Factors Influencing the Rating of Regional Economic Performance

or Reasons why Prague has Become the 6th Best Economically Performing Region of the EU

Miloslav Chlad[1] | *Czech Statistical Office, Prague, Czech Republic*
Jaroslav Kahoun[2] | *Czech Statistical Office, Prague, Czech Republic*

Abstract

Regional Gross Domestic Product per capita is a key indicator for the distribution of financial resources within the Structural Funds in the EU. With regard to this fact, an increasing attention is also paid to this indicator in the Czech Republic (especially after its accession to the EU). Regional GDP per capita is often incorrectly presented as the indicator of economic well-being of the population residing in the region. Some factors with significant impact on the value of regional GDP per capita and/or the ranking of regions in this international comparison are neglected. These factors include, for example, commuting to work, NUTS classification and/ or units of measure (PPS versus euro) etc. The analysis shows the influence of these factors.

INTRODUCTION

On 24 February 2011, the Statistical Office of the European Commission (Eurostat) issued a press release on the generated gross domestic product (GDP) per capita for the NUTS 2[3] regions of the European Union member countries in 2008.

Although the limits of the indicator in terms of its content and interpretation have been described rather unambiguously in the conclusions of discussions held particularly on international conferences[4],

---

[1] Quarterly and Regional Accounts Section, e-mail: mchlad@czso.cz.

[2] Quarterly and Regional Accounts Section, e-mail: jaroslav.kahoun@czso.cz.

[3] The NUTS 2 regional level is considered and recommended as the basis for statistical comparisons, which are used when re-distributing of resources within Structural funds.

[4] E.g. OECD, Forum on the Role of Statistics in Democracies, Palermo, 10.–13.11.2004 a 2nd World Forum — Measuring and Fostering the Progress of Societies, Istanbul, 27.–30.6.2007; Beyond GDP: Measuring progress, true wealth and the well-being of nations, Brussels, 19.–20.11.2007.

GDP remains to be the most commonly used indicator to measures the economic performance of an economy. It has become and in the upcoming years will certainly continue to be the basis for political and economic decisions.

When being interpreted in the media, statistical data are very often presented incorrectly (most commonly, generation of GDP is mistaken for the well-being of the region), which may consciously or unconsciously shape public opinion as well as the decisions of competent authorities concerning further development of a region, etc. Given these facts, the data should be accompanied by methodical explanations, commentaries and other information.

1 EU REGIONAL POLITICS

Regional politics is a very broad term, in a broader context it can be characterized as politics concentrating on the development of regions, i.e. the growth of socioeconomic and environmental potential and competitiveness of regions leading to the increase of well-being and quality of life of its inhabitants (MMR, 2006). EU regional politics is aimed at balancing, i.e. it is based mainly on the solidarity principle — supporting regions which have not benefited from the integration process so far and also regions that have been negatively affected by this process. Pursuing this approach the EU provides support to underdeveloped regions, supports the conversion of troublesome industrial areas, implementation of research and scientific projects, modification of agriculture and redevelopment of towns and municipalities. In this way, EU allows all regions to contribute to the increase of the European Union's competitiveness. The aim of EU regional politics is to strengthen economic and social solidarity between the Communities, mainly through measures in the area of regional, structural, social and agricultural

Figure 1 Regional GDP per capita (in PPS), NUTS 2 regions, EU27 = 100 in 2008
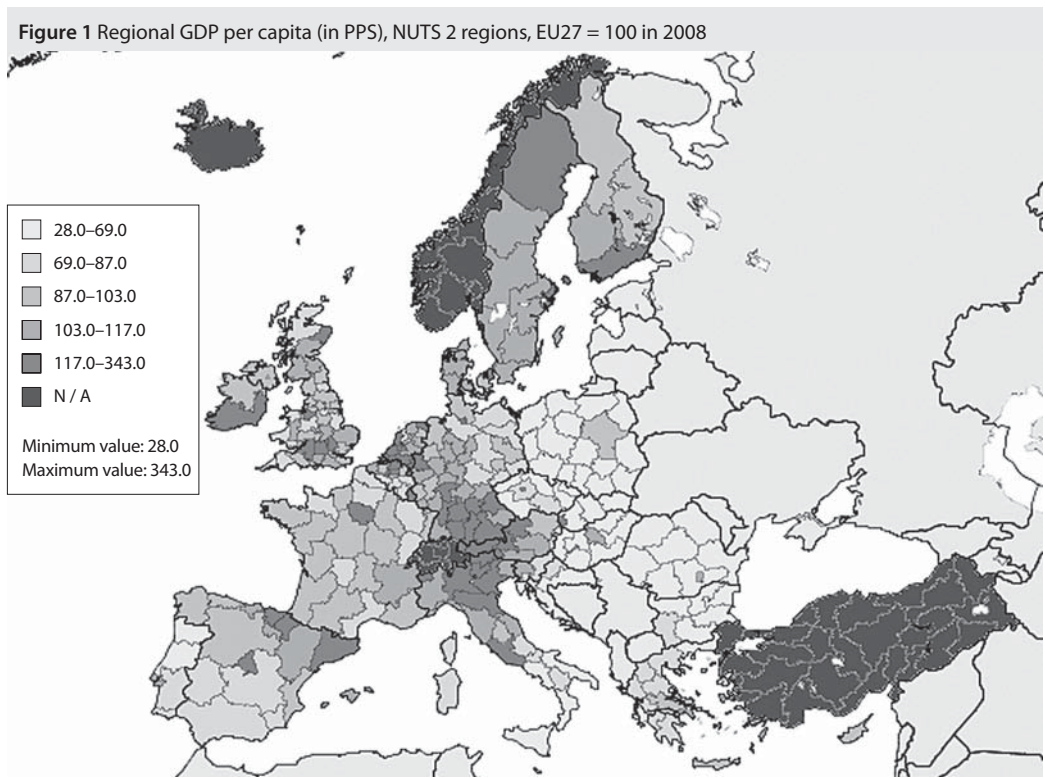
Source: Eurostat

politics and measures supporting employment. When providing aid to underdeveloped regions, it is necessary to define its objective and also select the eligible regions. These "problematic" regions are determined on several levels, however, it can be said that EU regional politics focuses mainly on NUTS 2 administrative regions.

Figure 1 shows the disparities of the proportion of GDP per capita in PPS for NUTS 2 regions in EU member and candidate countries in 2008. Figure 2 a 3 present the results for 2009 for Czech NUTS 2 and NUTS 3 regions compared to the EU27 average.

Figure 2 GDP per capita according to NUTS 2 regions, EU27 = 100, year 2009
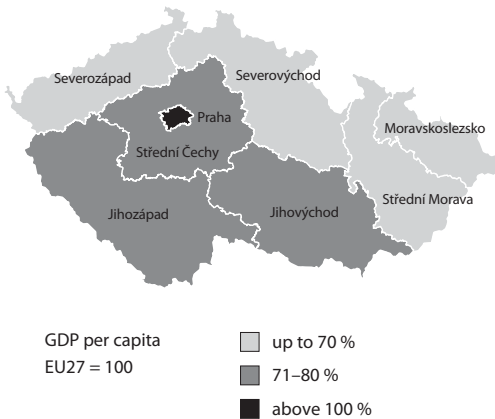
Figure 3 GDP per capita according to NUTS 3 regions, EU27 = 100, year 2009

Source: Czech Statistical Office, own figure

Source: Czech Statistical Office, own figure

2 EVALUATION OF NUTS 2 CAPITAL REGIONS

Eurostat's periodical press releases on regional GDP only compare the position of regions pertaining to the NUTS 2 classification level, which is crucial for the allocation of resources from EU structural funds. In most EU member countries, regional self-administration units correspond to this level.[5]

Different results would be obtained in a comparison of NUTS 3 regions, which correspond to the regional self-governing units of the Czech Republic (kraje — regions). In this group, Prague ranked the 47th in 2008, compared to the 6th position among the NUTS 2 regions (Bratislava region — 56th position compared to the 9th position at the NUTS 2 level). The reason for this significant difference is mainly the fact that "purely urban regions" of the EU countries are normally classified at the *NUTS 3 regional level*. Similarly as Prague, Brussels, Vienna, and Berlin are classified at both NUTS 2 and NUTS 3 regional level. These cities have the nature of "purely" urban regions. On the contrary, the capitals of Bratislava, Stockholm, Madrid, Athens and Valletta are also classified as NUTS 2 and NUTS 3 regions, however, unlike Prague; these regions also include their surroundings. A third specific group is represented by Nicosia and Luxembourg, which are not classified according to the NUTS classification due to their size and only the respective national data are applied to them.

---

[5] The quoted Eurostat press release on regional GDP in EU27 regions can be viewed at the Eurostat Statistical Office web site: <http://epp.eurostat.ec.europa.eu/cache/ITY_PUBLIC/1-24022011-AP/EN/1-24022011-AP-EN.PDF>, or at the Czech Statistical Office web site: <http://apl.czso.cz/pll/rocenka/rocenka.indexnu_reg>.

Table 1 Regional comparison of the area and number of inhabitants

Territory	NUTS2			NUTS3		
	$\bar{x}$	x_{min}	x_{max}	$\bar{x}$	x_{min}	x_{max}
EU27						
Area in km²	15 869	13	153 439	3 300	13	98 249
Number of inhabitants in thousands	1 819	27	11 360	378	10	5 218
Czech Republic						
Area in km²	9 658	485	17 068	5 519	485	10 808
Number of inhabitants in thousands	1 281	1 127	1 641	732	304	1 252
Capital city of Prague						
Area in km²	485	485	485	485	485	485
Number of inhabitants in thousands	1 176	1 176	1 176	1 176	1 176	1 176

Source: Eurostat

In general, we can say that the territorial units classified at NUTS 2 level are smaller than the EU27 average in their size and number of inhabitants, which is one of the causes of the extraordinary position of Prague among NUTS 2 regions in the EU, see Table 1.

Table 2 Comparison of EU27, Czech Republic and the Capital of Prague

Territory	in the years						
	1995	2000	2004	2005	2006	2007	2008
EU27							
GDP per capita in PPS	14 700	19 100	21 700	22 500	23 700	25 000	25 100
Czech Republic							
GDP per capita in PPS	10 700	13 000	16 300	17 100	18 200	19 900	20 200
Capital city of Prague							
GDP per capita in PPS	18 300	26 000	33 400	35 600	38 300	42 800	43 200

Source: Eurostat

Table 2 compares the average GDP per capita in PPS for EU27, the Czech Republic and the Capital city of Prague, showing the long-term development from 1995 to 2008. The data are taken from the EURO-STAT's database. If we wish to make a more homogeneous comparison of NUTS 2 regions, i.e. comparing for example only regions which include the capital of the given country, the ranking of regions and member countries would be as shown in Table 3.

Table 3 shows the ranking of regions and member countries according to the economic performance of these NUTS 2 regions. In the case of Estonia, Cyprus, Lithuania, Latvia, Luxembourg and Malta, the data are equal to the data obtained at the national level; in these cases, the NUTS 1 and NUTS 2 regions are identical territorial units. In the group of regions defined in this way, Prague is the fourth most successful region. In this case, however, it must be taken into account that individual regions according to the NUTS classification are very different in terms of their size and number of inhabitants.

Table 4 compares urban regions corresponding to the NUTS 3 classification level. Possible differences were described above. The comparison of economic performance of regions at the NUTS 2 and NUTS 3 level shows that Prague has been overtaken by the capitals of France, the Netherlands, Ireland and Denmark. Despite this fact, the 9th position among the 27 capitals of the EU demonstrates the economic potential of our capital. It can be said that this statistics proves Prague's extraordinary position among EU regions.

Table 3 Gross domestic product per capita in NUTS 2 regions comprising the capital city (in PPS)

NUTS 2 region / period	1995	2000	2004	2005	2006	2007	2008
Inner London	41 000	59 400	72 900	75 900	80 300	83 200	85 800
Luxembourg	32 700	46 700	54 800	57 300	64 000	68 600	70 000
Région de Bruxelles-Capitale / Brussels Hoofdstedelijk Gewest	38 400	48 800	52 100	53 300	53 900	55 200	54 100
Praha	**18 300**	**26 000**	**33 400**	**35 600**	**38 300**	**42 800**	**43 200**
Île de France	25 800	34 400	36 700	38 600	39 600	42 400	42 000
Stockholm	24 100	33 800	37 700	38 100	39 600	42 500	41 900
Bratislavský kraj	14 900	20 700	27 900	33 000	35 000	40 200	41 800
Wien	28 500	35 300	37 500	37 800	39 600	40 700	40 900
Noord-Holland	20 800	29 500	33 100	34 600	35 900	37 900	38 200
Hovedstaden	:	:	:	35 300	36 300	37 800	38 000
Southern and Eastern	16 500	27 600	34 000	35 800	38 200	40 900	37 000
Etelä-Suomi	18 100	26 200	29 000	29 500	31 100	33 600	33 600
Comunidad de Madrid	17 600	25 200	28 700	29 900	32 300	34 000	33 500
Lazio	20 800	25 800	28 000	28 500	29 200	30 600	30 800
Bucuresti-Ilfov	6 900	10 700	14 800	17 300	19 800	23 000	28 300
Attiki	13 300	18 200	24 000	24 200	26 200	27 300	28 200
Zahodna Slovenija	12 900	18 000	22 500	23 600	24 900	26 600	27 300
Lisboa	15 700	21 700	23 500	25 200	26 100	27 400	27 200
Közép-Magyarország	10 700	16 200	22 000	23 200	24 900	25 900	26 800
EU27	**14 700**	**19 100**	**21 700**	**22 500**	**23 700**	**25 000**	**25 100**
Berlin	19 200	20 800	21 500	22 600	23 600	24 700	24 700
Kypros/Kibris	13 000	16 900	19 600	20 400	21 400	23 100	24 400
Mazowieckie	8 000	13 900	16 700	18 300	19 600	21 800	22 200
Malta	12 700	15 900	16 700	17 600	18 600	19 300	19 500
Yugozapaden	5 700	7 100	11 100	12 200	14 200	16 600	18 200
Eesti	5 500	8 600	12 400	13 800	15 600	17 300	17 000
Lietuva	5 200	7 500	10 900	11 900	13 100	14 700	15 300
Latvija	4 600	7 000	9 900	10 900	12 200	13 900	14 100

Source: Eurostat

The Czech capital has a specific position within the country and there is no other similar centre in the Czech Republic. Many countries have several natural centers of this kind (such as Hamburg, Munich, Frankfurt upon Mohan in Germany, Amsterdam, Groningen and Utrecht in the Netherlands or London, Aberdeen and Oxford in the United Kingdom). Some of these centers show better economic performance than the capitals of the respective countries, such as Germany, Italy, and in some cases also Spain. The territory of the Prague region is determined by the city boundaries and does include the near surroundings that represent the immediate catchment area. The capital of Prague is the seat of most of state administration authorities and national and international companies' headquarters. This leads to an extraordinary concentration of gross added value created by the general government sector and a major part of the services sector, including the fields of financial, insurance and telecommunications services.

This fact is influenced by many other factors (i.e. a different structure of sectors, commuter inflows and outflows from and to other regions of the Czech Republic, demographic influences, professional and

Table 4 GDP per capita in NUTS 3 regions comprising the capital (in PPS, EU27 = 100)							
NUTS1, NUTS2, NUTS3	1995	2000	2004	2005	2006	2007	2008
European Union (27 countries)	**100**	**100**	**100**	**100**	**100**	**100**	**100**
Inner London	279	311	336	337	339	333	342
Paris	315	329	299	304	291	305	300
Luxembourg	222	245	253	255	270	274	279
Arr. de Bruxelles-Capitale / Arr. van Brussel-Hoofdstad	261	255	240	237	227	221	216
Groot-Amsterdam	182	202	206	208	204	203	203
Dublin	137	172	197	204	207	210	193
Byen København	:	:	:	:	177	178	179
Hlavní město Praha	**124**	**136**	**154**	**158**	**162**	**171**	**172**
Stockholms län	164	177	174	169	167	170	167
Bratislavský kraj	101	108	129	147	148	161	167
Miasto Warszawa	126	137	143	153	157	166	166
Wien	194	185	173	168	167	163	163
Uusimaa	141	165	157	155	155	160	159
Budapest	90	109	131	135	140	138	143
Madrid	120	132	132	133	136	136	133
Roma	155	150	144	140	135	132	133
Osrednjeslovenska	102	110	124	125	126	127	129
Grande Lisboa	122	131	129	133	130	130	128
Bucuresti	48	59	70	80	85	95	117
Attiki	90	95	111	108	111	109	112
Põhja-Eesti	:	66	88	93	103	106	103
Sofia (stolitsa)	48	47	66	72	81	92	100
Berlin	131	109	99	100	100	99	98
Kypros/Kibris	88	88	90	91	90	92	97
Riga	:	63	83	88	89	96	96
Vilniaus apskritis	43	54	74	79	85	92	94
Malta	:	85	78	80	80	79	79

Source: Eurostat

educational structure of the population and workforce, the fact that many crucial companies have their headquarters there, etc.). Some of these influences will be analyzed further in this article.

2.1   EVALUATION OF NUTS 2 REGIONS OF EU MEMBER COUNTRIES

The available data relating to capital regions of EU member countries clearly show that in 2008 most of these regions (19 out of 27 EU capital cities) achieved a higher GDP per capita in PPS than was the EU27 average. Table 3 of the Annex shows the existing disparities between these regions.

If we extend the analysis of NUTS 2 regions to the entire group of 271 EU regions, we obtain the following characteristics. In 2008, GDP per capita in PPS in NUTS 2 regions of EU27 ranged from 28 % of the EU27 average registered in the Bulgarian region Severozapaden to 343 % registered in Inner London in Great Britain. The factor between these extreme values is 12.1:1. In the preceding year, this ratio for the same regions was 13.1:1. Despite this strong disproportion, we can conclude that the convergence objectives are being fulfilled. The dispersion (Eurostat, 2010a) of GDP per capita in PPS for NUTS 2 regions

decreased from 32.7 % to 28.3 % for the EU27 average between years 2000 and 2007. There was practically no change in 2008. If we focused on the dispersion for each MS of the EU we cannot disregard that in most of the "old" EU15 member states the decreasing dispersion confirms the increasing convergence of economic development of NUTS 2 regions. On the contrary, the trend in the "new" member countries is the opposite. For example, in the Czech Republic, the dispersion between years 2000 and 2007 in NUTS 2 regions increased from 22.7 % onto 26.5 % (Eurostat, 2010b), which result is strongly influenced by a faster growth of GDP in Prague. The strongest increase of dispersion was recorded in Bulgaria (from 17.6 % to 35.4 %). In terms of convergence, the decrease of share of inhabitants by 4.1 percent points in the group of regions with more than 125 % of the average GDP per capita on the EU27 level is also positive. The share of inhabitants decreased also in underdeveloped regions (from 27.2 % to 24.5 %), whose GDP per capita does not exceed 75 % of the EU average (Eurostat, 2010b).

3   NON-EXISTENCE OF REGIONALLY DISTINGUISHED PURCHASING POWER PARITY

The comparison between regions is limited by the fact that although the PPS excludes the influence of the differences between price levels in individual countries, it does not, *however, take into consideration the difference between price levels in the regions* within individual countries. These differences between price levels in capitals and other regions are significant, mainly due to the price of rentals and some other kinds of services. This leads to a situation where capitals usually produce a nominal gross added value which is higher than the value that may actually be used at the given place (there is a transfer of income from the region of production to the place of actual use), and therefore, when compared with other regions, the real income of the inhabitants is lower than it may seem. Higher prices of selected items are compensated by higher income.

The Czech Republic is a typical example of this situation, as its capital (due to many specific particularities compared to other regions of the Czech Republic) is a separate NUTS 2 region delimited by the city boundaries. If the city's wider surroundings were included, the inter-regional price difference would not be so significant (due to a dilution). At the same time, Prague is also defined as a NUTS 3 and LAU 2 (Local Administrative Unit) region at the level of municipalities, which is in accordance with Regulation EC 1059/2003.

An important factor that can also significantly affect the ranking of regions in terms of their economic performance would be the use of another unit, i.e. expressing the GDP per capita in Euros instead of PPS. The Eurostat report presents this indicator not only in PPS, but also in Euros. Possible changes can be determined by comparing the development of the exchange rate of the Czech Crown to Euro or as the respective coefficient to PPS. By comparing the exchange rates and the PPS coefficient we obtain another indicator (ERDI — Exchange Rate Deviation Index), which reflects the relationship between the purchasing power and the exchange rate, i.e. the level of underestimation or overestimation of the national currency exchange rate.

Table 5 Development of the exchange rate and purchasing power standard in relation to CZK

	1995	2000	2004	2005	2006	2007	2008	2009	2010
Exchange rate CZK / EUR	34.6960	35.5990	31.8910	29.7820	28.3420	27.7660	24.9460	26.4350	25.2840
Coefficient CZK / PPS	13.2005	16.3432	16.9600	17.0961	17.2313	17.1703	17.5384	17.9382	17.4258
ERDI	2.62839	2.17822	1.88037	1.74204	1.64480	1.61710	1.42237	1.47367	1.45095

Source: Eurostat (exchange rate and PPS), ERDI – own calculation

Figure 4 shows the comparison of ERDI of EU27 member states for 2010. Although the value of this indicator for the Czech Republic has decreased, it is still obvious that the exchange rate of the Czech

Figure 4 ERDI in 2010 for EU27 countries
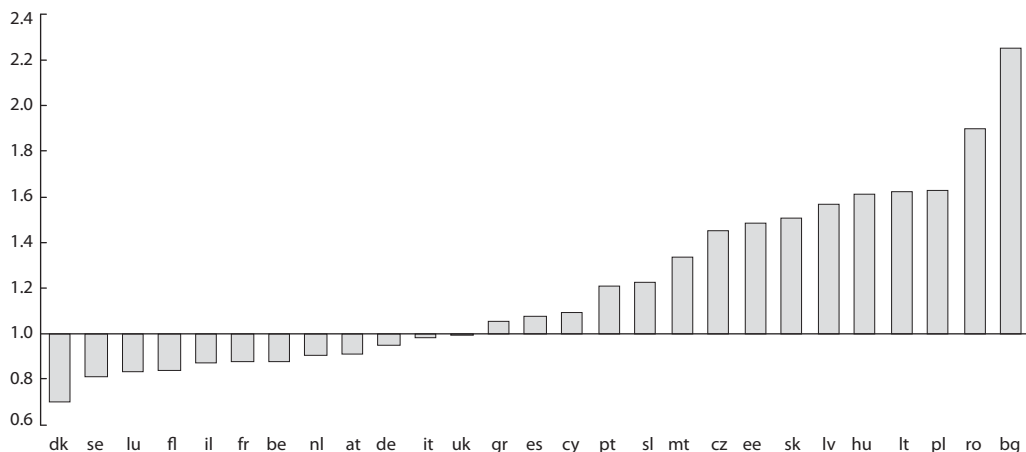
Note: Share of the exchange rate and purchasing power standard.
Source: Own calculation

Crown remains to be significantly overestimated in comparison to its purchasing power as a consequence of the measures adopted by the federal government consisting in three devaluations in the 1990s. The development of the Czech Crown's exchange rate demonstrates that there remains a significant space for consolidation and approximation to its actual purchasing power.

4 INTER-REGIONAL COMMUTER INFLOWS AND OUTFLOWS

The fact that regional disparities may be significantly affected by commuter inflows and outflows is mentioned by Eurostat (2011a) in its press release reporting the data on regional GDP for NUTS 2 regions: *"It should be noted, however, that in some regions the GDP per capita figures can be significantly influenced by commuter flows. Net commuter inflows in these regions push up production to a level that could not be achieved by the resident active population on its own. The result is that GDP per capita appears to be overestimated in these regions and underestimated in regions with commuter outflows."* The data obtained in a selective workforce survey showed that in Prague in 2008, inflowing commuters accounted for 18.5 % of all persons employed in the capital.

Exact data on commuter inflows and outflows of economically active inhabitants to work and pupils and students to schools are only gathered within the census of population, houses and flats. Their values are influenced by social, age and professional structure of the population, the rate of economic activity, type and distribution of job opportunities and the nature of the residential structure and infrastructure in the region. In the period between censuses, these data are not updated at the nationwide level. The informative value of these data decreases with the time lapsed from the end of the census and with the increasing dynamics of the development of regional economies. Given these facts, we use the output of the selective survey of workforce, which gathers data on the residents' place of work. Based on these data it was ascertained that there is a significant flow of workforce between the Středočeský kraj (region of Central Bohemia) and the capital of Prague (the balance between commuter inflows and outflows in the Central Bohemia is around 12 % in favour of outflows, while in Prague, on the contrary, this balance ranged from 15 to 19 % in favour of inflows). Certain decrease in commuter outflow is indicated by the data collected in regions with lagging economies, such as the Karlovarský, Ústecký, Olomoucký, Zlínský and Moravskoslezský regions.

5 EMPLOYMENT RATE OF FOREIGNERS

This factor is related to the previous point and its significance has been increasing mainly in last years, when the Czech Republic has seen a growth of the proportion of foreigners in its population. The increasing unbalance between regions in terms of non-resident foreigners must be also taken into account. Since 2000, the share of foreigners in the population of the Czech Republic has more than doubled, while this increase was significantly higher in Prague than in the rest of the country. The influence of foreigners and their economic activity may be one of the decisive factors for faster development of the GDP in the capital compared to the disposable household income, in which the share of Prague on the overall result of the Czech Republic has been rather stagnating. This influence was stronger

Table 6 Number of foreigners in NUTS 3 regions

	1996	2000	2005	2007	2008	2009	2010
Czech Republic	**199 151**	**200 951**	**278 312**	**392 315**	**437 565**	**433 305**	**425 301**
Hl. m. Praha	61 203	57 583	89 997	129 002	141 841	148 398	148 815
Středočeský kraj	22 413	26 993	35 304	50 273	60 123	58 544	57 815
Jihočeský kraj	9 175	8 088	10 595	15 171	16 560	27 580	15 051
Plzeňský kraj	8 670	8 913	13 206	20 986	27 636	15 429	25 198
Karlovarský kraj	7 670	10 439	14 437	19 419	20 321	19 647	19 621
Ústecký kraj	13 985	14 427	22 130	33 053	35 451	32 086	30 705
Liberecký kraj	8 446	8 794	11 675	15 288	17 320	17 359	16 831
Královéhradecký kraj	8 418	8 117	11 294	15 512	16 517	15 326	14 914
Pardubický kraj	5 335	5 648	6 418	10 562	12 588	11 981	12 077
Vysočina kraj	3 739	4 198	6 160	8 729	9 771	8 589	8 029
Jihomoravský kraj	14 723	16 813	24 234	32 606	35 619	37 050	36 107
Olomoucký kraj	6 037	6 197	7 497	10 322	9 909	9 455	9 481
Zlínský kraj	6 558	7 057	5 926	7 639	8 413	8 147	8 048
Moravskoslezský kraj	22 779	17 684	19 337	22 962	25 496	23 714	22 609

Source: Czech Statistical Office

Figure 5 Share of foreigners in regions in 2010 (in %)
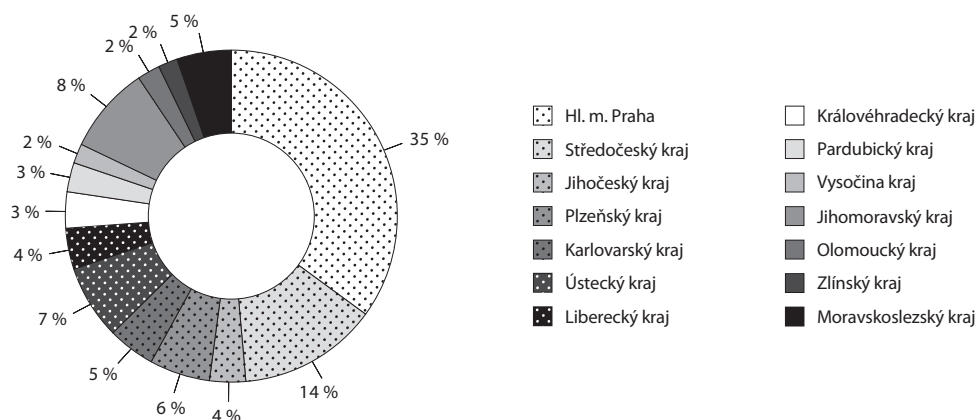
Source: Own construction

at the time of economic recession in 2009, when the proportion of foreigners in Prague's population further grew (from 11.6 % to 11.9 %).

The numbers of foreigners living in individual regions of the Czech Republic are shown in Table 6 and Figure 5, which illustratet the regional structure of foreigners according to regions. The data again confirm the extraordinary position of the capital of Prague, with 35 % of the total number of 425 thousand foreigners, whose share in the total number of employed persons cannot be neglected. The 14 % of the total number of foreigners living in the region of Central Bohemia region is also worth mentioning. In the remaining regions, the share of foreigners ranged from 2 to 7 %.

Table 7 characterizes the regional differences in the share of foreigners in the overall employment rates. The extraordinary position of the capital of Prague is demonstrated again, with a 9.2 % share of foreigners in the region's overall employment rate in 2009. Other regions with higher foreigner employment rates are Středočeský, Plzeňský, Jihomoravský and Liberecký regions. On the contrary, the lowest long-term employment rates of foreigners have been reported by the Olomoucký and Ústecký regions.

Table 7 Share of foreigners in the overall employment rates (in %)

	1995	2000	2004	2005	2006	2007	2008	2009
Czech Republic	**3.6**	**3.9**	**4.5**	**4.7**	**5.4**	**4.6**	**5.4**	**4.4**
Hl. m. Praha	7.4	7.5	9.5	9.1	10.0	8.7	10.4	9.2
Středočeský kraj	5.0	5.3	5.9	6.4	7.2	6.6	8.0	6.8
Jihočeský kraj	2.2	2.3	3.1	3.2	3.6	3.0	3.2	2.2
Plzeňský kraj	2.4	2.8	4.2	5.5	7.0	7.0	7.5	4.7
Karlovarský kraj	4.1	4.8	5.8	6.3	6.7	2.7	3.2	2.6
Ústecký kraj	2.1	2.8	2.7	3.0	3.5	1.8	2.1	1.7
Liberecký kraj	3.6	3.9	3.7	4.7	5.7	4.5	4.7	4.0
Královéhradecký kraj	2.6	2.6	2.9	3.5	4.1	4.0	4.5	3.4
Pardubický kraj	2.1	2.7	2.2	3.0	4.1	5.9	6.6	3.8
Vysočina kraj	2.8	2.7	2.5	2.6	3.2	2.9	3.0	1.6
Jihomoravský kraj	3.0	3.3	3.4	3.6	4.3	3.9	5.2	4.7
Olomoucký kraj	1.6	2.0	1.7	1.9	2.0	1.5	1.6	1.2
Zlínský kraj	3.1	3.0	2.4	2.5	2.5	1.9	2.2	1.9
Moravskoslezský kraj	3.0	3.2	3.4	3.0	3.3	2.2	2.5	2.2

Source: Own calculation

6 PUBLIC RESOURCES REDISTRIBUTION RATE AND NET DISPOSABLE HOUSEHOLD INCOME

Unlike the production of gross domestic product and some factors influencing the amount of GDP, this chapter focuses more on the use of GDP, which is partially reflected in the net disposable household income indicator (NDHI) (Ježdík and Chlad, 2009). The limitations of GDP and derived indicators have been often discussed recently; special attention being paid to GDP per capita, whose informative value is limited by the above-mentioned factors, such as commuter inflow and outflow, absence of regional consumer price indexes, inter-regional transfers, etc. To evaluate the welfare of the inhabitants of regions, we selected the above-described indicator NDHI per capita with permanent residence in the given region. It is basically the balance between income and expenditure recorded on the account of secondary income distribution. With a certain degree of simplification, it can be said that this indicator characterizes the level of the wealth of households (expressed by value of their income, which does not indicate the value of property) residing in the given region. For the purpose of possible in-

ternational comparison, the net disposable household income is expressed in PPCS units (Purchasing Power Consumption Standards) based on the purchasing power derived from the final consumption of households. As some member countries do not provide the values of this indicator, the average value for the European Union is not estimated either and therefore only limited comparisons can be made for NUTS 2 regions of the countries that do record this indicator.

Table 8 Net disposable household income per capita (in PPCS)

NUTS 2 regions comprising a capital	1995	2000	2004	2005	2006	2007
London	13 875	21 114	22 602	23 834	25 332	24 733
Paris	12 914	16 558	19 020	19 545	19 704	21 072
Vienna	14 298	17 056	17 700	18 280	18 977	19 485
Athens	9 536	11 820	15 277	15 673	16 502	18 251
Madrid	9 902	14 255	15 742	16 542	17 315	17 638
Rome	12 568	14 586	16 161	16 515	16 515	17 115
Stockholm	10 657	13 334	15 145	15 517	16 182	17 071
Amsterdam	10 122	12 986	14 361	14 832	15 237	16 488
Dublin	8 329	11 711	14 308	15 146	15 600	16 293
Brussels	11 991	14 263	14 258	14 378	14 983	15 438
Berlin	12 540	13 421	14 032	14 447	14 830	15 049
Lisbon	8 641	11 674	12 852	13 733	14 111	14 374
Helsinki	7 931	10 463	12 593	12 802	13 238	14 202
Bratislava	5 050	8 005	9 983	11 867	12 195	13 749
Copenhagen	:	11 445	:	12 549	13 265	13 518
Prague	6 738	8 827	10 578	11 225	12 247	13 181
Ljubljana	:	9 712	11 415	12 016	12 498	13 065
Budapest	:	7 650	10 328	11 079	10 868	10 506
Warsaw	5 020	7 450	8 547	8 722	9 166	10 248
Bucharest	:	4 120	5 699	6 891	7 708	9 296
Vilnius	2 693	4 350	6 122	6 839	7 549	8 092
Tallinn	2 666	4 053	5 447	6 101	6 938	7 857
Riga	2 195	3 658	5 265	5 801	6 776	7 736
Sofia	:	2 695	4 229	4 250	4 495	5 541
Nicosia	:	:	:	:	:	:
Luxembourg	:	:	:	:	:	:
Valletta	:	:	:	:	:	:

Source: Eurostat

Another limitation of this indicator for international comparison consists in the fact that there are significant differences between member countries in the redistribution of resources between sectors. The regional disparities measured in this way are strongly influenced by social and other transfers carried out by the sector of governmental institutions. The effort to eliminate the differences between social levels influences also the elimination of regional disparities in the given country and vice versa (this is illustrated by the relatively neutral position of Stockholm and Vienna compared to the national aver-

age, and, on the contrary, by the strengthening position of Prague or the Bratislava region compared to the nationwide average values of GDP per capita). Unfortunately, as this indicator is not generally used as a criterion for the redistribution of resources from the European funds, member countries are not forced to remove these disparities. Given these limitations for international comparisons, the possibilities of applying this indicator are reduced. For the sake of maximum homogeneity of data, this indicator should be mainly used to compare the regions within the given country and asses their development in time.

Table 8 reveals certain disparity between the ranking of NUTS 2 regions comprising the capital of the given country depending on whether we evaluate the production of regional GDP or the net disposable household income. As it is explained above, this ranking is strongly influenced by the redistribution processes and the differences between these processes in individual EU27 countries. While Prague ranked the 4th in terms of regional GDP, in terms of net disposable household income it ranked the 16th or 17th, as the data for Luxembourg are not available.

The discrepancy between the production and use of resources is obvious also when assessing the regional values for the regions of the Czech Republic in relation to the national average. This relationship is indicated in Figure 6. The significant decrease of net disposable household income compared to the GDP in Prague is influenced mainly by commuter inflows and outflows (Kahoun, 2010).

Table 9 Comparison of regional GDP and NDHI per capita with the national average

Territory	Regional GDP per capita, CR = 100				NDHI per capita, CR = 100			
	1995	2000	2005	2009	1995	2000	2005	2009
Czech Republic	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
Hl. m. Praha	170.6	199.6	208.9	220.4	123.6	133.2	135.1	129.1
Středočeský kraj	86.3	94.1	92.1	91.8	102.7	104.6	106.3	104.2
Jihočeský kraj	93.7	91.9	90.1	86.2	98.4	97.4	96.7	99.0
Plzeňský kraj	96.6	93.8	94.4	86.8	101.0	100.0	100.3	99.9
Karlovarský kraj	93.5	83.7	75.3	67.6	96.2	97.6	89.7	90.2
Ústecký kraj	94.8	81.5	81.2	79.8	95.8	91.4	88.1	90.8
Liberecký kraj	90.7	89.5	83.8	69.5	94.9	95.9	93.9	93.1
Královéhradecký kraj	93.3	94.6	87.6	84.3	100.5	100.4	97.4	96.2
Pardubický kraj	89.8	85.4	82.4	82.9	93.5	92.0	95.0	95.4
Vysočina kraj	85.5	83.8	84.8	78.3	91.4	91.1	93.8	94.4
Jihomoravský kraj	95.8	92.4	91.0	95.5	97.5	96.6	97.6	98.0
Olomoucký kraj	83.3	79.6	75.8	75.4	91.9	91.4	90.6	92.4
Zlínský kraj	89.6	83.6	80.7	83.0	94.5	93.8	93.4	93.6
Moravskoslezský kraj	87.6	78.3	84.7	81.5	95.8	90.9	91.0	93.2

Source: Czech Statistical Office

The standard deviation for the production of regional GDP per capita in comparison with the national average in 2009 was four times higher than for NDHI per capita for NUTS 3 regions in comparison with the national average. When excluding Prague, the variability rate shall decrease to one half. These characteristics again confirm the exclusive position of the capital of Prague in comparison with other regions of the Czech Republic.

The indicated trend — exceeding of the average national NDHI per capita by NUTS 2 regions comprising a capital city is obvious in the majority of member countries, as illustrated in the Table 10. The only exceptions in 2007 were Brussels and Berlin.

Table 10 Net disposable household income per capita (in PPCS)

Territory / period	1995	2000	2004	2005	2006	2007
Belgium	11 890	14 300	14 687	15 072	15 670	16 181
Brussels	11 991	14 263	14 258	14 378	14 983	15 438
Bulgaria	:	2 296	3 500	3 499	3 740	4 228
Yugozapaden	:	2 695	4 229	4 250	4 495	5 541
Czech Republic	5 450	6 630	7 744	8 309	8 933	9 765
Prague	6 738	8 827	10 578	11 225	12 247	13 181
Denmark	9 407	10 789	11 746	12 037	12 757	13 096
Copenhagen	:	11 445	:	12 549	13 265	13 518
Germany	12 800	15 102	16 615	17 192	17 646	18 060
Berlin	12 540	13 421	14 032	14 447	14 830	15 049
Estonia	2 666	4 053	5 447	6 101	6 938	7 857
Eesti	2 666	4 053	5 447	6 101	6 938	7 857
Ireland	8 016	11 340	13 767	14 410	14 959	15 708
Southern and Eastern	8 329	11 711	14 308	15 146	15 600	16 293
Greece	8 371	10 184	12 128	12 767	13 401	14 817
Attiki	9 536	11 820	15 277	15 673	16 502	18 251
Spain	8 318	11 467	12 981	13 718	14 349	14 793
Comunidad de Madrid	9 902	14 255	15 742	16 542	17 315	17 638
France	10 464	13 397	15 278	15 924	16 496	17 326
Île de France	12 914	16 558	19 020	19 545	19 704	21 072
Italy	11 725	13 835	14 676	15 001	15 494	16 055
Lazio	12 568	14 586	16 161	16 515	16 515	17 115
Cyprus	:	:	:	:	:	:
Kypros/Kibris	:	:	:	:	:	:
Latvia	2 195	3 658	5 265	5 801	6 776	7 736
Latvija	2 195	3 658	5 265	5 801	6 776	7 736
Lithuania	2 693	4 350	6 122	6 839	7 549	8 092
Lietuva	2 693	4 350	6 122	6 839	7 549	8 092
Luxembourg	:	:	:	:	:	:
Luxembourg	:	:	:	:	:	:
Hungary	:	5 721	7 337	7 739	8 081	8 052
Közép-Magyarország	:	7 650	10 328	11 079	10 868	10 506
Malta	:	:	:	:	:	:
Malta	:	:	:	:	:	:
Netherlands	9 525	12 281	13 582	13 988	14 423	15 569
Noord-Holland	10 122	12 986	14 361	14 832	15 237	16 488
Austria	12 489	15 291	16 565	17 442	18 345	19 022
Wien	14 298	17 056	17 700	18 280	18 977	19 485
Poland	4 071	5 791	6 703	6 844	7 247	8 095
Mazowieckie	5 020	7 450	8 547	8 722	9 166	10 248
Portugal	7 105	9 188	10 059	10 655	11 060	11 215
Lisboa	8 641	11 674	12 852	13 733	14 111	14 374
Romania	:	2 859	4 023	4 067	4 491	5 200
Bucuresti-Ilfov	:	4 120	5 699	6 891	7 708	9 296

Source: Eurostat

Table 10 Net disposable household income per capita (in PPCS) — continuation						
Territory / period	1995	2000	2004	2005	2006	2007
Slovenia	:	8 952	10 602	11 215	11 701	12 289
Zahodna Slovenija	:	9 712	11 415	12 016	12 498	13 065
Slovakia	3 786	5 449	6 462	7 259	7 832	8 905
Bratislavský kraj	5 050	8 005	9 983	11 867	12 195	13 749
Finland	7 620	9 803	11 781	11 964	12 480	13 454
Etelä-Suomi	7 931	10 463	12 593	12 802	13 238	14 202
Sweden	9 226	11 389	13 150	13 450	14 060	14 983
Stockholm	10 657	13 334	15 145	15 517	16 182	17 071
United Kingdom	10 889	14 561	16 731	17 219	17 726	17 440
Inner London	13 875	21 114	22 602	23 834	25 332	24 733

Source: Eurostat

Figure 6 Comparison of the GDP and NDHI per capita in 2009, CR = 100
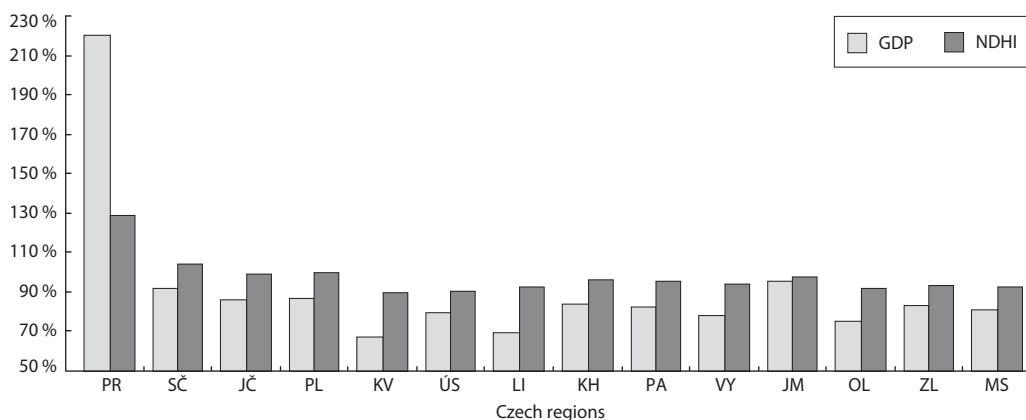
Source: Own construction

CONCLUSION

The aim of this article was to respond to the misleading interpretation of statistical data in certain media and to demonstrate the complexity of their objective evaluation and drawing of unambiguous conclusions. Certain rules and principles must be observed to secure correct comprehension of data presented. One of these principles is to study the methodology of used indicators and the classification defining the corresponding structures before the interpretation.

Another issue covered in this article is the difference between the "generated" and "used" GDP, i.e. between the production of GDP and the net disposable household income, which is similar to the analysis of regional differences according to "wealth" in terms of the amount of income of the household sector. It is obvious from the analysis that GDP or GDP per capita reflects the rate of the overall economic activity in the given region. GDP is usually used to compare the rate of economic development of regions and not the amount of income or wealth of the residents in the region (Eurostat, 2011b).

Last but not least, the article demonstrates the extraordinary position of Prague within the Czech Republic as well as among the EU regions. On the other hand, to achieve an objective evaluation, it is necessary, taking into account the nature of the given territory, to create homogeneous groups and fil-

ter some internal discrepancies, particularly administrative, although they comply with the applicable supranational legislation.

Compared to the NUTS 2 regions, the capital city of Prague has the character of a purely urban region, without the adjacent surroundings. Similar is the case of Brussels, Vienna and Berlin, while the other NUTS 2 regions comprising a capital city, such as Paris, Madrid and Budapest, include the city surroundings. This fact leads to lower commuter inflows in the capital city, and therefore the GDP per capita in such regions is lower than that of Prague. In addition, the inclusion of the wider surroundings in the capital region may also affect the structure of the produced gross added value. A significant change is observed if we compare NUTS 3 regions, i.e. territorial units with higher homogeneity — regions having urban character. In these comparisons, Prague falls from the 6th position among the NUTS 2 regions to the 47th position, or from the 4th to the 9th position if we only compare regions comprising the capital of the given member country. Last but not least, significant changes may take place if we change the measuring units, i.e. if we express the GDP per capita in Euros instead of purchasing power standard units. In this case, the ranking will be influenced by the level of underestimation or overestimation of the national currencies exchange rate to Euro compared to the standard of the national currency.

ANNEX | Methodical Definition of Selected Terms and Indicators

Classification of territorial units for statistical purposes — NUTS

Geographic division of a territory is the basis for all regional analyses of phenomena and processes. It is used to secure a single unified structure of territorial units in the EU countries. The "Classification of Territorial Units" has been proposed and gradually elaborated for statistical purposes. Individual levels of this territorial classification represent certain size groups of territorial units. Their size is usually given by the number of inhabitants and square area. Until 2003, the classification of territorial units within the NUTS was a result of a bilateral "gentlemen's" agreement between member or candidate countries and EUROSTAT. The regulation distinguishes between two basic types of territorial units — *administrative*[6] and other, *non-administrative units*. When defining individual levels, the administrative division of a state is preferred, applying the complementarities principle, meaning that higher levels consist of a certain number of lower-level units and a group of all regions of one level covers the entire territory of the state. The basic structure of the NUTS should be the state's territory divided without remains. Individual regional levels correspond to the respective degrees of territorial administrative division for regional levels NUTS 1 to NUTS 3:

- *NUTS 1* — territorial units corresponding to major regions, smaller states, macro regions, federal states of countries like Germany or autonomous regions;
- *NUTS 2* — generally the medium administration level, which also serves as the basis for application of EU regional policies;
- *NUTS 3* — usually the lowest level of territorial administration, usually corresponding to the division of the given state, e.g. groups of districts or regions of a state (Chlad, 2007).

In 2003, the principles of a unified methodology for establishing the European NUTS classification were issued in the form of *Regulation (EC) No 1059/2003 of the European Parliament and of the Council*. The European NUTS classification is binding upon all EU member countries. Based on the said regulation 1059/2003, EUROSTAT generated the European NUTS classification. Its relatively fixed criteria should not exclude the existence of other classifications[7] and possibly of another more detailed division of territorial units.

The NUTS classification was created mainly to satisfy the needs of statistical data users, particularly in order to harmonize the data available in the European Union and ensure their comparability. This norm affects the collection, processing, transmission, publishing and presentation of statistical data of individual member countries and Communities. Therefore it became the prerequisite for spatial comparison of regional statistics, which are the basic feature of the European statistical system and serve for a wide range of purposes. One territorial unit can be classified at several NUTS levels. However, two different territorial units cannot be classified under the same name at one NUTS level. Member countries may have more NUTS levels at their own discretion.

---

[6] European Commission — Methods and Nomenclatures — Regions Nomenclature of territorial units for statistics NUTS — 2003.

[7] For example LAU — Local Administrative Unit, which uses two levels, of which LAU 2 is particularly important as it represents the level of municipalities.

For the sake of functionality of this classification, it is necessary to define regions based on relatively objective criteria, in order to ensure impartiality when processing and applying regional statistics. The current administrative units of member states are the first criterion for the definition of territorial units. In this context, "administrative units" are geographical areas with an administrative body which has the competence to adopt administrative or political decisions for this area within the legal and institutional framework of the given member country.

The NUTS classification is limited to the economic territories[8] of member states, which also includes the so-called extra-regio territories consisting of aerial space, territorial waters and continental shelves, territorial enclaves, particularly embassies, consulates and military bases, and reservoirs of oil and natural gas in international waters used by resident units.

Changes to the NUTS classification are not made more often than every three years. When changing the NUTS classification, the given member state presents to the Commission the time series of the new regional division replacing the previously submitted data. The list of time series and their duration is determined using a regulatory procedure, considering whether they may be submitted at all. These time series must be submitted within two years following the changes made to the NUTS classification.

Gross domestic product (GDP) is the monetary representation of the total value of goods and services newly created in the given period in a certain territory; it is used to assess the performance of an economy. It can be calculated using the following three methods:

- production method,
- expenditure method,
- and income method.

Gross domestic product per capita[9]
Economic performance of a territorial unit is usually characterized by the formation of gross domestic product per capita. This indicator represents the relationship between the total volume of formed GDP and the number of all inhabitants residing in the given territory (regardless of their age). The advantage of this indicator is the fact that it uses the number of inhabitants which is relatively easy to detect also in international context. Its disadvantage subsists in the fact that it also includes the performance of citizens commuting to work in the given region and contributing to the production of GDP and does not take into account the number of commuters outside the region.

The GDP per capita shows the productivity or economic performance of the given region. This indicator was adopted as the basis for international comparisons and also as a criterion for the redistribution of resources from EU structural funds, favouring underdeveloped regions (Ježdík and Chlad, 2009).

Dispersion of regional gross domestic product (GDP) per capita[10]
The dispersion of regional GDP (at NUTS level 2 and NUTS 3) is measured by the sum of the absolute differences between regional and national GDP per capita, weighted with regional share of population and expressed in percent of the national GDP per capita.

The indicator is calculated from regional GDP figures based on the regional accounts of the European System of Accounts (ESA95).

---

[8] See Commission Decision 91/450/EEC.

[9] <http://www.czso.cz/csu/redakce.nsf/i/hruby_domaci_produkt_(hdp)>.

[10] Eurostat (2011b).

Gross disposable household income per capita

Gross disposable household income represents the part of formed gross domestic product that households have available for their use (final spending and savings) and characterizes an important aspect of the population's quality of life. Sometimes this indicator related to inhabitants is used to express the level of the inhabitants' economic well-being. The amount of net disposable household income depends on a number of factors, particularly on the volume of formed GDP and the method of its distribution in the form of primary and secondary income.

Gross disposable household income is the result of the balance of income and expenditure recorded on the secondary income distribution account. It reflects how the net primary income (compensation to employees, mixed income, operating surplus and income from ownership) is allocated through redistribution in the form of taxes, social benefits and contributions and other usual transfers (Kahoun, 2010).

Although gross disposable household income per capita is a more accurate indicator of the economic well-being of the capitals of individual regions, it is used much less often than GDP per capita. This limited use is mainly due to the different rates of redistribution in individual EU member countries, which illustrates the fact that the area of taxes and social transfers is not harmonized and individual countries are not willing to unify these areas.

Purchasing power parity (PPP) — Purchasing power standard (PPS)[11]

The differences between GDP values in individual countries, also after converting them using the respective exchange rates to euro, cannot be attributed only to different volumes of goods and services. The "level of price" is another major factor. Exchange rates are influenced by many factors relating to the demand and offer on currency markets, foreign trade, inflations prognoses and interest differential. Conversion using exchange rates has only a limited significance for international comparison. To be able to obtain a more accurate comparison by individual countries, it is necessary to use special conversion coefficients to remove the impact of price levels. Purchasing power parity is a conversion coefficient converting GDP as an economic indicator expressed in national currencies to an artificial common currency, the so-called purchasing power standard (PPS). It is used to convert GDP and other economic aggregates (i.e. spending on the consumption of certain groups of products) from different countries to comparable volumes of spending expressed in the purchasing power standard (PPS).

After the introduction of euro, we can compare the prices in individual countries of the Eurozone. However, the purchasing power of euro in individual countries inside the Eurozone is different, which is related to the level of prices in individual countries. Therefore, PPP must be used continually in the Eurozone to calculate the value of macroeconomic aggregates for member states in PPS.

To put it simple, PPP represents the price of one type of goods or services in the national currencies for individual countries (e.g. a loaf of bread costs EUR 2.30 in France, EUR 1.90 in Germany, GBP 2.40 in Great Britain, etc.). Consumer baskets with comparable goods and services are used in the price statistics of consumer prices. They are selected so as to represent an entire range of goods and services, taking into account the structure of consumption in different countries. These simple rates of prices of goods and services are then aggregated in PPP according to groups of products, then for the total consumption and finally also for GDP. In order to obtain comparable values for the calculation of purchasing power parity, one country is usually selected and used as a reference country for which the value is equal to 1. This selection of a single country is not an optimal method for the European Union. Therefore PPS is an artificial common currency unit of comparison used in the

---

[11] Eurostat (2010b).

European Union to express the volume of economic aggregate indicators for the purpose of spatial comparisons in real values.

Unfortunately, due to the high costs, it will not be possible to consider and use regional conversion coefficients in the near future. If such regional parities of purchasing power were available, then the GDP in PPS for many periphery or rural areas of the EU would be probably higher than the GDP calculated using purchasing power parity at the national level.

Regions may be evaluated differently when expressing the value of indicators in PPS instead of euro. For example, in 2007, the Swedish region Östra Mellansverige achieved a GDP per capita of 31 300 EUR, thus outperforming Madrid, whose GDP per capita was 30 600 EUR. However, when expressed in PPS, the GDP per capita in Madrid was 34 100, which is more than the 26 500 recorded in Östra Mellansverige.

The macroeconomic aggregate of GDP per capita expressed in PPS is a key indicator to determine whether the given region will receive aid within the EU structural policies at the NUTS 2 regional level.

Purchasing power standard defined according to the final household consumption
Purchasing power standard defined according to the final household consumption, abbreviated as PPCS, is analogical to the purchasing power standard (PPS), which is used to compare the regional values of the macroeconomic aggregate of gross domestic product (GDP). It is also an artificial conversion unit for the calculation of final consumption expenditure of households.

Purchasing power parities and international volume comparisons
The differences in GDP values between countries, even after conversion by means of exchange rates to a common currency, cannot be attributed solely to differing volumes of goods and services.

The 'level of prices' component is also a major contributory factor. Exchange rates are determined by many factors related to demand and supply in the currency markets, such as international trade, inflation forecasts and interest rate differentials. Conversions using exchange rates are therefore of only limited relevance for international comparisons. To obtain a more precise comparison, it is essential to use special conversion rates which eliminate the effect of price-level differences between countries. Purchasing power parities (PPPs) are conversion factors of this kind which convert economic indicators from national currencies into an artificial common currency, called the purchasing power standard (PPS). PPPs are therefore used to convert GDP and other economic aggregates (e.g. consumption expenditure on certain product groups) of various countries into comparable volumes of expenditure, expressed in purchasing power standards.

With the introduction of the euro, prices can now, for the first time, be compared directly between countries in the euro area. However, the euro has different purchasing power in the different countries of the euro area, depending on the national price level. PPPs must therefore also continue to be used to calculate pure volume aggregates in PPS for the Member States within the euro area.

In their simplest form, PPPs are a set of price ratios between the prices in national currency of the same good or service in different countries (e.g. a loaf of bread costs EUR 2.30 in France, EUR 1.90 in Germany, GBP 2.40 in the UK, etc.). A basket of comparable goods and services is used for price surveys. These are selected so as to represent the whole range of goods and services, taking account of the consumption structures in the various countries. The simple price ratios at product level are then aggregated to PPPs for product groups, then for overall consumption and finally for GDP. In order to have a reference value for the calculation of PPPs, one country is usually chosen and used as the reference country, and set to 1. For the European Union, the selection of a single country as a base is inappropriate. Therefore, PPS is the artificial common reference currency unit used in the European Union to express the volume of economic aggregates for the purpose of spatial comparisons in real terms.

Unfortunately, for reasons of cost, it will not be possible in the foreseeable future to calculate regional conversion factors. If such regional PPPs were available, the GDP in PPS for numerous peripheral or rural regions of the EU would probably be higher than that calculated using national PPPs.

The regions may be ranked differently when calculating in PPS instead of euros. For example, in 2007 the Swedish region of Östra Mellansverige had per capita GDP of EUR 31 300, putting it well ahead of Madrid at EUR 30 600. However, in PPS, Madrid at 34 100 PPS per capita is ahead of Östra Mellansverige at 26 500 PPS per capita.

In terms of distribution, the use of PPS rather than the euro has a levelling effect, as countries with a very high GDP per capita also generally have relatively high price levels. The range of GDP per capita GDP in NUTS level 2 regions in the EU27 thus falls from 93 400 in euros to 76 900 in PPS.

Per capita GDP in PPS is the key variable for determining the eligibility of NUTS level 2 regions under the European Union's structural policy.

References

CZECH STATISTICAL OFFICE. *Co ovlivňuje pořadí ekonomické výkonnosti regionů aneb příčiny postavení Prahy jako 6. ekonomicky nejvýkonnějšího regionu EU* [online]. Prague: Czech Statistical Office, 2011.
<http://apl.czso.cz/nufile/Postaveni_Prahy_mezi_regiony_Evropy.pdf>.

EUROSTAT. *Eurostat Quality Profile, Dispersion of regional gross domestic product per inhabitant (Indicator definition)* [online]. Luxembourg: Eurostat, 2010a. <http://epp.eurostat.ec.europa.eu/portal/page/portal/sdi/files/Dispersion%20of%20regional%20GDP.pdf>.

EUROSTAT. *Methodologies and working papers. Regions in the European Union / Nomenclature of territorial units for statistics NUTS 2006/EU27* [online]. Luxembourg: Eurostat, 2007.
<http://epp.eurostat.ec.europa.eu/cache/ITY_OFFPUB/KS-RA-07-020/EN/KS-RA-07-020-EN.PDF>.

EUROSTAT. *News release, GDP per inhabitant ranged from 28 % of the EU27 average in Severozapaden in Bulgaria to 343 % in Inner London* [online]. Luxembourg: Eurostat, 2011a. <http://epp.eurostat.ec.europa.eu/cache/ITY_PUBLIC/1-24022011-AP/EN/1-24022011-AP-EN.PDF>.

EUROSTAT. *Eurostat regional yearbook 2010* [online]. Luxembourg: Eurostat, 2010b.
<http://epp.eurostat.ec.europa.eu/portal/page/portal/publications/regional_yearbook>.

EUROSTAT. *Sustainable development indicators, Socio-economic development — Eurostat Quality Profile* [online]. Luxembourg: Eurostat, 2011b. <http://epp.eurostat.ec.europa.eu/portal/page/portal/sdi/indicators/theme1>.

CHLAD M. *Regionální aspekty makroekonomických ukazatelů.* Prague: University of Economics, 2007.

JEŽDÍK V. and CHLAD M. *Rozdíly mezi kraji ČR — vývoj a příčiny* [online]. Prague: Czech Statistical Office, 2009. <http://czso.cz/csu/2009edicniplan.nsf/p/1382-09>.

KAHOUN, J. *Regionální disparity v ČR — HDP versus disponibilní důchod.* Prague: CES, 2010.

MINISTRY OF REGIONAL DEVELOPMENT. *Strategie regionálního rozvoje — Zásady regionální politiky ČR.* Prague: Ministry of Regional Development, 2006.