Cosmin Sabău¹

REGIONAL POLICY AND REGIONS' ROLE IN CATCHING UP THE DEVELOPMENT GAPS: SCENARIOS OF THE EUROPEAN UNION, ROMANIA, HUNGARY, THE NORTH-WEST REGION AND ÉSZAK-ALFÖLDY REGION

The paper presents how European regional policy can contribute to catching of development gaps between European regions, achieving a careful analysis of the concept of regional policy. The second part presents a practical study that highlights a descriptive analysis of GDP per capita between the years 2000-2009 for Romania, Hungary, the North-West Region and Eszak-Alfoldy Region. Then we added the scenarios for 2010-2020, for catching the gaps of the indicator mentioned above.

Keywords: regional policy; development gaps; region; regionalism; scenarios.

Космін Сабеу

РЕГІОНАЛЬНА ПОЛІТИКА ТА РОЛЬ РЕГІОНІВ У КОРИГУВАННІ РОЗРИВІВ У РОЗВИТКУ: НА ПРИКЛАДІ ЄВРОПЕЙСЬКОГО СОЮЗУ, РУМУНІЇ, УГОРЩИНИ, ПІВНІЧНО-ЗАХІДНОГО РЕГІОНУ ТА РЕГІОНУ ПІВНІЧНИЙ АЛЬФЕЛЬД

У статті розглянуто, як європейська регіональна політика впливає на коригування різниці у розвитку між європейськими регіонами, та проведено ретельний аналіз концепції регіональної політики. Друга частина являє собою практичне дослідження, що базується на описовому аналізі ВВП на душу населення за 2000-2009 рр. в Румунії, Угорщині, Північнозахідному регіоні та регіоні Північний Альфельд. До цього додано прогнозні сценарії для 2010-2020 рр. щодо заповнення розривів у вищезгаданому показнику.

Ключові слова: регіональна політика; розриви у розвитку; регіон; регіоналізм; сценарії. Форм. 8. Рис. 5. Табл. 15. Літ. 13.

Космин Сабэу

РЕГИОНАЛЬНАЯ ПОЛИТИКА И РОЛЬ РЕГИОНОВ В КОРРЕКЦИИ РАЗРЫВОВ В РАЗВИТИИ: НА ПРИМЕРЕ ЕВРОПЕЙСКОГО СОЮЗА, РУМЫНИИ, ВЕНГРИИ, СЕВЕРО-ЗАПАДНОГО РЕГИОНА И РЕГИОНА СЕВЕРНЫЙ АЛЬФЕЛЬД

В статье рассматрено, как европейская региональная политика влияет на коррекцию разницы в развитии между европейскими регионами, проведен тщательный анализ концепции региональной политики. Вторая часть представляет собой практическое исследование, которое базируется на описательном анализе ВВП на душу населения за 2000-2009 гг. в Румынии, Венгрии, Северо-западном регионе и регионе Северный Альфельд. К этому добавлен прогнозные сценарии для 2010-2020 гг. относительно заполнения разрывов в вышеупомянутом показателе.

Ключевые слова: региональная политика; разрывы в развитии; регион; регионализм; сценарии.

¹ PhD, Faculty of Economy and Business Administration, West University of Timisoara, Romania.

1. Introduction. This research aims to showcase the differences that exist between European Union and two of its member countries, Romania and Hungary, in terms of a very important macroeconomic indicator: GDP per capita. Also the analysis was extended to two representative regions of the two countries located on Romanian-Hungarian border, the North-West region and Eszak-Alfoldy region. Thus the overall objective is to identify the situation for 2000-2009 and to present projections for the next 10 years until 2020 taking into account the growth rate recorded.

In the fourth section, the descriptive data for 2000-2009 period is analyzed, collected from the statistical yearbooks provided by EUROSTAT, regarding European Union as a whole, then Romania and Hungary, and then Romanian North-West region (RO11) and Hungarian Northern Great Plain region (Eszak-Alfoldi-HU32) in Gross Domestic Product per capita.

Since studies on the EU average are done on the NUTS2 regions level, the undertaken analysis in this case focuses on Romania's North-West region and of Hungarian Eszak-Alfoldi region.

In the fifth section of this research, several scenarios are drawn for each case, country or region, and for each variable described above. Scenarios will pencil in 3 directions: the worst case scenario, the baseline scenario and the best case scenario.

2. What is Regional Policy? The reality in today's Europe shows that differences in development between member states of the European Community are quite obvious. Moreover, imbalances are large also within countries, living standards of citizens being different from one area to another. In this context, regional policy has played, plays and will play an important role in mitigating and even eliminating these gaps. Therefore, this first section provides some clarification on the definition of this type of European policy.

Thus, in the paper entitled "Regional policy and the coordination of structural instruments" it is estimated that regional policy represents "in the first place the solidarity between Member States; it is designed to help the most disadvantaged regions. Regional policy is tangible, its results are visible for EU citizens, who benefit directly from assistance in job search and adapting to labor market changes, especially through training courses" [7].

The same authors state that regional policy does nothing but lead to improving the lives of people in less developed regions, by increasing the funds that local authorities benefit to create new infrastructure and help companies become more competitive (highways, airports, railway networks, all were built with structural funds, SMEs were established and helped to operate in decline areas or the information society has penetrated the most remote rural areas) [7].

Another definition is given by Dorin Dolghi in his paper "Region and Regionalization in the EU" in which he considers that regional policy is "a set of measures adopted at community level to support the less developed regions, aiming to create or to restore a relative balance in the economic activities, living standards, population distribution"[3]. Peter Prisecaru in his paper "Common EU Policies", quoting Michel Barnier, says: "Common regional policy is the only tool designed expressly for disparities, while in the same time being a very specific tool, which involves a transfer of resources among member countries through the EU budget" [8, p.75].

The European Commission, the European Union's executive body, tried to give a definition to the term of regional policy, concluding that regional development policy seeks to reduce the visible effects on the gap between the development levels of different regions. Also, this type of policy plays an important role in financial support of the projects aimed at the development of regions, cities and increasing living standard of their inhabitants. Therefore, the main goal is to create a potential for regions so that they contribute to the growth and development of economic competitiveness [12].

Based on the above statements, regional policy can be defined as a set of means (tools) needed to eliminate the national and regional development disparities. This will be achieved by stimulating cooperation between regions and interregional, competitive environment creation and development, financial support (through European funds) of less developed regions, stimulating the investments in problematic areas through an appropriate fiscal policy, increasing skilled human resources and so on.

Thus, in addition to the above definition, we can say that EU regional development policy gives an impulse in the recovery of regional differences within the European Community, especially from the signing of the Single European Act and the Maastricht Treaty, the European Union has set itself the task to reduce regional development disparities and also to prevent in a certain extent the backwardness of the less developed areas.

3. The Region: an important actor in catching up the disparities. The beginnings of the term "region" are found in ancient Rome, where, after the administrative changes of Octavian, Rome was divided administratively into several regiones [4]. They didn't have the forms of today's regions, but the Roman Empire is considered an example to be taken into account when bringing into question the process of European construction. After a period in which the term was not much used, in the nationalist period it returned to the forefront by becoming involved in the complex process of globalization.

Regarding the meanings of regions, they are the most diverse. Thus, Daniela Zanfirescu remembers that "a region may be an area of territory with a set of distinct and consistent internal characteristics, physical and human, giving it a significant and distinguishing unit from other neighboring area" [10].

Then, as the same authoress says, The Assembly of Regions (ARE) perceive the regions as political authorities that are situated at the next level after the state, possessing certain powers put in practice by a government that is accountable for the actions of their place before a democratically elected assembly [10].

Stanislaw Czamanski, quoted by Gabriel Pascariu, gives a definition to the term "region", saying that it comprises a part of a territory, delimited by economic, administrative, geographic, social, cultural, historical and ecological criteria, that gives it consistency and customize it in relation to the national economy [8]. The term region can be found in some cases used in the context of cooperation between countries. This use of it can be directly related to economic development programs across borders.

From the practical perspective, a region requires a certain administrative boundary, which can make developing regions coincide or not with territorial administrative units. In Romania, development regions have been designed in relation to the EU requirements (as statistical analysis units NUTS 2 type), opting for several counties conglomerates without legal personality or corresponding administrative-territorial division. A region is a unit of implementation of regional development policies.

The European Parliament defines a region as a territory which geographically consists of an own entity, in which there is a certain continuity or whose population have certain common elements and that seeks to promote cultural, economical and social progress.[8]

Therefore, giving a definition to the term, one can say that a region is a territory, no matter size, appearance, structure and specific functions that give a degree of harmonization and still different from other areas around it [4]. In conclusion, a region is an area in the national economic space sufficiently comprehensive in terms of structure to operate independently, although in reality it has important links with the rest of the economy.

4. Descriptive data analysis. In terms of GDP per capita, it was calculated for the EU, Romania and Hungary, but also for two regions from this analysis, in euro, the measurement unit being the same in order to make comparisons between areas or countries. Unemployment and inflation rate are expressed in percentage.

At the EU level, the data analysis are presented in Annex 1 of the present work, and their descriptive results can be seen in Table 1:

 Table 1. The results of the descriptive analysis of GDP per inhabitant in the European Union (2000-2009)

Statistical Indicators	Average	Median	Module		Assymetry coefficient	Minimum	Maximum
Variable							
GDP/inh_E U (eur/pers)	22.170,00	22.100,00	#N/A	-1,43	0,06	19.100,0	25.100,0

Source: EUROSTAT *author's calculations

The average GDP per capita in the EU in 2000-2009 is 22.170 euros. The minimum value of GDP per capita was 19.100 euros in 2000. The maximum value of GDP per capita was 25.100 euros for 2008. This data set does not have a normal distribution.

The inflation rate reached the maximun quota in the European Union in 2008 by 3,7%, while the minimum level was in 2009, with only 1%.

The average inflation rate was 2,26 over the course of these years and was calculated with the following formula:

$$\overline{r_i} = n_{\neg 1} \prod_{t=1}^{n} r_t \forall t = \overline{1, n}$$
(1)

The unemployment rate was registered in 2004, being of 9,1% and the lowest level was in 2008, only 7%. On average, there was, in a period of 10 years taken into observation, an unemployment rate of 10.63%, calculated by the following formula:

$$\overline{r_s} = n \sqrt{\prod_{t=1}^{n} r_t} \forall t = \overline{1, n}$$
(2)

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For Romania the data analysis is presented in Annex no. 2 of the present work, and the descriptive results can be seen in Table 2:

Table 2. The results of the descriptive analysis of GDP per inhabitant in Romania (2000-2009)

Statistical indicators	Average	Median	Module	Flattening coefficient		Minimum	Maximum
Variable				coefficient	coefficient		
GDP/inh_RO	6.968,00	6.500,00	6.500,00	0,10	0,92	5.000,00	10.400,00
(eur/pers)							

Source: EUROSTAT *author's calculations

The average value of GDP per capita was of 6968 euros, with a slight right asymmetry, the majority of the values being below 7.000 euros.

For Hungary the data analysis is presented in Annex no. 3 of the present work, and the descriptive results can be seen in Table 3:

Table 3. The results of the descriptive analysis of GDP per inhabitant in Hungary(2000-2009)

Statistical indicators	Average	Median	Module	Flattening coefficient	Assymetry coefficent	Minimum	Maximum
Variable							
GDP/inh_HU	13.720,00	13.950,00	#N/A	-0,61	-0,49	10.500,00	16.100,00
(eur/pers)							

Source: EUROSTAT *author's calculations

The average GDP per capita in Hungary in 2000-2009 was 13.720 euros. The minimum value of GDP per capita was 10.500 euros in 2000. The maximum value of GDP per capita was 16.100 euros in 2008. This data presents a series of left asymmetric distribution.

For the North-West Development Region (RO11), the data analysis is presented in Annex no. 4 of the present work, and the descriptive results can be seen in Table 4:

Table 4. The results of the descriptive analysis of GDP/ inhabitant in North-West RO11 Region (2000-2009)

Statistical indicators	Average	Median	Module	Flattening coefficient	5 5	Minimum	Maximum
Variable							
GDP/inh_reg	6.850,0	6.650,0	#N/A	-0,17	0,62	4.600,0	10.000
RO11 (eur/pers)							

Source: EUROSTAT *author's calculations

The average GDP per capita in the North-West Region (RO11) in 2000-2007 was 6.850 euros. The minimum value of GDP per capita was 4.600 euros in 2000. The

maximum value of GDP per capita was of 10.000 euros in 2007. This data presents a series of right asymmetric distribution. There is data missing for 2008 and 2009, so the analysis for the macroregion was performed for only the first 8 years.

In the Eszak-Alfoldi Region (HU32), the analyzed data are presented in Annex no. 5 of the present work, their descriptive results can be seen in Table 5:

Table 5. The results of the descriptive analysis of GDP/ inhabitant in North-West-RO11 Region (2000-2009)

Statistical indicators	Average	Median	Module	Flattening coefficient		Minimum	Maximum
Variable							
/ _ 0	8.587,50	8.850,00	9.000,00	0,46	-0,82	6.800,00	9.800,00
HU32 (eur/pers)							

Sursa: EUROSTAT

*author's calculations

The average GDP per capita in the Eszak-Alfoldi Region (HU32) in 2000-2007 was 8.587 euros. The minimum value of GDP per capita was 6.800 euros in 2000. The maximum value of GDP per capita was 9.800 euros in 2007. This series of data presents a left asymmetric distribution because for 2008 and 2009 we have missing data, the analysis for this macroregion was performed only for the first 8 years, but it will not be a hindrance in comparison with the RO11 macroregion, because the period for the analysis is similar.

5. The scenario method. This method consists of using multiple scenarios of economic and financial developments of a country or a region, depending on the values that will likely take different parameters [6]. The method consists of the following steps:

1) identifying the most relevant parameters for an analyzed country or a region;

2) selection of an appropriate set of scenarios;

3) association of subjective probabilities for each scenario;

4) sensitivity analysis that links the predicted alternative variants.

Applying this method involves a high degree of subjectivity, high costs and time and doesn't allow the comparison or ranking of countries or regions. However, it can cause unexpected possibilities in events development, can be useful for testing other methods and can help to understand the risks that may arise as the result of economic development of a country or a region in the long term.

Ist Scenario: best case scenario, when inflation and unemployment fluctuations are small, GDP per capita increases.

2nd Scenario: normal scenario, without dramatic changes, analyzed factors behave at a rate less good than in the first scenario.

3rd Scenario: worst case scenario, when political factors and decisions brought an increase in inflation and unemployment, GDP per capita decreases.

Next, it will be considered only the first and last scenario. In the first part it will be considered only the period between 2000 and 2007 and then 2000-2009 in order to observe the last two years of the negative influence that the global economic crisis had.

Let's say the used variable, namely GDP per capita, denoted as GDP per capita, expressed in euros/person, representing the absolute level of (y_t) variable, and the

analyzed period, expressed in years, denoted by $\overline{t = 1, n}$ where *n* will represent the total number of observations [1]. It will be calculated the rate of increase (or decrease for each particular case) base chain according to the formula below:

$$R_{\frac{t}{t-1}}^{\%} = \left(I_{\frac{t}{t-1}} - 1\right)^* 100, \tag{3}$$

where $I_{\frac{t}{t-1}}$ is the mobile base index calculated by the following formula:

$$I_{\frac{t}{t-1}} = \frac{y_t}{y_{t-1}} * 100, \tag{4}$$

therefore the increase (or decrease) rhythm can be written again as:

$$\boldsymbol{R}_{\frac{t}{t-1}}^{\%} = \left(I_{\frac{t}{t-1}} - 1\right) * 100 = \left(\frac{y_t}{y_{t-1}} - 1\right) * 100 = \left(\frac{y_t - y_{t-1}}{y_{t-1}}\right) * 100.$$
(5)

Then the average indicator, will be calculated namely the average rate of increase (or decrease) by the formula:

$$\overline{R} = (100) - 100,$$
 (6)

where:

$$\bar{I} = {}_{n-1} \sqrt{\prod I_{\frac{t}{t-1}}} = {}_{n-1} \sqrt{\frac{y_n}{y_1}}.$$
(7)

This average rate will be used in the normal (baseline) scenario.

Under the assumption that the macroeconomic trend will continue in the same direction as that of the analyzed period 2000-2009, we can predict what will be the EU, Romania or Hungary's growth level in 2013 and then in 2020.

To find the absolute value of GDP per capita in the years concerned, we will use the formula:

$$\boldsymbol{y}_m = \left(\overline{\boldsymbol{R}} + 1 \right)^{n-1} * \boldsymbol{y}_n, \tag{8}$$

where m is the year for which we make the foresight and n is the last year of the period taken in consideration.

Regarding the European Union, we have calculated these rates that are found in Table 6, and also GDP per capita, for both scenarios:

Table 6. The results of the scenarios with reduced and normal rates of GDP per capita for the EU

I ₂₀₀₀₋₂₀₀₇	1,03920	I _{2000-20.09}	1,02378
R2000-2007	0,03920	R _{200 0-2009}	0,02378
Year	GDP/inhab	Year	GDP/inhab
	with R ₂₀₀₀₋₂₀₀₇		with $R_{2000-2009}$
2013	31.488,05	2013	25.926,68
2020	41.214,72	2020	30.563,85

* author's calculations

Considering the data for 2000-2007, the growth rate of GDP per capita will be of 3.92% per year, therefore in 2013, for the EU, GDP per capita will be equal to 31.488,05 euros and in 2020 it will be equal to 41.214,72 euros. If values were recorded and analyzed for 2008-2009, that is during and after the financial crisis that occurred across the globe, then the growth rate of GDP per capita will be of only 2.378%, so in 2013 it will be of 25.926,68 euros and of 30,563.85 euros in 2020 (Figure 1).



Figure 1. The evolution of GDP/inhabitant in the EU. Scenarios with low and normal rates for the 2010-2020 period

Regarding Romania, the calculated rates are in Table 7 as well as GDP per capita for both scenarios:

I ₂₀₀₀₋₂₀₀₇	1,1103	I _{200 0-2009}	1,0082
R2000-2007	0,1103	R2000-2009	0,0082
Year	GDP/ in hab	Year	GDP/inhab
	with R _{200 0-2007}		with R ₂₀₀₀₋₂₀₀₉
2013	19.483,1447	2013	5.558,0323
2020	40.524,9409	2020	5.883,8818

 Table 7. The results of the scenarios with reduced and normal rates

 of GDP/inhabitant in Romania

*author's calculations

Taking into account the data series over 2000-2009, with the last two years in recession, it can be observed that the average rate is 0,82%, but if only 2000-2007 are considered, the average rate is 1.103%.

So, for an average growth rate calculated for 2000-2009, GDP per capita of a Romanian inhabitant will be 5.558,03 euros and 5.883,88 euros in 2020, but if the crisis would not have occurred in the country, GDP per capita in 2013 would be 19.483,14 euros and 40.524,94 in 2020. (Figure 2).

GDP per capita in Hungary will be 17.407,66 euros in 2013 and 22.853,9 euros in 2020. If we would have considered the data only from 2000-2007, when GDP per capita registered the average growth rate of 5.82%, in 2013 it would be 21.902,7 euros and in 2020, GDP per capita would reach 32.541,15 euros (Figure 3).





In Hungary's case, GDP/inhabitant will be analyzed as follows:

Table 8. The results of the scenarios with reduced and normal rates
of GDP/inhabitant in Hungary

I ₂₀₀₀₋₂₀₀₇	1,0582	I ₂₀₀₀ -2009	1,0397
R2000-20 07	0,0582	R ₂₀₀₀₋₂₀₀₉	0,0397
Year	GDP/inhab	Year	GDP/inhab
	with $R_{2000-2007}$		with R ₂₀₀₀₋₂₀₀₉
2013	21.902,7029	2013	17.407,6633
2020	32.541,1586	2020	22.853,9010

*author's calculations



Figure 3. **The evolution of GDP per capita in Hungary. Scenarios with reduced and normal rates for the 2010-2020 period**

Regarding another very important macroeconomic indicator (the inflation rate), it is necessary to make the following comments. The problem of how inflation varies from one region to another within a monetary union and when it has some implications for monetary policy was discussed only theoretically in the last decade.

However, there isn't a theoretical framework to consider that there are regional differences of inflation within a country. Instead of the notion of region, in the existing literature there are references to countries from the eurozone or to areas that are composed of several countries.

Based on the framework developed by Obstfeld and Rogoff (1995, 2000), Duarte and Wolman (2002) and Altissimo, Benigno and Palenzuela (2005), the models were built in an open economy, including both trade sectors and non-trade sectors, and were used to analyze the inflation differences in the euro area. They concluded that tax measures and differences in productivity are the consistent source of major fluctuations in regional inflation.

So far, fluctuations and heterogeneity in terms of regional inflation rates were not systematically analyzed in the European Union.

Beck, Hrubich and Marcellino investigated how and to what extent the differences in regional inflation rates affect that country's inflation [2] and also their influence on other euro areas, taking into account all the regions from Italy, Germany and Spain, during 1996-2004, and data on the price development of certain products as an analysis tool, then making a comparison with the states in the USA.

However, regional inflation calculated in the above presented model can't be calculated in our case, because some data sets are unavailable for a large period of time.

In Romania's North-West case (RO11) the following analysis on GDP per capita is presented:

 Table 9. The results of the scenarios with reduced and normal rates of GDP/inhabitant for the North-West Romania (RO11)

I _{2 000-2007}	1,1173
R2000-2007	0,1173
Year	GDP/ inhab
	with $R_{2000-2.007}$
2013	19.456,4999
2020	42.296,7389

*author's calculations



Figure 4. The evolution of GDP per capita in the North-West of Romania (RO11). Scenarios with reduced and normal rates for the 2010-2020 period The analysis of GDP/inhabitant in RO11 region can be performed only on 2000-2007 period due to the lack of the data for the next two years and therefore we will not be able to analyze the financial crisis effects that began in 2008. Growth rate of GDP per capita was of 11.73%, so in 2013 it would be registered as the sum of 19.456,49 affiliated with a resident from the North-West of Romania; for 2020, the sum would be 42.296,73 euros (Figure 4).

Regarding the HU32 region, we will consider the same variable and the same time period as for the North-West Region (RO11):

Table 10. The results of the scenarios with reduced and normal rates of GDP per
capita in the Hugarian Eszak-Alfoldy Region (HU32)

I _{2,000-2007}	1,0536
R ₂₀₀₀₋₂₀₀₇	0,0536
Year	GDP/ inhab
	with $R_{2000-2007}$
2013	13.405,0784
2020	19.319,0836

*author's calculations

Growth rate of GDP per capita in 2000-2007 was 5.36%, reaching the value of 13.405,07 euros in 2013 and of 19.319,08 in 2020 (Figure 5).



Figure 5. The evolution of GDP per capita in the Hungarian Eszak-Alfoldi Region (HU32). Scenarios with reduced and normal rates for the 2010-2020 period

6. Conclusions. Following the performed research it can be seen that in the current EU enlargement in the last several years the development gaps between countries and regions widened. Therefore, the development levels are different and for European Community regional policy has become a priority. Regions play an important role in the extensive process of catching the development differences (inequalities). From the practical study conducted for Romania, Hungary, the North-West Region and Eszak-Alfoldi Region it is shown that in terms of GDP per capita, the differences are quite large. As a consequence of the outlined scenarios method it is shown that if it would have been maintained a growth trend of this indicator in the 2000-2007 period when both Romania and Hungary and North-West

Region and Eszak-Alfoldy Region had more easily recovered the gap that separates them from the EU average. But due to the global economic crisis which began in Europe in the second half of 2008, the pace of recovery is much slower, Romania and Hungary being in need of many years to reach the average EU's GDP per capita.

Thus, regions are an important starting point for countries that face lower standards of living. First we will have to assist in harmonization of the development levels of smaller size territories and then their economic development will put the mark on the national situation. Exactly for this reason the European Union supports the projects that aim at boosting regional and local economies. As a result, from the calculations performed, we can conclude that in 2000-2009 the, European Union has a positive overall evolution of GDP per capita, the last two years of the interval putting somehow the mark on the growth of the indicator; the same situation is valid for Hungary and Romania. For the regions, growth rhythm was somewhat slower, and due to the lack of the data for 2008-2009 it couldn't be followed the influence of economic crisis on regional indicators.

In the coming years regions and regional policy through their instruments will have a major importance in the difficult process of catching-up the development differences within the European Union.

Annexes

Annex 1. European Union's GDP/inhabitant, 2000-2009

Year	GDP/inh EU (eur/pers)
2000	19.100,00
2001	19.800,00
2002	20.500,00
2003	20.700,00
2004	21.700,00
2005	22.500,00
2006	23.700,00
2007	25.000,00
2008	25.100,00
2009	23.600,00

Annex 2. Romania's GDP/inhabitant, 2000-2009

Year	GDP/inh RO (eur/pers)
2000	5.000,00
2001	5.500,00
2002	6.000,00
2003	6.500,00
2004	7.400,00
2005	7.900,00
2006	9.100,00
2007	10.400,00
2008	6.500,00
2009	5.380,00

GDP/inh HU (eur/pers)
10.500,00
11.600,00
12.600,00
13.000,00
13.700,00
14.200,00
15.000,00
15.600,00
16.100,00
14.900,00

Annex 3. Hungary's GDP/inhabitant, 2000-2009

Annex 4. GDP/inhabitant in the North-West Region (RO11), 2000-2008

Year	GDP/inh reg RO11 (eur/pers)
2000	4.600,00
2001	5.200,00
2002	5.800,00
2003	6.200,00
2004	7.100,00
2005	7.400,00
2006	8.500,00
2007	10.000,00
2008	-
2009	-

Annex 5. GDP/inhabitant in the Hungarian macroregion of Eszak-Alfoldi (HU32), 2000-2008

Year	GDP/inh regHU32 (eur/pers)
2000	6.800,00
2001	7.800,00
2002	8.200,00
2003	8.700,00
2004	9.000,00
2005	9.000,00
2006	9.400,00
2007	9.800,00
2008	-
2009	-

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