ECONOMIC DISPARITIES AND CHANGES IN THE CONVERGENCE OF THE ROMANIAN NUTS 2 AND NUTS 3 REGIONS

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ABSTRACT - In this article we use the classic economic variable, the Gross domestic product (GDP) per capita in order to investigate the economic convergence between regions in Romania and between the Romanian regions and EU in the period 2000–2010. The main results confirm that while there is an evident convergence between the country as whole and EU, the inter-regional disparities in Romania has widened, confirming the Williamson hypothesis.

Keywords: convergence, economic disparities, Romania, European Union

INTRODUCTION

The basic question of this paper is concerned with the variations of the economic performances of the Romanian regions in comparison to the EU-level. The GDP per capita of Romania has registered a continuous growth starting with 2000 until the crisis of 2008 (Figure 1). As a consequence, the development gap between Romania and the European Union has been significantly reduced in the period 2000-2011 (Table 1). In 2000, Romania was the poorest country in Europe, with a GDP per capita situated at 26% of the EU level. The progress registered by the country was quite spectacular, the convergence process can be labelled as successful, the GDP per capita registering a value which situates Romania at 49% of the EU level in 2011, exceeding even the most optimistic forecasts (Traistaru et al., 2003).

GDP/inhabitant (EUR)

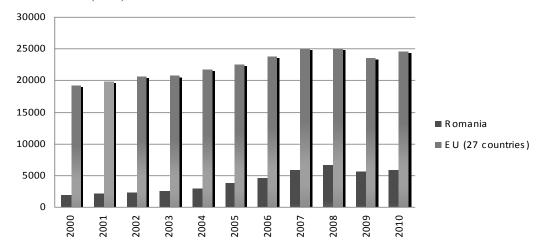


Figure 1. The convergence process of Romania: catching-up with Europe (GDP/inhabitant in the EU-27 and Romania)

Source: authors, based on the Eurostat data

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The convergence was more intensive than in the neighbouring Bulgaria, the latter being even overtaken by Romania. However, the distance to the next convergence club, formed by the Baltic States, Poland, and Hungary is still considerable (Kuttor, 2009).

Table 1. The GDP per capita of the EU countries, % in EU-27, in 2000 and 2011

| Country | 2000 | 2011 | Country | 2000 | 2011 |
|--------------------------|------|------|----------------|------|------|
| EU (27 countries) | 100 | 100 | Latvia | 36 | 58 |
| EU (15 countries) | 115 | 110 | Lithuania | 40 | 62 |
| Euro area (17 countries) | 112 | 108 | Luxembourg | 245 | 274 |
| Belgium | 126 | 118 | Hungary | 54 | 66 |
| Bulgaria | 28 | 45 | Malta | 85 | 83 |
| Czech Republic | 71 | 80 | Netherlands | 134 | 131 |
| Denmark | 132 | 125 | Austria | 132 | 129 |
| Germany | 118 | 120 | Poland | 48 | 65 |
| Estonia | 45 | 67 | Portugal | 81 | 77 |
| Ireland | 132 | 127 | Romania | 26 | 49 |
| Greece | 84 | 82 | Slovenia | 80 | 84 |
| Spain | 97 | 99 | Slovakia | 50 | 73 |
| France | 115 | 107 | Finland | 117 | 116 |
| Italy | 118 | 101 | Sweden | 128 | 126 |
| Cyprus | 88 | 92 | United Kingdom | 119 | 108 |

Source: authors, based on the Eurostat data

INTERNAL ECONOMIC DISPARITIES AT NUTS 2 LEVEL

At regional level, as opposite to the general, national convergence, we have two opposite trends. First, one region, Bucharest-Ilfov had a considerable growth rate of the GDP per capita, reaching the 115% of the EU level. It is still far behind the "richest regions" of the Blue Banana zone, like Inner-London, Luxembourg, Bruxelles, or Ile de France (Table 2), but not far from the other Central-European capital-regions. Second, the non-capital regions had a much lower growth rate, failing to compete against the capital-regions. Generally, in the Eastern European countries, the GDP per capita shows a low level, only the capital-regions managing to reach a higher development level.

Table 2. The "richest" NUTS 2 regions of the EU, in 2009

| Region | Country | GDP/capita % in EU-27 |
|------------------------------|----------------|-----------------------|
| Inner London | United Kingdom | 332 |
| Luxembourg | Luxemburg | 266 |
| Région de Bruxelles-Capitale | Belgium | 223 |
| Hamburg | Germany | 188 |
| Bratislavský kraj | Slovakia | 178 |
| Île de France | France | 177 |
| Praha | Czech Republic | 175 |
| Stockholm | Sweden | 172 |
| Åland | Finland | 164 |
| Wien | Austria | 161 |

Source: authors, based on the Eurostat data

ECONOMIC DISPARITIES AND CHANGES IN THE CONVERGENCE OF THE ROMANIAN NUTS 2 AND NUTS 3 REGIONS

The lowest development at NUTS 2 level is recorded in Bulgaria and Romania. In 2000, among the 11 "poorest" NUTS 2 regions of the EU, there are seven Romanian and four Bulgarian regions (Table 3). In Romania, only the capital-region of Bucharest-Ilfov is not listed in table 3, while the lowest three values of the GDP per capita are recorded by the Romanian regions.

Table 3. The "poorest" NUTS 2 regions in the EU, in 2000

| Region | Country | GDP/capita % in EU-27 |
|--------------------|----------|-----------------------|
| Nord-Est | Romania | 18 |
| Sud - Muntenia | Romania | 21 |
| Sud-Vest Oltenia | Romania | 22 |
| Yuzhen tsentralen | Bulgaria | 22 |
| Severen tsentralen | Bulgaria | 23 |
| Sud-Est | Romania | 23 |
| Nord-Vest | Romania | 24 |
| Severozapaden | Bulgaria | 26 |
| Centru | Romania | 27 |
| Severoiztochen | Bulgaria | 27 |
| Vest | Romania | 27 |

Source: computation made by the authors, based on the Eurostat data

Nine years later, in 2009, the situation shows little changes (Table 4). The lowest values are now registered by the Bulgarian regions. The Nord-Est Region in Romania remains in the last position among the Romanian NUTS 2 regions, with GDP per capita values 13 times lower than the maximum amount recorded in the Inner-London region. Other three Romanian regions have left this table, registering higher GDP growth rates: Vest, Centru, and Nord-Vest, all three situated in the central-western part of the country, in the historical provinces of Transylvania and Banat. These three regions were replaced in 2009 by four very poor performing regions from the eastern part of Hungary and Poland.

Table 4. The "poorest" NUTS 2 regions in the EU, in 2009

| Region | Country | GDP/capita% in EU-27 |
|--------------------|----------|----------------------|
| Severozapaden | Bulgaria | 27 |
| Severen tsentralen | Bulgaria | 29 |
| Nord-Est | Romania | 29 |
| Yuzhen tsentralen | Bulgaria | 31 |
| Severoiztochen | Bulgaria | 36 |
| Yugoiztochen | Bulgaria | 36 |
| Sud-Vest Oltenia | Romania | 36 |
| Sud-Est | Romania | 38 |
| Észak-Magyarország | Hungary | 40 |
| Sud - Muntenia | Romania | 40 |
| Lubelskie | Poland | 41 |
| Észak-Alföld | Hungary | 42 |
| Podkarpackie | Poland | 42 |

Source: computation made by the authors, based on the Eurostat data

It must be noticed that over the last years, the eastern peripheries of the European Union showed a remarkable growth of the GDP per capita (over 6%), which indicates a more balanced territorial development of the European Union (Benedek and Kurkó, 2012). The correlation between

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the GDP per capita and the annual average rate of GDP growth is high, but negative, of -0.527, which means that, with growing GDP per capita levels, the growth rate of GDP will register lower values (eb.). The crisis year could well represent the turning point in the overall growth of the eastern peripheries.

Figure 2 emphasizes the trend of increasing inner-country disparities. The capital region Bucharest-Ilfov acts, on the one hand, as the main engine of the country's convergence process, but it is, on the other hand, the main source of the increasing inter-regional disparities in Romania. While the growth rate of GDP per capita had little variances in the Romanian regions until 2004, the EU-integration induced a rapid growth of the capital-region.

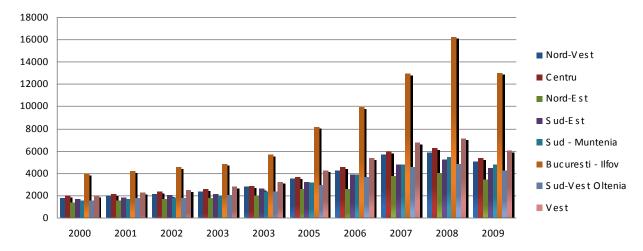


Figure 2. The GDP per capita (EUR) in the NUTS 2 regions of Romania Source: computation made by the authors, based on the Eurostat data

Table 5 gives us a picture about the regional differences of the GDP per capita. In 2000 Bucharest-Ilfov registered a value of GDP per capita three times higher than the region Nord-Est. This gap increased in the following period, recording 13,000 euro per capita for Bucharest-Ilfov in 2009 and 3,400 euro per capita in the Nord-Est Region, a value which is almost four times lower. The ranking of regions underwent little changes. It was only the Sud-Muntenia Region, situated around the capital city of Bucharest, that improved its position and outrun the Sud-Est and Sud-Vest Oltenia regions.

Table 5. The GDP per capita in the NUTS 2 regions of Romania, 2000-2009

| Region/Year | 2000 | 2001 | 2002 | 2003 | 2003 | 2005 | 2006 | 2007 | 2008 | 2009 |
|------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| European Union | | | | | | | | | | |
| (27 countries) | 19100 | 19800 | 20500 | 20700 | 21700 | 22500 | 23700 | 25000 | 25000 | 25000 |
| Nord-Vest | 1700 | 1900 | 2100 | 2300 | 2700 | 3500 | 4200 | 5600 | 5800 | 5000 |
| Centru | 1900 | 2100 | 2300 | 2500 | 2800 | 3600 | 4500 | 5900 | 6200 | 5300 |
| Nord-Est | 1300 | 1500 | 1600 | 1700 | 1900 | 2500 | 2500 | 3700 | 4000 | 3400 |
| Sud-Est | 1600 | 1800 | 2000 | 2100 | 2600 | 3200 | 3800 | 4700 | 5200 | 4400 |
| Sud-Muntenia | 1500 | 1600 | 1800 | 1900 | 2300 | 3100 | 3800 | 4700 | 5400 | 4700 |
| București-Ilfov | 3900 | 4100 | 4500 | 4800 | 5600 | 8100 | 9900 | 12900 | 16200 | 13000 |
| Sud-Vest Oltenia | 1500 | 1700 | 1700 | 2000 | 2300 | 2900 | 3600 | 4500 | 4800 | 4200 |
| Vest | 1900 | 2200 | 2400 | 2700 | 3200 | 4200 | 5300 | 6700 | 7100 | 6000 |

Source: computation made by the authors, based on the Eurostat data

ECONOMIC DISPARITIES AND CHANGES IN THE CONVERGENCE OF THE ROMANIAN NUTS 2 AND NUTS 3 REGIONS

The rapid growth of Bucharest-Ilfov situates it at 113% of the EU level, which means that it is outside of the eligibility threshold for the cohesion policy. The Vest Region (Timişoara as main urban centre) is positioned second, at half of the EU level, while the poorest region remains Nord-Est.

Table 6. The GDP per capita of the NUTS 2 regions, % in EU-27

| Region/Year | 2000 | 2008 |
|------------------|------|------|
| EU-27 | 100 | 100 |
| Nord-Vest | 24 | 41 |
| Centru | 27 | 45 |
| Nord-Est | 18 | 29 |
| Sud-Muntenia | 21 | 39 |
| București-Ilfov | 56 | 113 |
| Sud-Vest Oltenia | 22 | 36 |
| Vest | 27 | 51 |

Source: computation made by the authors, based on the Eurostat data

INTERNAL ECONOMIC DISPARITIES AT NUTS 3 LEVEL

The growing inequalities in income and wealth can be observed also at county level, with large differences in GDP per capita between NUTS 3 regions, even within the same NUTS 2 region. Table 7 shows that all the 41 counties plus Bucharest improved their values in percentage of the EU-27 average between 2000 and 2008.

Table 7. The GDP per capita of the NUTS 3 regions, % in EU-27

| NUTS 3 REGIONS | 2000 | 2008 | NUTS 3 REGIONS | 2000 | 2008 |
|-----------------|------|------|-----------------------|------|------|
| EU-27 | 100 | 100 | EU-27 | 100 | 100 |
| Bihor | 25 | 45 | Constanța | 32 | 56 |
| Bistriţa-Năsăud | 21 | 35 | Galaţi | 23 | 35 |
| Cluj | 32 | 56 | Tulcea | 18 | 33 |
| Maramureş | 18 | 31 | Vrancea | 21 | 28 |
| Satu Mare | 21 | 32 | Argeş | 27 | 54 |
| Sălaj | 19 | 35 | Călărași | 15 | 29 |
| Alba | 24 | 46 | Dâmboviţa | 19 | 33 |
| Braşov | 33 | 55 | Giurgiu | 14 | 25 |
| Covasna | 28 | 35 | Ialomiţa | 19 | 32 |
| Harghita | 26 | 36 | Prahova | 24 | 48 |
| Mureş | 25 | 36 | Teleorman | 18 | 28 |
| Sibiu | 25 | 52 | București | 59 | 118 |
| Bacău | 21 | 33 | Ilfov | 35 | 85 |
| Botoşani | 14 | 23 | Dolj | 20 | 37 |
| Iași | 21 | 36 | Gorj | 28 | 50 |
| Neamţ | 18 | 26 | Mehedinţi | 18 | 31 |
| Suceava | 18 | 27 | Olt | 20 | 28 |
| Vaslui | 12 | 22 | Vâlcea | 23 | 35 |
| Brăila | 19 | 37 | Arad | 28 | 48 |
| Buzău | 19 | 31 | Caraş-Severin | 22 | 37 |
| Constanța | 32 | 56 | Hunedoara | 23 | 43 |
| Galaţi | 23 | 35 | Timiş | 31 | 64 |

Source: computation made by the authors, based on the Eurostat data

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Without considering Bucharest and Ilfov, the values of GDP per capita ranged on a scale of 12% (Vaslui) and 33% (Braşov) of the EU-27 in 2000. Eight years later, the same indicator varied between 22% (Vaslui) and 64% (Timiş). This means that the differences doubled at county level in the analysed period. The county with the lowest level remains the same: Vaslui, located in the Nord-Est Region. The best rank in 2008 is associated with Timiş, located in the Vest Region, the most developed region after Bucharest. Braşov (Centru Region) lost its leading position, but is still among the best (after Cluj and Constanţa). All this means that there are few changes among the counties of lowest and highest values, and the differences are increasing.

CONCLUSIONS

The above-mentioned trends in the evolution of GDP per capita prove the existence of the convergence process within the European countries and Romania, both at the national level and at the level of the capital-regions. Due to the high growth rates of the GDP per capita in the period 2000-2008, the country has closed the development gap to the EU-countries. On the other hand, there is a significant regional differentiation process inside the country, at both NUTS 2 and NUTS 3 levels. These opposite trends confirm the Williamson hypothesis in the case of Romania as well.

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