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Regional Resilience in Romania - Between Realism and Aspirations

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Abstract

The resilience of regions/locations as a possible response to the uncertainty and various rapid and volatile changes in the social and economic environment began to capture the attention of both researchers and policy makers. Based on the concept of regional resilience and selected indicators, the paper analyzes the development of the Romanian regions and their counties over a longer temporal interval, characterized by both growth and crisis and recession. The results indicate different development and adjustment patterns among the regions and among the counties within a region, but also some common trends of economic fragility, continuous restructuring and attempts at adapting to the ever changing socio-economic environment.

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1. Economic resilience – Definition and some concept clarifications

Economics of sustainability and complexity has added a new component - the **economic resilience**, which means identifying ways and means of solving problems of increasing resistance, ability to stop or recover the negative effects of external shocks and which becomes a fundamental feature at micro and macro level. In other words, *resilience deals with reducing the probability of failure or economic risks, assuming the combined analytical and predictive approaches, ex-post and ex-ante* (Zaman, 2014).

At local level, the phenomenon of *resilience of regions/locations*, as a possible response to the uncertainty and to

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various rapid and volatile changes in the social and economic environment began to capture the attention of both researchers and policy makers. The issue of regional "resilience" is, basically, quite old: namely why some regions manage to overcome short or long term economic adversity and maintain the standard of living of their citizens and others fail - but is not limited to regional sensitivity to economic shocks or other shocks, which induce serious economic and social problems (for instance, natural disasters – Christopherson et al., 2010). Moreover, a region with high resilience does not only obtain short-term economic success, but it is also able to maintain it on long term, despite (or perhaps in response to) the continuous pressures towards adaptation induced by changes in the international competition, in the consumer behavior, etc. For these reasons, it is a matter of interest regarding the political discourse and the governance capacity and successful implementation of policies and strategies at regional level.

A universally accepted definition of *economic resilience* is not found in the literature, there are differences of opinion among experts regarding the content, specificity and area of coverage. However, one can identify two meanings of the notion, not necessarily interfering (Zaman, 2014): one that is based on the analysis of economic equilibrium and concerns the ability of an economic system to return to a pre-existing state in a unique balance system, and another that is based on the theory of complex adaptive systems and refers to the ability to adapt and change of a system in response (reaction) to sudden pressures, shocks and negative impacts. In both meanings, two aspects (axes) are important, namely: a) the ability to return to a previous state of equilibrium (optimal) without the system changing its fundamental structure (a "takeover of valuable, valid tradition/heritage ") and b) responsiveness, system response to external or internal shocks without returning to the previous state, but with recovery and stabilization in a new equilibrium (validation of Schumpeterian formula of "creative destruction "in the new conditions that support growth and technological and socio-economic renewal in a constructive and not "demolishing" way – Zaman, 2014).

In turn, the *regional resilience* is widely discussed in the literature, and can be identified in this case a number of definitions, but in principle this is defined as the ability of a region to record economic success accompanied by social inclusion, to protect environment and ability to overcome (fast) the shocks (Bristow, 2010). Therefore, as stated earlier, this is in connection with the ability to withstand or respond adequately to external pressures (the so-called short-term resilience) and long-term adaptability (or learning ability) accompanied by the capacity of governments to engage in actions and processes for implementing appropriate policies and strategies and social learning (the so-called long-term resilience). In such a context, the concept of resilience shows that regions should have a variety of businesses, institutions and sources of energy and food, ability to adapt to changing environmental conditions, the ability to reorganize in the event of a shock, many small localized activities (without predominance of a particular sector), a healthy core of households, elements of civil society, community spirit to share and collaborate to provide essential services (Yiannis et al, 2012). In other words, among the determinants of adjustment and adaptation ability of a region may be mentioned those which give power and to the regional innovation- learning system, modern infrastructure, highly skilled workforce, innovative and with propensity to engage in entrepreneurial activities, appropriate funding schemes and diversified sectoral basis (Christopherson et al., 2010, Martin, 2010).

The literature may show various types of economic resilience, based on economic performance, on how to respond to shocks (both negative and positive), and on other determinant factors (Pike et al., 2010). An important factor is the time interval used to assess resilience, since the long-term resilience trajectory may be different, even if the end result may be similar (Figure 1) and the (possible) path determines the optimal policy for the region (Régibeau, Rockett, 2012). Resilience trajectory is multi-dimensional (with respect to strength (resistance), recovery, reorientation and renewal) and is directly related to the past economic performance previous to a shock (Martin, 2010). Moreover, considering the two axes mentioned above, we believe that we can say that the dimensions of resistance-recovery folds more on the recovery axis (3r), while the reorientation-renewal dimensions on the response axis (3R).

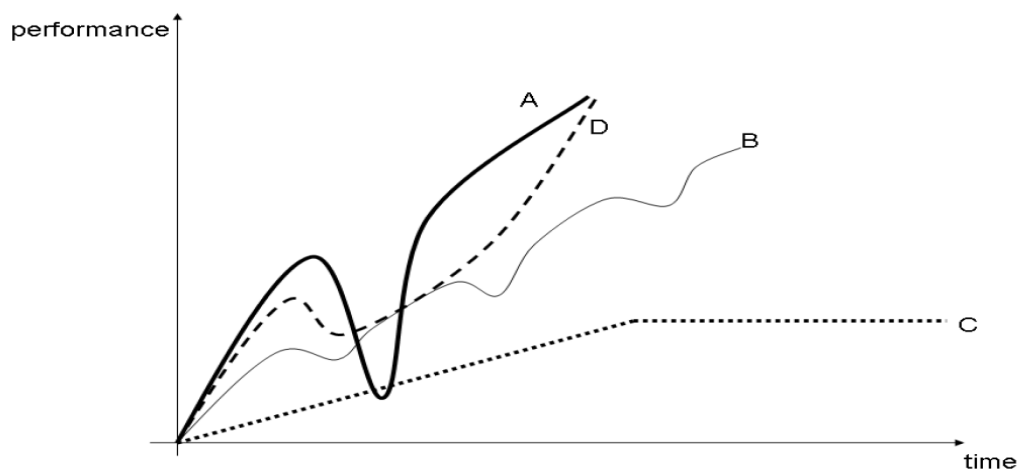


Fig. 1: Long-term Regional Resilience Trajectories

Note: Regions A and D have the same level of final performance, but how each adjusts to shocks is different (short and sharp for the A region, more subdued and sustained for the D region). Region B seems quite resilient to shocks, but more susceptible to frequent shocks that regions A and D may not record, but the recovery period is short. Region C appears not to be affected by shocks, but also registers the lowest potential for long-term performance, and if performance is "low enough", then its sustainability is questionable.

Source: Pierre Régibeau, Katharine Rockett, *Economic Analysis of Resilience: A Framework for Local Policy Response Based on New Case Studies*, MPRA Paper No. 38549, April 2012.

Interest in regional vulnerability to shocks and their trajectories to overcome and return to growth increased with the onset of the global economic crisis in 2008; a number of European studies highlighting the differences between the different regions of Europe regarding the size of recession and the subsequent economic recovery (Martin, 2010). For Romania, they showed a greater resilience of Bucharest-Ilfov region's economy, and continuing fragility of many other regional economies and the difficulties associated with structural changes and integration into the EU economy (Davies, 2011, Groot et al., 2011).

In what follows, this paper proposes an analysis at the level of Romanian regions[†] of one of the above-mentioned factors as having a significant impact on regional resilience, i.e. *business environment*. In this regard, we considered two groups of indicators related to the development of economic agents over a period of time, characterized by both periods of growth and crisis and recession. We used for analysis the statistical information taken from bulletins and statistical analyses of the National Trade Register Office (NTRO) in the periods 2002-2013 and 2008/2009 to 2013.

2. Evolution of registrations of economic agents in the Romanian regions

A first group of indicators which, in our opinion, may characterize the sustainability and resilience of business domain (of tangency, mainly, to dimensions related to "reorientation-renewal" and "response" axis in the above-mentioned sense) is related to *registrations of businesses* (Figures 2 and 3). The annual growth rate indicates similar trajectories of registrations of new businesses in all regions of Romania, with clear periods of decline in the years 2006, 2009 and 2012. The developments over the period also especially reveal the shock of the economic crisis (detectable in 2009), but also the general downward trend and the significant differences among the regions related

[†] For reasons of space, the analysis of the counties of each region is not included in this paper.

to "reorientation-renewal" (strongest in the Vest and Nord-Vest regions and partly, in Sud Muntenia and poor the Centru region). Different "reorientation-renewal" (3R) models of the regions are more visible when analyzing the evolution of the absolute differences in the total number of registrations to the NTRO (Figure 4): resistance and stronger recovery in the Nord-Vest, Vest and Sud Muntenia regions and weaker in the Centru, Nord-Est and Sud-Est regions. The Centru and Bucharest-Ilfov regions are special cases that seem to indicate that the good performance previous to a shock (in this case the one in the year 2009) do not necessarily lead later to a similar recovery. Also, the Sud-Vest Oltenia region shows the reverse of the above situation, showing a relative recovery in terms of poor performance on registrations of businesses prior to 2009.

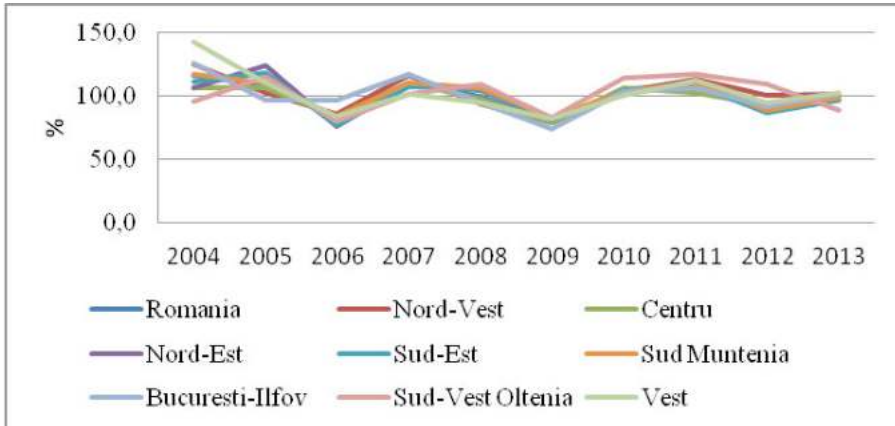


Fig. 2: Total Registrations at the NTRO in the Romanian Regions - Annual Dynamics, %

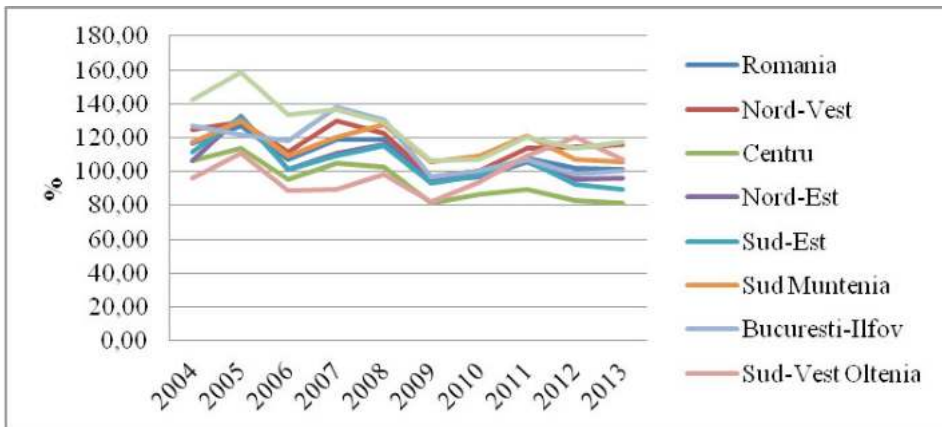


Fig. 3 Growth Dynamics of Total Registrations at NTRO in the Romanian Regions, 2003 = 100.0%

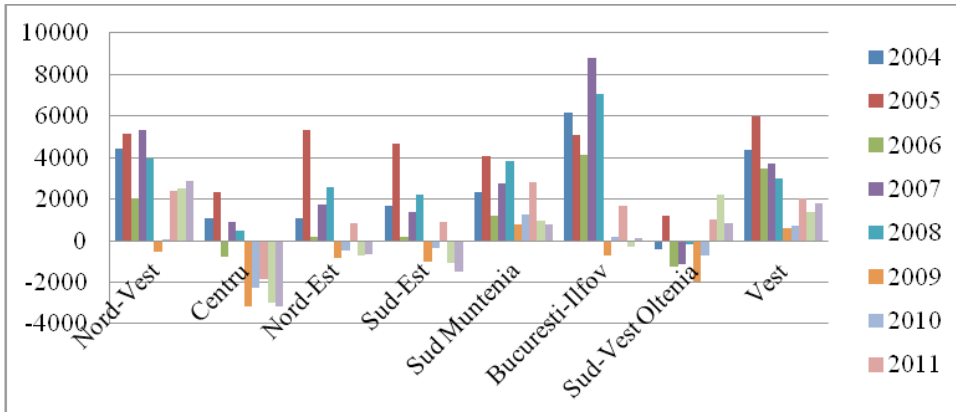


Fig. 4 Absolute Differences in the Business Registrations at the NTRO in the Romanian Regions - 2003 = Base Year

To detail the trends of business resilience of regions of Romania, we analyzed the evolution of registrations of businesses on main categories, namely *natural* and *legal persons* in 2008-2013 (Figures 5 and 6). Behavioral adjustment differences to the economic shock are large: *registrations of individuals* recorded positive developments throughout the analyzed period, the most significant increases were also in the Nord-Vest and Vest regions and even explosive growth in the Sud-Vest Oltenia region, while *registrations of businesses* (agents that form the basis regional business environment) showed a marked decrease in the years 2009 to 2010 in almost all regions and a relative return, but with downward trend in 2011-2013, signs of slow accommodating by the regions of the major economic shock induced by the economic crisis and its consequences on the Romanian economy. The best performances were recorded by the Vest and, especially, the Bucharest-Ilfov region, which remains the main attractor-region of Romania.

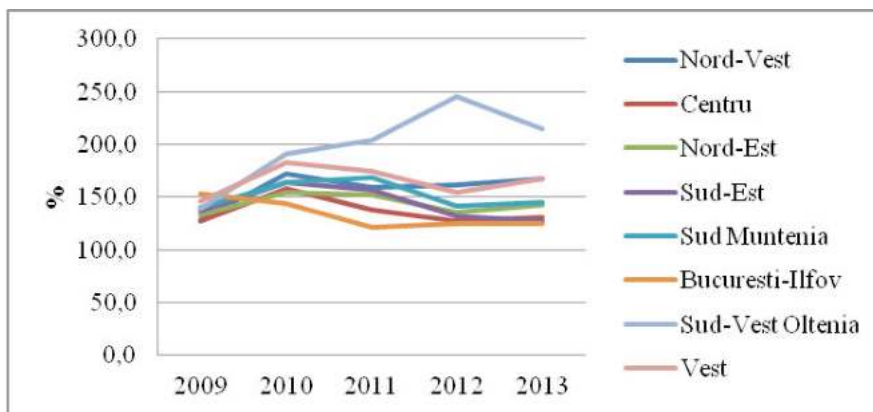


Fig. 5: Evolution of Registrations of Individuals at the NTRO in the Romanian Regions , 2008 = 100.0%

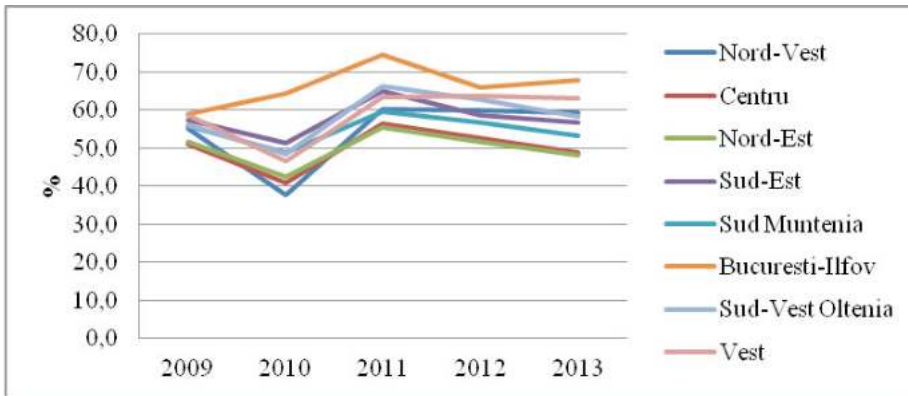


Fig. 6: Evolution of Registrations of Businesses at the NTRO in the Romanian Regions , 2008 = 100.0%

3. Evolution of active economic agents in the Romanian regions

Another important indicator of viability and sustainability of the business environment of a region (which indicates, in a first phase, type 3r models) refers to the *evolution of active economic agents* (Figures 7, 8 and 9). Thus, in terms of all active economic agents of regions of Romania in the period after the shock induced by the economic crisis in 2008-2009, we may see that the lowest resistance and recovery (and still non-recovery to the pre-crisis activity levels) had the Nord-Est and Sud-Est regions, and the strongest the Bucharest-Ilfov, Sud-Vest Oltenia and Vest (by exceeding pre-crisis activity levels). By categories of economic agents, while *individuals'* return to pre-crisis levels of activity are yet to be in the Nord-Est, Sud-Est and Sud Muntenia regions, and it is substantial in the Sud-Vest Oltenia region and important in the Bucharest-Ilfov and Vest regions. For *legal entities (de facto businesses)*, the only region where a return to pre-crisis activity levels have not yet been achieved at the end of 2013 was Nord-Est, while in Bucharest-Ilfov and Sud Muntenia regions the return to pre-crisis activity levels and their overcome was more rapid and substantial and, also significant in the Nord-Vest and Vest regions.

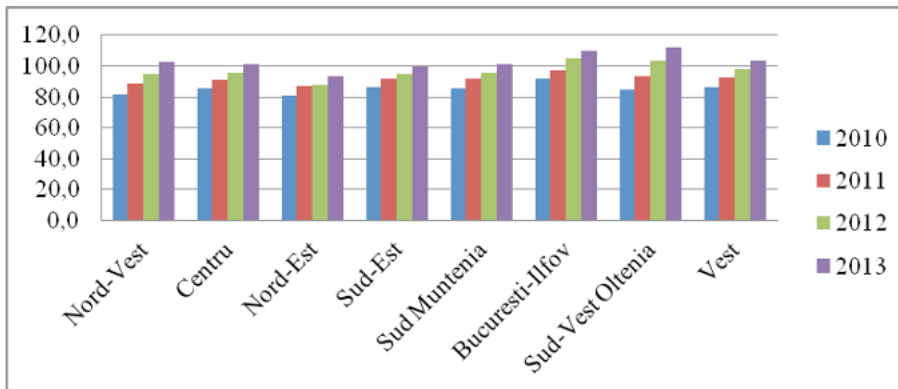


Fig. 7: Evolution of Active Economic Agents in the Romanian Regions - Total, 2009 = 100.0%

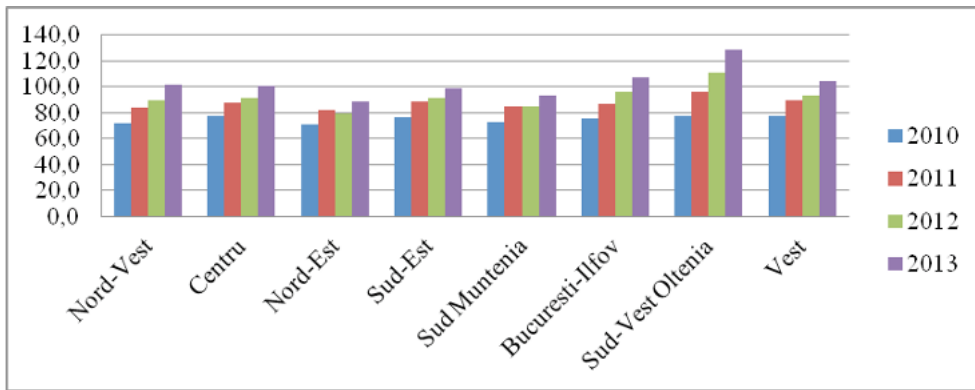


Fig. 8: Evolution of Active Economic Agents in the Romanian Regions - Natural Persons, 2009 = 100.0%

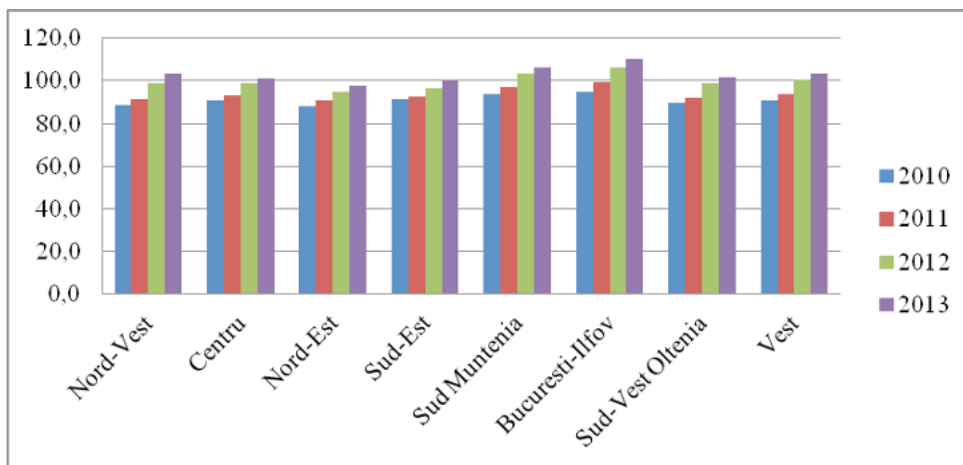
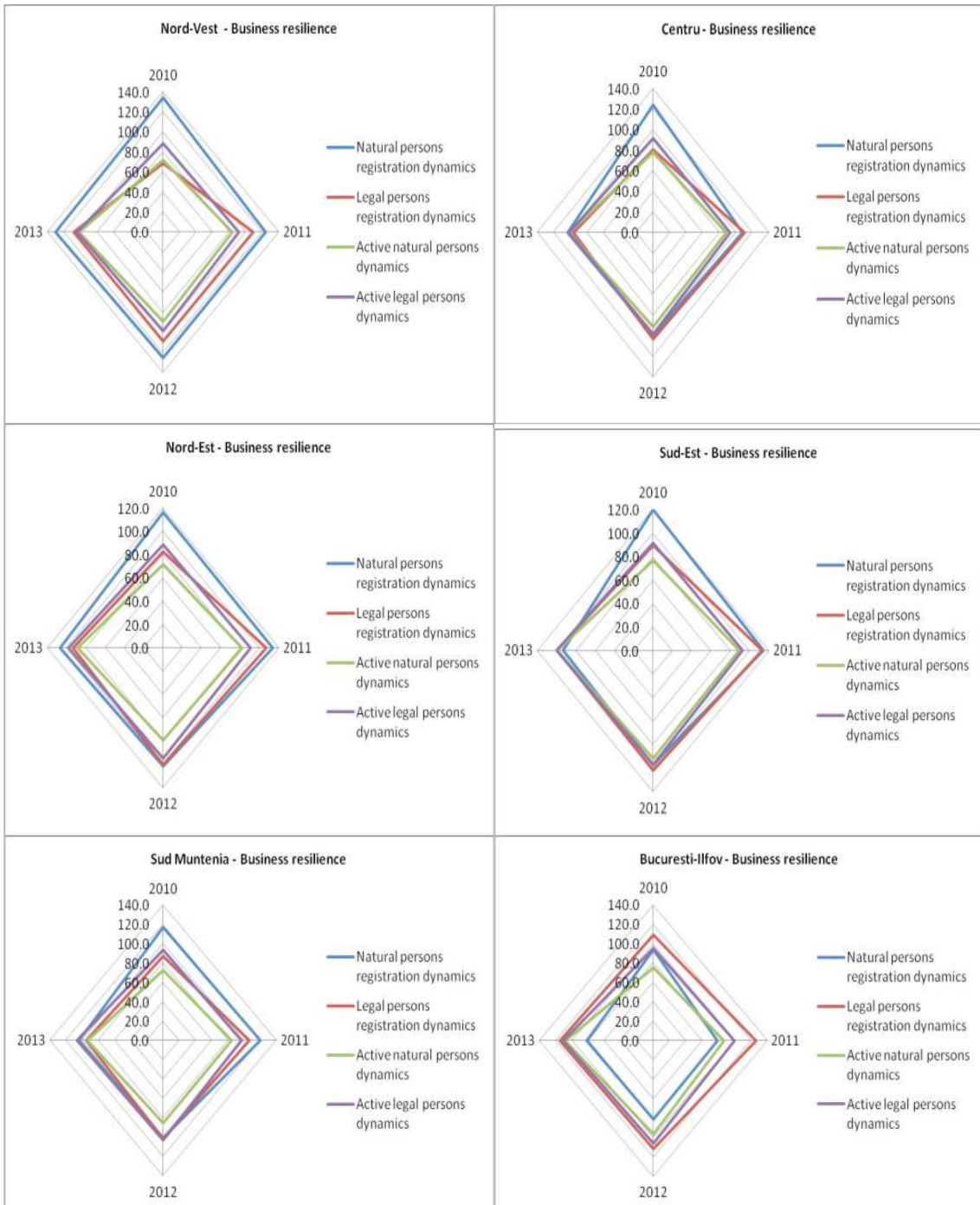


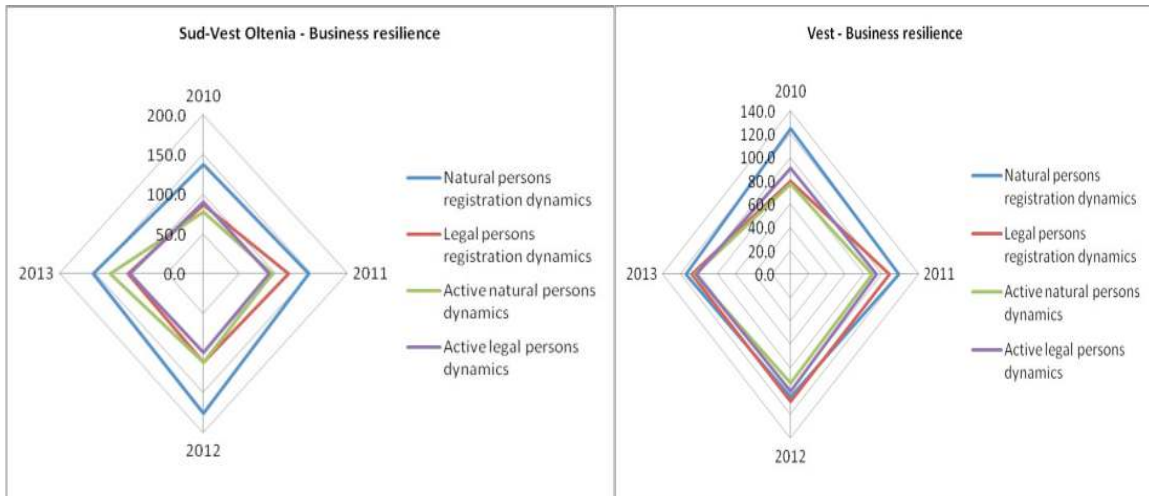
Fig. 9: Evolution of Active Economic Agents in the Romanian Regions - Legal Persons, 2009 = 100.0%

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Appendix A. Resilience of business environment in the Romanian regions





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