

The Dynamics of Traded Industries In Romania Between 2008-2014

Ibolya Török ¹, Gergely Török ^{1,2}

¹ Babeş-Bolyai University, Faculty of Geography, Clinicilor Street 5-7, Cluj-Napoca 400006, Romania

² North-West Regional Development Agency, 1 Decembrie 1918 Street 3, Cluj-Napoca 400699, Romania

E-mail address: ibolya.kurko@geografie.ubbcluj.ro

Abstract. During the last two decades a great number of studies have analyzed the industrial specialization and spatial concentration of specific industries, considering that the two phenomena closely interrelated: the geographic concentration of economic activities representing a territorial approach that describes the distribution of economic activities within a well-defined geographical area, while regional specialization expresses the weight of a certain sector in the regional economy. At the same time regional specialization is a good indicator of the competitive advantages a region possesses in producing different goods or services, making the best use of the local resources compared to other territories. The present study will analyze the importance and perspectives of traded- vs. local industries in the case of Romania during the 2008-2014 period.

1. Introduction

In recent years, the analysis of local economic processes has represented one of the main research topics within the specialized literature. Research has shown, that despite the strengthening effects of globalization, local conditions still play an important role in the economic development of companies, industries and states. According to some authors the simultaneous relocation of certain economic activities and the increasing importance of local conditions seem to be a contradiction in terms [1]. Moreover, in the last year's transport costs have decreased significantly both in terms of direct costs associated with transport itself, as well as the indirect ones represented by taxes, legislation or different institutional systems, thus contributing to the global expansion of economic activities. However, location still continues to play a significant role in economic development, although a number of examples mentioned in the literature [2, 3] – showing that the specialization of regions and nations has remained relatively constant during the last 20 years – are beginning to be proven wrong (it is enough to consider the shaking stability of the telecommunications sector in northern Europe, once considered to be the most stable high-tech industry in the area). But despite the relocation of a large number of production facilities to countries with low labor costs, a series of labor intensive industries have remained in countries associated with extremely high wages. Although we can find a series of specific cases underlining this phenomenon – like the automotive industry in western Germany or the porcelain industry in Meissen – the examples mentioned in the last decade seem to lose their significance. Thus, although some companies in certain traded cluster categories have continued to be concentrated in just



a few more developed locations – forming generally stable clusters despite the increasing global competition – in contrast to Brenner's [1] observations, the effects of globalization are starting to show their impact more and more. Having this in mind, the identification of factors supporting clustering processes within high added value industries is becoming all the more important.

2. Data and Method

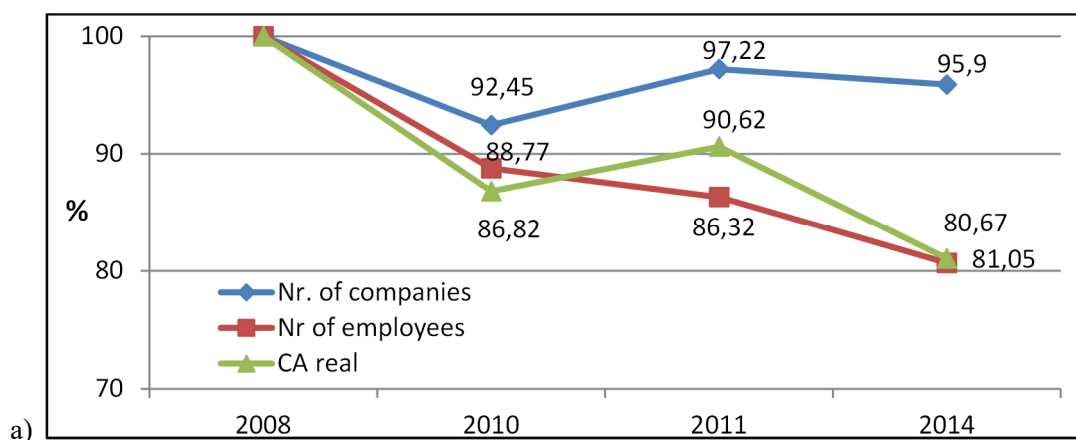
The analysis of Romanian companies was based on the existing territorial statistical data obtained from the National Trade Register Office, the National Statistics Institute of Romania, including the Tempo Online web database. Within the analysis we have used the traded cluster categories delimited within the 2014 edition of the European Cluster Panorama, published by the European Cluster Observatory, except those based on the exploitation of natural resources. Thus the object of our study is represented by 46 traded cluster categories which by definition are made up of NACE 4 level industries that are serving markets beyond their own location and which are fully exposed to competition from other locations. Traded clusters have the tendency to concentrate across regions, their high wages and high levels of innovative activity making them key engines of regional economies.

3. Results and Discussion

3.1 Traded vs. local industries – importance and perspectives

Analyzing the concentration of economic activities, we can see that in 2008, 41.2% of all active Romanian companies have belonged to traded industries which make up the 46 selected cluster categories. In the same year these companies have employed more than half of private sector employees, being responsible for generating 54% of total turnover of Romanian companies.

Regarding the evolution of the number of employees, the number of companies as well as the turnover in the 2008-2014 period, we can see a steady decrease in almost all cases: in 2014 the overall number of companies has been around 96% of the initial value from 2008, whereas in the case of companies belonging to traded cluster categories this value has gone over 101%. This means that industries with a high concentration tendency have shown a significantly better performance within the analyzed period compared to the rest of the economy, being a good indicator that traded industries have managed to repel the negative effects of the economic crisis. From the analyzed data we can also see that in the last 6 years in absolute terms the country's economy has not managed to reach the performance of the reference year, namely the period right before the financial crisis of 2008. However, what we can see is the improving position and share of traded industries in the country's overall economy as well as the significant increase in labor productivity in these sectors. This situation can be observed quite well in Figure 1.



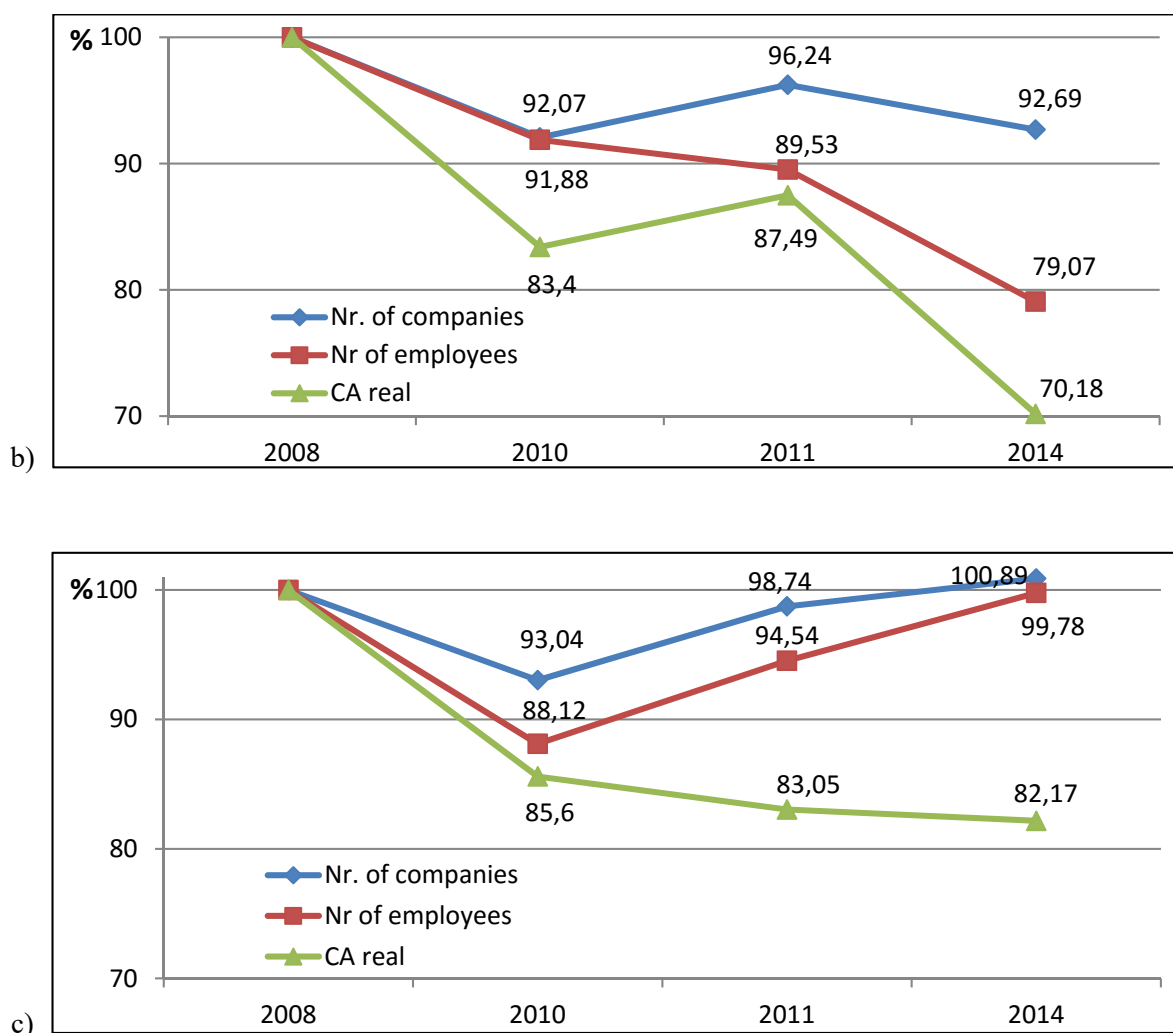


Figure 1a-c). The evolution of the number of companies, the number of employees and turnover in the 2008-2014 period (within the whole economy, in the case of local industries as well as the traded ones) [4,5].

Analyzing the share of traded industries in the country's economy, we can see an almost constant growth over the last six years, the increasing importance of these sectors as well as of their role in supporting the entire economy becoming more and more important. During the analyzed period the share of the number of companies in these industries has risen from 39% to 41.2%, the share of employees from 49.6% to 50.6%, although the highest increase has been registered in case of the turnover, with a total growth of 7 nearly percentage points - even after adjusting the data with the values for inflation - from 46.8 to 53.6%.

As a result, it can be stated that although the overall performance of the economy has not managed to achieve the levels registered before the economic crisis, the importance of traded sectors has shown a steady growth, this being a sure sign that the structure of the Romanian economy is evolving in the direction of those found in western Europe, entering more and more into a strong competition at global level.

Not considering local industries and those based on the exploitation of natural resources, within our analysis we have studied the evolution of 46 cluster categories made up of traded industries, not just in terms of the evolution of companies and employees, but also the turnover.

It has been considered that it is crucial to analyze all of 3 dimensions for several reasons:

- the evolution of the numbers of companies in a specific field is a good indicator of the entrepreneurial spirit in the respective industry, denoting that the private sector has perceived a relatively strong potential for growth in the medium and long term.
- the number of employees shows that role the industry already has in the economy
- the increase or decrease of the turnover on the other hand is a very good indicator of the ability of the sector to capitalize on local resources.

At the same time, these indicators should always be analyzed in parallel with other aspects because a slight decrease in the number of employees in a particular field which goes in parallel with the rise in turnover in the respective sector may denote an increase in labor productivity and not necessarily the decrease of the importance of the sector within the national economy. Also, the increasing growth of the turnover in one particular sector can indicate the change of its importance within the whole economy, the emergence of new technologies that lead to a better capitalization of resources in that area or the increasing importance of that sector due to changing conditions at a global scale.

To avoid the cases where we identify sectors with strong dynamics but with a very small share in the economy we will only consider only cluster categories which are situated in the top 80% with regard to the size. Thus we can eliminate the following industry groups: manufacturing of tobacco products, manufacture of spacecraft and defense vehicles, leather products, fishing and manufacturing of fishing products, the production of jewelry as well as sound recording. Considering the three pillars (number of companies, employees and turnover) we can see that at national level there are two cluster categories showing a sharp increase in all three dimensions, namely the production of medical devices with an increase of 23% in the case of employees, 22% with regard to the number of companies and almost 30% of the turnover value. The second such cluster category is transportation and logistics, with a more moderate increase in the number of companies (7%) and turnover (13,5%). The performance of these exact two industries with a considerable increase on all three levels compared to the rest of global industries is not necessarily surprising considering the growing importance attributed to personal health on the one hand, as well as the growing importance of transportation and logistics services (it is enough to consider "just in time" production or e-commerce which have a strong transport and logistics component). We can also find four cluster categories showing significant increases in the analyzed period both in terms of the number of companies as well as the number of employees, namely the production and distribution of electricity, environmental services, business services and tourism. The growth rate of these two elements denotes that we are dealing with emerging fields of business where entrepreneurs have already responded to new signals given by the global market, the success of these initiatives waiting to be validated (or not) in the coming years by the evolution of the turnover.

We can also find two other cluster categories situated in the top 20% regarding the increase of the number of employees as well as the turnover, but without a dramatic increase in the number of companies, this being a sign of consolidation of existing companies in the field. These two sectors are the automobile industries and the manufacture of biopharmaceuticals, both with a significant increase of exports in the analyzed period (pharmaceuticals products 4 times, automobiles 1.6 times).

In addition to these cluster categories with a growing number of employees we find a number of other areas that have above-average results during the analyzed period, for example education and knowledge creation, agricultural products and services as well as livestock processing.

The performance of the above analyzed sectors is all the more important, since the available data are from 2008, before the financial crisis when the analyzed indicators have reached their maximum values, values which at the level of the overall economy could not be equaled even after six years. For this reason, we have proceeded to analyzing the data also for the 2010-2014 period in order to identify sectors which have been significantly affected by the negative effects of the economic downturn but which have managed to recover and adapt faster than other traded industries. Thus we will also be able to identify industries obtaining major importance, showing a steady increase over the last 4 years despite the unfavorable economic conditions. In this second case, the situation is even more heterogeneous than in the first period, the only cluster category maintaining an increase in all three areas being the

manufacturing of medical equipment, transport and logistics services losing their importance in terms of employee growth. The later has been severely hit by the economic crisis after 2008 and although it has managed to report and increase of more than 7% in the 2010-2014 period, this has not proven enough to surpass the performance of other industry groups (Figure 2).

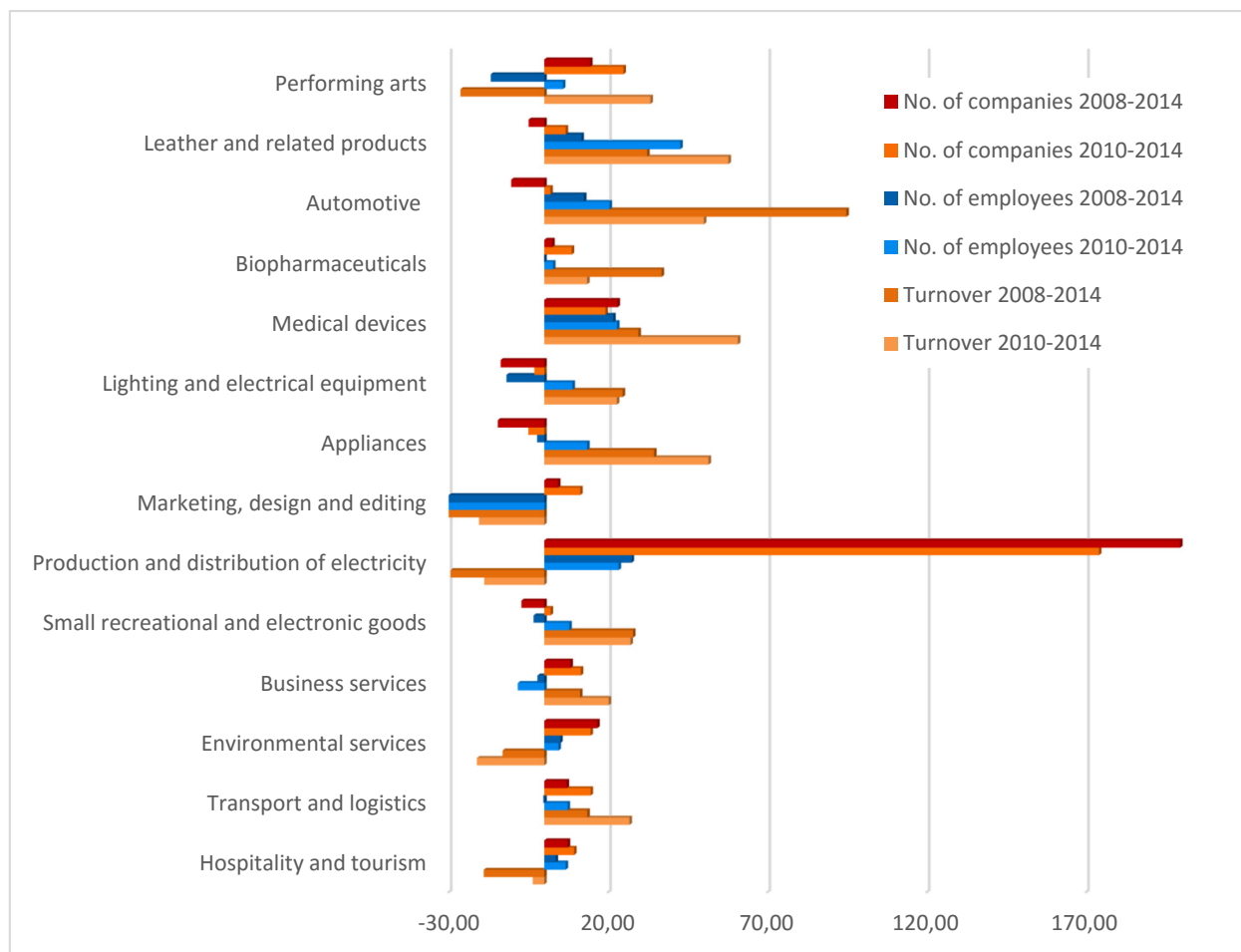


Figure 2. The evolution of the number of employees, the number of companies as well as the turnover in the 2010-2014 and the 2008-2014 periods

Considering the number of employees and the evolution of turnover, there are 3 cluster categories which fall into the top 20%. Besides the automotive industry we have identified as such the manufacturing of appliances and the production of electric and lighting equipment industry. These three industries have all registered a severe decline in the first two years of crisis, reaching the lowest point in 2010, but in parallel with the increasing demand for their products they have registered a spectacular growth in the following years. The appliances industry for example has shown an increase of the number of employees of almost 14% in the 2010-2014 period along with a 50% increase in turnover, while the electrical and lighting equipment industry has registered an increase of nearly 10% in the case of employees as well as a 23% increase in the case of turnover (Figure 2).

4. Conclusions

In this paper we have studied the evolution and performance of traded industries, considering the complex relationships between individual industries and cluster categories as well as their increasingly important role within the Romanian economy. With the help of the applied methodology we could observe specific patterns of evolution in the case of these industries compared to the rest of the country's

economy, being marked by a more obvious growth rate and a superior performance. On the other hand, compared to the economies of western Europe we can clearly see the much lower performance of companies in emerging and high added-value sectors, both in terms of the number of employees as well as the labour productivity, particularly in the case of biopharmaceuticals manufacturing and the automotive industry. Despite these aspects the analysed cluster categories have still managed to show an overall superior performance not only compared local industries but the whole Romanian economy in general.

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