteristics:

- evolution of the economically active population in the four economic activities (agriculture, industry, construction and trade) as a whole, was negative in most counties, except for two classes where evolution was positive (class 2 and 7).
- salary evolution was negative overall, yet it did not create distortions in the population's decision to change residence or place of domicile.



Class 1. Region unattractive for residence and domicile settling, strongly negative evolution of the economically active population in industry, salary evolution close to the average (high social resilience); **Class 2.** Region attractive for residence settling and unattractive for domicile settling, generally significant numerical increase of the economically active population, and significant salary decreases (high social resilience); **Class 3.** Regions unattractive for residence settling, but attractive for domicile settling, numerical evolution of the economically active population generally below average, salary evolution above average (low social resilience); **Class 4.** Region attractive for residence and domicile settling, generally slight numerical decrease of the economically active population, salary decrease below average (low social resilience); **Class 5.** Region with moderate territorial movement of population, significant numerical decrease of the economically active population, significant salary decrease (very low social resilience); **Class 6.** Region unattractive for domicile settling, significant numerical decreases of the economically active population, significant salary decrease (low social resilience).

Figure 6. Typology of development regions by economically active population, number of unemployed and average profile of classes, 2000
(Data source: National Institute of Statistics, www.insse.ro)

In 2000, an average of some 20,000 people lost their job in agriculture, industry and trade in every development region. Only 1,000 persons succeeded to find employment in construction. Under these circumstances changing the place of residence or of domicile was an option for an average of some 40,000, and 30,000 people respectively in developing regions. Excepting industry, where the salary was almost constant, in the other economic activities it decreased.

HAC running at development regions revealed the following (Figure 6):

- negative numerical evolution of the economically active population in the four economic activities (agriculture, industry, construction and trade) as a whole, in most development regions, except for class 2, where evolution was positive; salary evolution generally negative, not population distortions in deciding on the change place of residence or domicile.

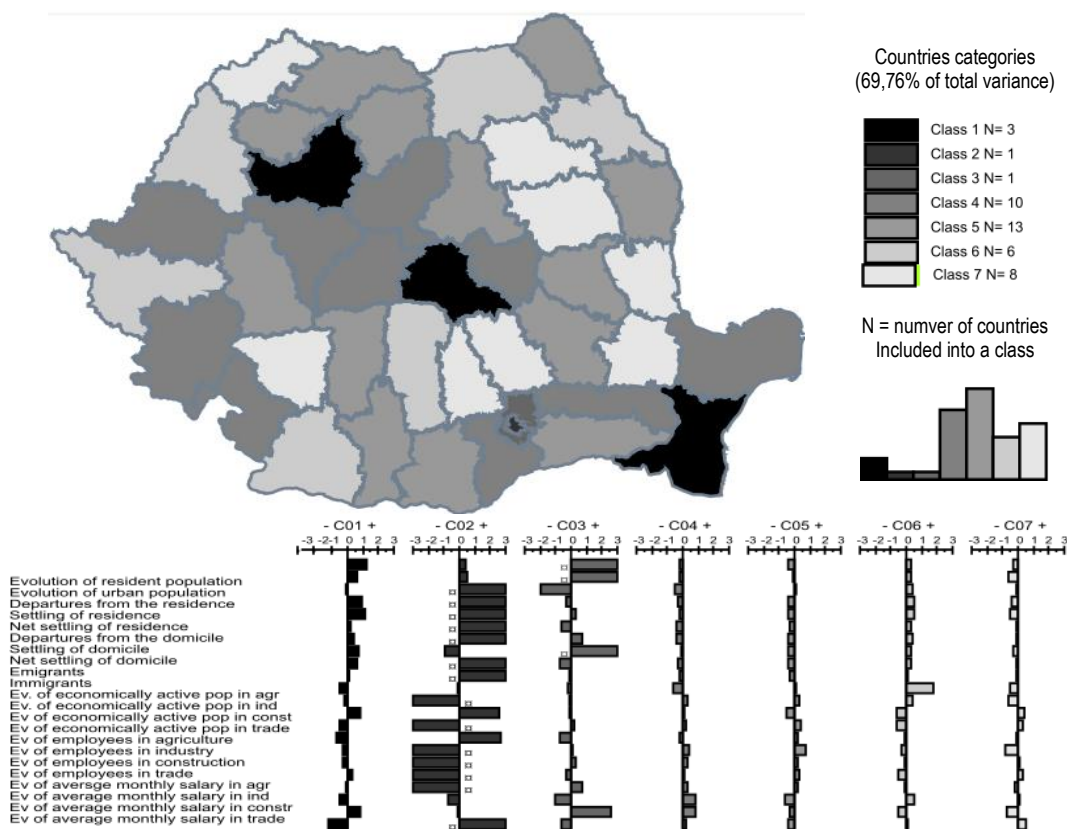
In 2000, the only exception in terms of social resilience dimension at county and regional level was Bucharest, a city of high economic growth, attracting labour from neighbouring counties or development regions. Otherwise, between the two spatial levels there were differences in the evolution of the economic variables, but also in the way people reacted to sudden economic changes. This is due to the local peculiarities of subsystems (in this case, the county level) that sometimes create path dependence. Therefore, every human community at county level follows a certain path of social and economic development based on its evolutionary history (Ianoş, 2000). There is, however, an extremely rare situation when local interactions are so strong that local path dependency induces path dependence at aggregate territorial level (in our case, the development region). When local ties are weak, urbanization externalities and international networks can be important. Diversified local economies have a high degree of adaptability and low propensity to path dependence. An economically attractive region enjoys the advantage of being selected for new locations (Martin et al., 2006).

Path dependence is a place-dependent process. Some regional economies became locked into certain ways of development and lose their dynamism, while other economies reinvent themselves by successive development paths. Path dependence is linked rather to "historical accidents" than to systematic forces. For Arthur (1994), driving forces in the evolution of the socio-economic systems are the economies of agglomeration (proximity to other companies' benefits, industry concentration - benefits that are not included in statistics). The formation of clusters, sometimes from one random location is explained by path dependence.

Path dependence, when asked to explain the history of industry, involving technology, patents, and specialization of labour, leads us to claim that it (dependence) does not apply universally, but locally, that we have more to do with place dependence (Cox, 1998). C. Castaldi and Dosi G., (2006) reached the same conclusion, when stating that path dependency on a small scale generates no path dependency on a wider scale, there are no isomorphism (structure similarity).

In 2010 the economic crisis was still ongoing in Romania. The number of employees was declining in all the economic activities, but more especially in industry. However, salaries kept rising in industry and construction. The population's reaction to this situation was change of place of residence (an average of some 5,000 people/county) and particularly of domicile (an average of 10,000 people/county). Running HAC at county level, the situation appeared as follows (Figure 7):

- in each of the seven classes, the number of employees in the four economic activities decreased (agriculture, industry, construction and trade).
- differences were found only in salary evolutions and population movement.



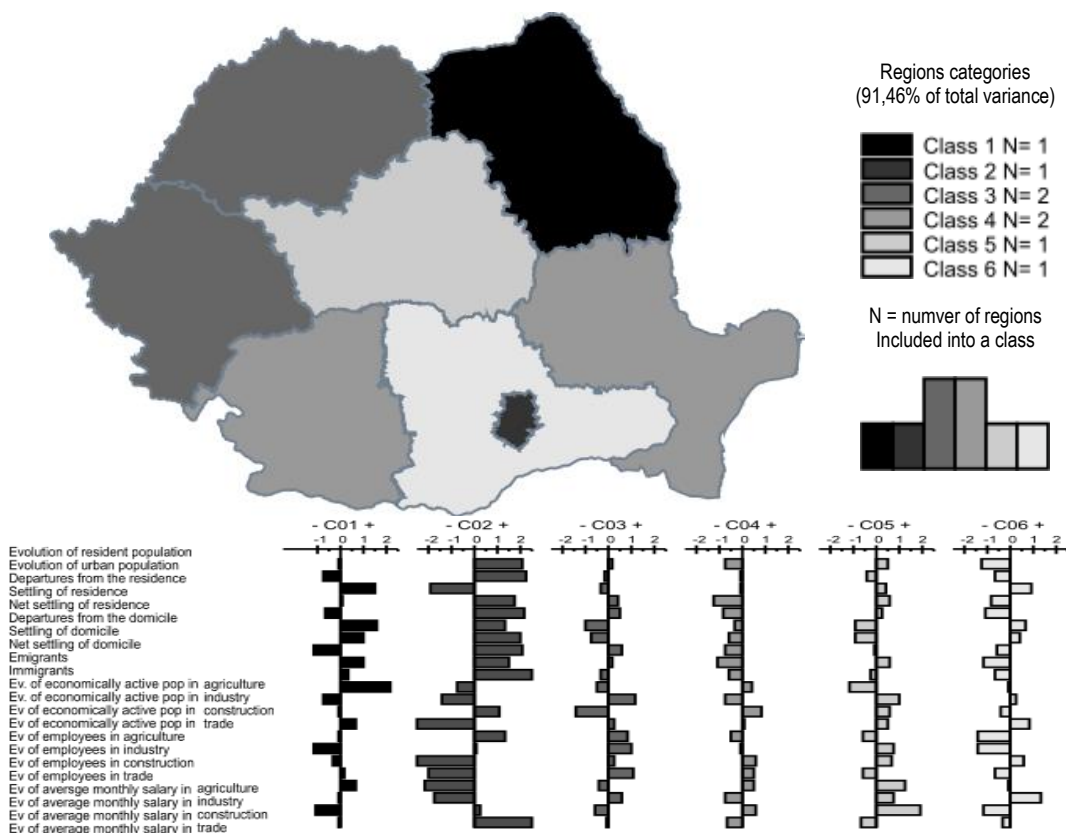
Class 1. County attractive for residence and domicile settling, generally with decreasing number of employees and above-average salary increases in construction and significant decreases in trade (very low social resilience); **Class 2.** Counties attractive for residence settling and unattractive for domicile settling, generally significant numerical decreases of employees and salary, significant increases in trade and significant decreases in agriculture (very low social resilience); **Class 3.** Counties attractive for domicile settling, above-average numerical decreases of employees in agriculture and significant salary increases in construction (very low social resilience); **Class 4.** Counties with moderate territorial movement of population, with generally close-to-average numerical evolution of employees and above-average salary increases in industry and construction (high social resilience); **Class 5.** Counties with moderate territorial movement of population, generally close-to-average numerical evolution of employees and slightly above average salary decreases (high social resilience); **Class 6.** Counties with moderate territorial movement of population, generally close-to-average numerical evolution of employees, above-average salary increases in industry and below-average in construction (low social resilience); **Class 7.** Counties with moderate territorial movement of population, generally close-to-average numerical evolution of employees, except for industry, where significant decrease and above-average salary increases in trade and above-average decreases in construction (high social resilience).

Figure 7. Typology of counties by economically active population, number of unemployed and average profile of classes, 2010
(Data source: National Institute of Statistics, www.insse.ro)

In 2010 an average of some 35,000 persons, lost their job in all the economic sectors of each development region. Under these circumstances, changing the place of residence or of domicile was an option for nearly 25,000

people and an average of 55,000 people, in each development region. Running HAC at development region level emphasized the following (Figure 8):

- the numerical evolution of employees in the four economic activities (agriculture, industry, construction and trade), as a whole, was negative in all development regions.
- salary evolution in all the economic activity was mixed, but it did not create distortions in people's decision of settling their residence or domicile.



Class 1. Region unattractive for residence and domicile settling, significant numerical decrease of employees in industry, significant salary decrease in construction and of salary increases in agriculture (high social resilience); **Class 2.** Region attractive for residence and domicile settling, significant numerical decreases of employees in construction and trade, significant salary increases in trade and significant salary decrease in agriculture and industry (very low social resilience); **Class 3.** Regions attractive for residence and domicile settling, generally below-average numerical decreases of employees, above-average salary increases in industry and above-average salary decreases in agriculture and construction (very low social resilience); **Class 4.** Regions unattractive for residence and domicile settling, above-average numerical decrease of employees in agriculture and below-average numerical decreases of employees in construction and trade, significant salary decrease in trade (high social resilience); **Class 5.** Region with moderate territorial movement of population, generally numerical decreases of employees, especially in agriculture and trade, significant salary increases in agriculture, industry and construction (low social resilience); **Class 6.** Region unattractive for residence and domicile settling, above-average numerical decreases of employees in agriculture, industry and trade, significant salary decreases in construction and significant salary increases in industry (high social resilience).

Figure 8. Typology of development regions by economically active population, number of unemployed and average profile of classes, 2010
(Data source: National Institute of Statistics, www.insse.ro)

Compared to the other analyzed years, social resilience in 2010 covered more extensive areas (over half of Romania), whether it was county or the

development region level we refer to. This situation depended on how the economic and financial crisis were manifest in Romania. The crisis did not hit all economic activities, but mainly industry and real estate. Romanian industry had already passed through a marked restructuring period, so that at the outset of the crisis the reduced number of employees in each sector was already low. In the second place, the population became more resilient in the wake of previous experiences it had gone through. The population had learned from the economic restructuring that period crisis may last and one had quickly look for a job if he had lost the previous one. However, differences in resilience at territorial level did exist.

This heterogeneity of resilience in county-level human communities should be seen as a positive aspect. The success achieved by some communities in the face of adverse economic situations was the way to follow by other low-resilient communities. Labour migration to areas that did successfully cope with economic change or train for a job in a more dynamic economic activity was a ways for social resilience to emerge.

CONCLUSIONS

The concept of resilience used by geographers along with other terms, such as vulnerability, mitigation and adaptation, is trying to find some ways for economic sustainable development. So, associate resilience with vulnerability (as an opposite) in socio-economic systems, at least as an extra test of the degree of their maturation (Trică & Papuc, 2013).

The close relationship between the economic and social components reminds us of the relationship between structure and function. This determines the transmission of the economic crisis to the social structure and, furthermore, to the economic structure, occurring economies deepening into the economic crisis by triggering a process of circular causality. The population's decision to relocate interrupts this process, leading to social resilience.

Our study is based on the analysis of social resilience on two spatial levels: county and development region. Actors and organizations that link the local scale by higher levels into social-ecological systems are often involved in such processes (Olsson et al., 2004).

For each spatial level we obtained different results, because economies have a different composition on different scales. The history of county or development region evolution (path dependency) plays a crucial role on how the population reacts to economic change. Therefore, inertia emerges in how people act, hoping that (economic) change does not occur. This explains the gaps in the evolution of the two components: social and economic. Even at development region level the differences between counties were levelled by social and economic differences. Social-economic complementarities between counties were a criterion for establishing development regions in 1998. EU pre-accession funds allocated to Romania starting with 1998 resulted in social-economic changes at development region level. In the 1995-2000 period, the Romanian economy experienced severe contraction, a positive economic trend being recorded in the years 2000-2010. Through 1995-2010, Romania's economy underwent a restructuring process that began with deindustrialization and continued with expanding the services and construction activities.

ACKNOWLEDGMENT

This work was supported by the project: POSDRU/159/1.5/S/133391 "Doctoral and postdoctoral programs supporting research", project co-financed through Sectoral

Operational Program for the Development of Human Resources 2007-2013 from European Social Fund.

REFERENCES

- ARTHUR W.B., (1994), *Increasing Returns and Path Dependence in the Economy*. Ann Arbor: University of Michigan Press;
- BRUYNOOGHE M., (1977), Méthodes nouvelles en classification automatique de données taxinomiques nombreuses. *Statistique et analyse des données*, 2 no. 3, pp.: 24-42;
- CASTALDI C., G. DOSI G., (2006), *The Grip of History and the Scope for Novelty: Some Results and Open Questions on Path Dependence in Economic Processes*, in A. Wimmer and R. Kössler (eds.), *Understanding Change. Models, Methodologies, and Metaphors*, London: Palgrave Macmillan;
- COX K., (1998), *Spaces of dependence, spaces of engagement and the politics of scale, or: looking for local politics* *Political Geography* 17, pp.: 1-23;
- FOLKE C., CARPENTER S.R., WALKER B., SCHEFFER M., CHAPIN T., ROCKSTRÖM J., (2010), Resilience thinking: integrating resilience, adaptability and transformability. *Ecology and Society* 15(4): 20. [online] URL: <http://www.ecologyandsociety.org/vol15/iss4/art20/>;
- FORRESTER J.W., (1986), *System Dynamics and the Lessons of 35 Years* The international Conference of the System Dynamics Society, Sevilla;
- HILL E.W., WIAL H., WOLMAN H., (2008), *Exploring Regional Economic Resilience. Working Paper 2008-04*, Institute of Urban and Regional Development, University of California, Berkeley;
- HOLLING C.S., (1973), *Resilience and stability of ecological systems*. *Annual Review of Ecological Systems*, 4: 1-23. Holling, C. S. and Gunderson, L. H. (2002) Resilience and adaptive cycles. In L. Gunderson and C.S. Holling (eds.). *Panarchy: Understanding Transformations in Human and Natural Systems*, pp. 25-62. Washington, DC: Island Press;
- IANOȘ I., (2000), *Sisteme teritoriale. O abordare geografică*, Ed. Tehnică, București;
- RON M., SUNLEY P., (2006), *Path Dependence and Regional Economic Evolution*, *Journal of Economic Geography*, 6:4 (August), pp.: 395-437;
- MCGLADE J., MURRAY R., BALDWIN J., (2006), *Industrial resilience and decline: a co-evolutionary approach*. In E. Garnsey and J. McGlade (eds.). *Complexity and Co-Evolution: Continuity and Change in Socio-Economic Systems*, pp. 147-176. Cheltenham: Edward Elgar
- OLSSON P., FOLKE C., BERKES F., (2004), *Adaptive co-management for building resilience in social-ecological systems*. *Environmental management*, 34(1), pp.: 75-90.
- PIMM S.L., (1984), *The complexity and stability of ecosystems*. *Nature*, 307: 321-326;
- SIMMIE J., MARTIN R.L., (2010), *The economic resilience of regions: towards an evolutionary approach*, *Cambridge Journal of Regions, Economy and Society* 3, 27-43;
- SMIT B., WANDEL J., (2006), *Adaptation, adaptive capacity and vulnerability*. *Global Environmental Change* 16(3), pp. 282-292;
- TRICĂ C.-L., PAPUC M., (2013), *Creșterea economică verde – premisă pentru dezvoltare durabilă*, *Economie teoretică și aplicată Volumul XX* (2013), No. 1(578), pp.: 94-104, http://store.ectap.ro/articole/822_ro.pdf;
- WILBANKS T., (2006), *How scale matters: Some concepts and findings*. In Reid W.V., Berkes F., Wilbanks T., & Capistrano D., (Eds.), *Bridging Scales and Knowledge Systems: Concepts and Applications in Ecosystem Assessment*. Washington, DC: Island Press;
- <http://www.insse.ro>;
- <http://www.resiliencescale.com>.

Submitted:
March 16, 2016

Revised:
April 13, 2016

Accepted:
May 1, 2016

Published online:
May 1, 2016

C O N T E N T S

TRADITION AND HISTORICAL CONTINUITY OF ADMINISTRATIVE FUNCTIONS IN THE FORMER PROVINCIAL CITIES IN POLAND

Wioletta SZYMAŃSKA
 (Art#1811**01**-297) 5

THE EMERGENCE OF LABOUR FORCE RESILIENCE. A CASE-STUDY: ROMANIA

Paul-Răzvan ȘERBAN, Ioan IANOȘ, Cristian TĂLĂNGĂ
 (Art#1811**02**-298) 18

* * * * *