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**COMMISSION STAFF WORKING DOCUMENT**

*Accompanying the*

**SIXTH PROGRESS REPORT ON ECONOMIC AND SOCIAL COHESION**

**{COM(2009) 295 final}**

**COMMISSION STAFF WORKING DOCUMENT**  
**accompanying the Sixth Progress Report on economic and social Cohesion**

Indicator	Period	Unit	Convergence	Transition	RCE	Remarks
Tertiary education attainment	2007	% of population 25-64	17	25	26	
Tertiary education attainment trend *	2000 - 2007	% point change	4.0	4.9	5.2	
Participation of adults aged 25-64 in education and training	2007	% of population 25-64	5.1	8.1	11.5	<i>excl. FR9</i>
Human capital intensity	2007	index EU27=100	95	92	104	
Human capital intensity trend*	2000 - 2007	index point change	1	6	-1	
Population aged 15-64 born in a non-EU27 country	2007	% of population 15-64	1.9	7.0	8.8	
Population aged 15-64 born in another EU27 Member State	2007	% of population 15-64	0.8	3.3	3.7	<i>excl. FR9 and IE</i>
Population aged 15-64 born in another country	2007	% of population 15-64	2.8	10.3	12.5	
Unemployment rate	2007	% of active population	9.2	8.4	6.1	
Unemployment rate trend	2000 - 2007	% point change	-4.6	-3.0	-0.5	
Arrivals in hotels	2006-07	Arrivals per capita	0.7	1.4	1.4	<i>excl. FR9, IE and SK</i>
Arrivals in hotels trend	2000-01 - 2006-07	% point change	0.16	0.2	0.11	
Core creative class	2006-07	% of population 15-64	5.4	6.9	8.3	
Core creative class trend *	2000-01 - 2006-07	% point change	1.1	0.9	1.0	<i>excl. FR9</i>
Broadband Access**	2008	% of households	32	43	57	
Productivity in industry and services (PPS)	2006	index EU27=100	63	90	113	
Productivity trend in industry and services	2000-2006	Average annual real productivity growth	1.94	1.27	0.94	
Authors of EPO patent applications	2004-2005	Inventors per million inhabitants	30	78	397	
Employment rate	2007	% of population 15-64	59	64	69	
Employment rate trend *	2000 - 2007	% point change	2.9	6.0	3.1	
GDP/head (PPS)	2006	index EU27=100	59	95	122	
GDP/head (PPS) trend	2000 - 2006	index point change	5.4	5.9	-4.4	
New foreign firms per million inhabitants	2005-07	Total new foreign firms per million inhabitants	268	62	225	
Change in new foreign firms per million inhabitants	2001-03 - 2005-07	Total new foreign firms per million inhabitants	118	-34	-18	
R&D expenditure in the business enterprise sector	2006 *	% of GDP	0.36	0.42	1.36	
R&D expenditure in the business enterprise sector trend	2000-2006(est.)	% points of GDP	0.04	0.08	0.01	<i>estimate excl. Région Wallonne, FR9, major parts of UK</i>

\* excl. UKM5 & UKM6

\*\* excl. FR9, DE5, DEC, UKD1, UKE1, UKK3, UKM5

# 1. GDP/head

Gross Domestic Product per head in Purchasing Power Standards

## Why does this matter?

**Gross domestic product (GDP)** is the total value of all goods and services produced within a region in a given time span. GDP/head is the level of output per inhabitant which is an indication of the average level of economic wealth generated per person. In order to compare regions, it is computed in Purchasing Power Standards (PPS) which eliminates differences in purchasing power due to different price levels between regions.

In general, the level of GDP per head is closely related to global economic performance, in particular to production factor productivity and employment. Its change in time rate indicates the pace of economic development.

## How do the EU regions score?

The geographical distribution of GDP/head underlines large development gaps between EU regions and particularly between the Western and the Central and Eastern Member States. The top ten regions are all located in the West and are often capital city regions. At the other end of the spectrum, several regions in Bulgaria and Romania have levels of GDP/head below 30% of the EU-27 average. The lowest level is 25% in Nord-Est, Romania.

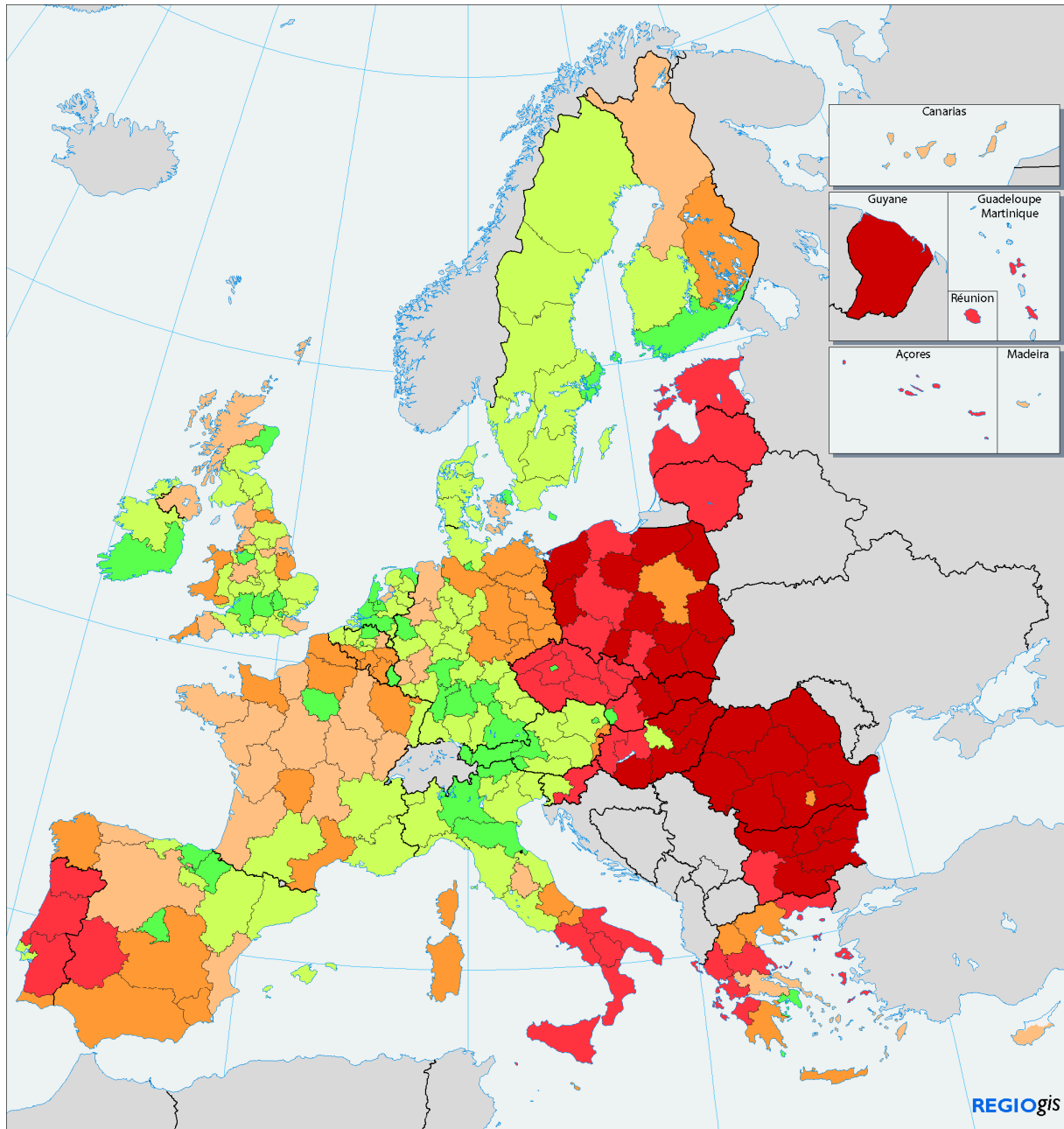
Country	Top Ten regions	GDP per head in PPS EU-27=100
This table shows the ten regions with the highest GDP per head in PPS in 2006		
UK	Inner London *	335.9
LU	Luxembourg (Grand-Duché) *	267.1
BE	Région de Bruxelles-Capitale / Brussels Hoofdstedelijk Gewest *	233.3
DE	Hamburg *	199.7
NL	Groningen	173.7
FR	Île de France	169.7
DE	Oberbayern	167.9
AT	Wien	165.9
SE	Stockholm	165.8
UK	Berkshire, Buckinghamshire and Oxfordshire	164.0

\*In these regions, GDP/head figures tend to be overestimated because of commuter flows.

Regions where GDP per head has increased often host the national capital or a large city. Strong upward trends are also frequently observed in regions with a low level of GDP/head, like for instance Yugozapaden, Bulgaria whose GDP/head is only 32% of the EU average but whose index has grown by almost 21 percentage points between 2000 and 2006. On the other hand, modest changes in GDP per head are observed in regions with its level is already high, particularly in Northern Italy or in some regions of Denmark, France, Germany, Sweden or Finland. For example, in Provincia Autonoma Bolzano/Bozen where GDP/head index decreased from 159 to 136.

Country	Top Ten Movers	Difference in GDP per head in PPS
This table shows the ten regions with the biggest increase in GDP per head in PPS between 2000 and 2006		
SK	Bratislavský kraj	39.9
RO	București - Ilfov	30.5
CZ	Praha	25.7
LU	Luxembourg (Grand-Duché)	23.4
GR	Attiki	23.0
NL	Groningen	23.0
BG	Yugozapaden	20.7
EE	Eesti	20.7
HU	Közép-Magyarország	19.3
RO	Vest	18.0

This suggests that poor regions are catching up with the rest of the EU and is consistent with the fact that convergence among EU regions in terms of GDP/head has increased. Between 2000 and 2006, the coefficient of variation, which is a statistical measure of regional disparities, decreased by 8%. The trend is however worrisome for regions of Southern Italy and Portugal where both GDP/head and growth are relatively low.



**GDP/head (PPS), 2006**

Index, EU-27 = 100

- < 50
- 50 - 75
- 75 - 90
- 90 - 100
- 100 - 125
- >= 125

Source: Eurostat

0 500 Km

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## 2. Unemployment rate

Measures the number of people aged 15 and more who are without work but looking for work and available for work, divided by the number of people aged 15 and more and active in the labour market, i.e. those working or looking for work.

### Why does this matter?

High unemployment is a threat to social cohesion leading to poverty and social exclusion and it is one of the most important incentives for people to leave their regions.

	Convergence	Transition	RCE
Unemployment rate, 2007	9.2	8.4	6.1
Change in unemployment rate, 2000 - 2007	-4.6	-3.0	-0.5

The rapid reduction of unemployment rates in the Convergence regions between 2000 and 2007 reduced the gap

between Convergence and the RCE regions by half. In 2000, the rate in Convergence regions was double that in RCE regions. The Convergence regions are faced mainly by structural unemployment due to a skills mismatch; which is often caused by rapid restructuring. Convergence regions tend to have low rates of participation rates. This means that as employment rates increase, people who were not working or looking for work may start to look for a work, and thus partially offsetting the decline in the unemployment rate.

### How do the EU regions score?

Regional disparities among the EU-27 regions remain high. The French overseas departments and Ciudad Autónoma de Ceuta and Melilla have the highest unemployment rates, partly due to the distance to the rest of the Union. The unemployment rates are also high in Leipzig, Berlin and Brussels, the latter both capital cities.

Country	Top Ten regions	Unemployment rate, %
This table shows the ten regions with the highest rate of unemployment in 2007		
FR	Réunion	25.2
FR	Guadeloupe	25.0
FR	Martinique	22.1
FR	Guyane	21.0
ES	Ciudad Autónoma de Ceuta	20.3
ES	Ciudad Autónoma de Melilla	18.2
DE	Mecklenburg-Vorpommern	17.4
DE	Leipzig	17.2
BE	Région de Bruxelles-Capitale / Brussels Hoofdstedelijk Gewest	17.1
DE	Berlin	16.3

Country	Top Ten Movers	Change in unemployment rate, percentage points
This table shows the ten regions in which unemployment rate decreased fastest between 2000 and 2007		
IT F6	Calabria	-14.8
PL 62	Warmińsko-Mazurskie	-13.1
IT F3	Campania	-12.5
LT T00	Lietuva	-11.6
ES 61	Andalucía	-11.3
IT G1	Sicilia	-11.0
FR 83	Corse	-10.9
PL 43	Lubuskie	-10.9
IT G2	Sardegna	-10.7
ES 43	Extremadura	-10.5

excl. FR9 (=DOM), UKM5 (NE Scotland), UKM6 (Highlands and Islands), PT20 (Azores) and PT30 (Madeira)

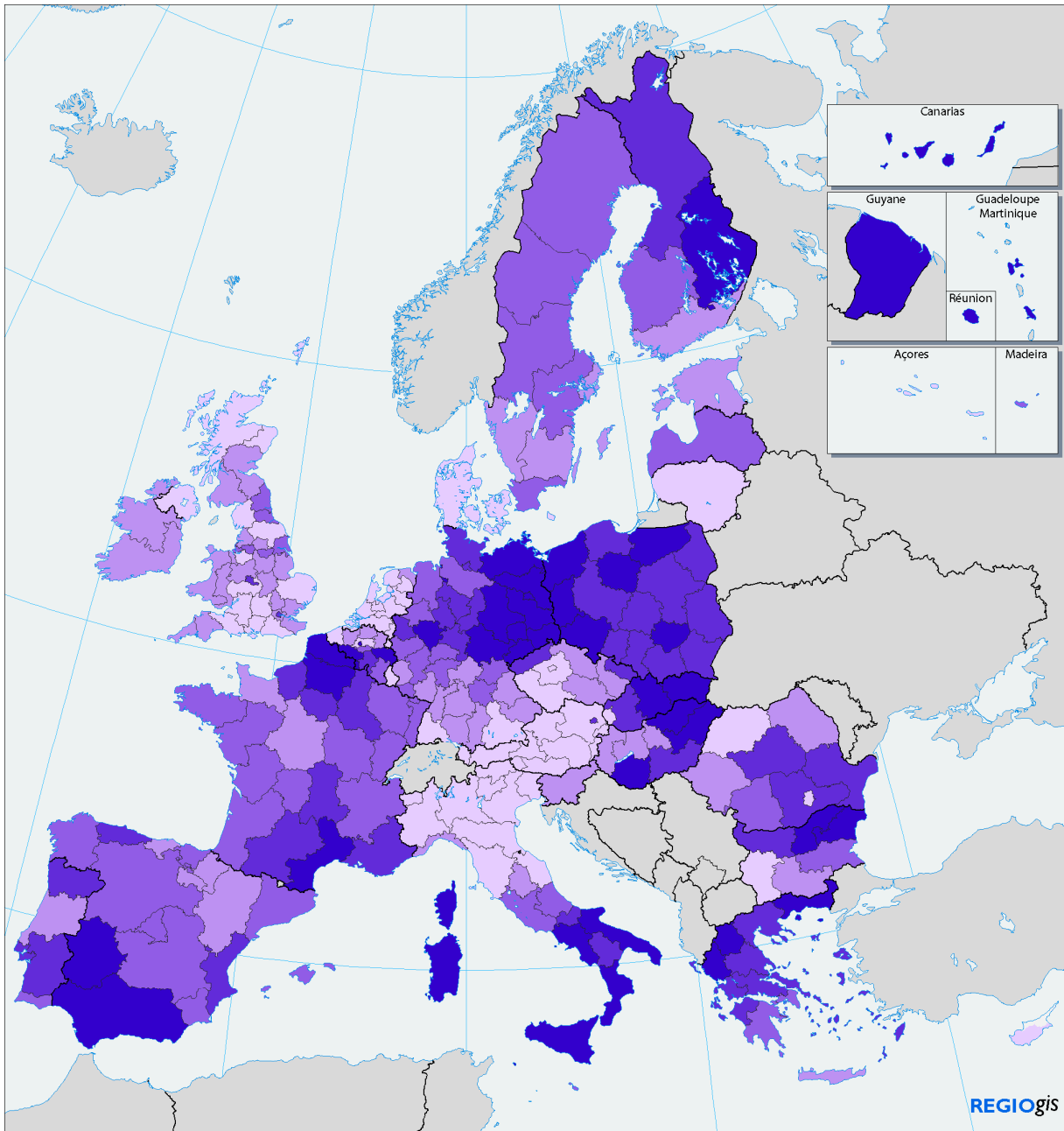
The 45 regions with the rates over 10% can be found mainly in Belgium, Southern Italy, Poland and the East German Länder. In contrast, regions like Zeeland, Praha and most regions in Northern Italy have rates of 3% or lower.

The ten top movers had an average unemployment rate of 22% in 2000 and only 10% in 2007. The coefficient of variation, a statistical measure of regional disparities, in 2007 was 14% lower than four years ago, which means that the difference between the regions with high

and low unemployment rates has been narrowed.

Unemployment rates dropped significantly in the Baltic States, Bulgaria, Southern Italy and Spain. On the other side, several regions in Portugal and Eastern Germany, Austria, Hungary and Luxembourg witnessed a substantial increase in the unemployment rates.

In most cases, reductions in unemployment rates are correlated with increased levels of GDP per capita and lower levels of poverty. Conversely, regions growing unemployment tend to have lower levels of economic growth and higher levels of poverty.



**Unemployment rate, 2007**

% of labour force

- < 4.3
- 4.3 - 5.9
- 5.9 - 7.7
- 7.7 - 9.6
- >= 9.6
- No Data

EU-27 = 7.2  
Source: Eurostat

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### 3. Human Capital Intensity Index

Measures the quality of the labour force

#### Why does this matter?

Human capital is at the core of the knowledge based economy. It is the volume of all knowledge that in a country, a region or a sector is used or is potentially available for the production of goods and services. In many regions, the demographic change will produce a need to replace decreasing labour by increasing human capital to attain higher productivity.

**The Human Capital Intensity (HCI)** is calculated from the EUROSTAT Labour Force Survey data by adding the share of population aged 25-64 with a "medium" qualification level to the share of population aged 25-64 with a "high" qualification level times two. A Human Capital Index is then calculated dividing by the EU-27 average and multiplying by 100. The tertiary educational attainment is weighted by a factor of two because the duration of tertiary education is about twice that of secondary II education (general education and vocational training). Since there is a strong relationship between formal education and an individual's future career path, qualifications acquired in skills-intensive jobs are taken indirectly into account.

MS	Top ten regions in 2007	HCI EU27 = 100
This table shows the ten regions with the highest human capital intensity index in 2007		
DE	Dresden	137
DE	Leipzig	136
DE	Chemnitz	134
SE	Stockholm	134
DE	Brandenburg - Südwest	133
BE	Prov. Brabant Wallon	132
UK	Inner London	132
CZ	Praha	131
EE	Eesti	130
FI	Etelä-Suomi	129

#### How do the EU regions score?

EU wide HCI has increased from 17.3 to 18.9 between 2000 and 2007, a remarkable increase of 9% over a period of only 7 years.

	Convergence	Transition	RCE
Human Capital Intensity (EU27 = 100)	95	92	104
Evolution 2000-2007	1	6	-1

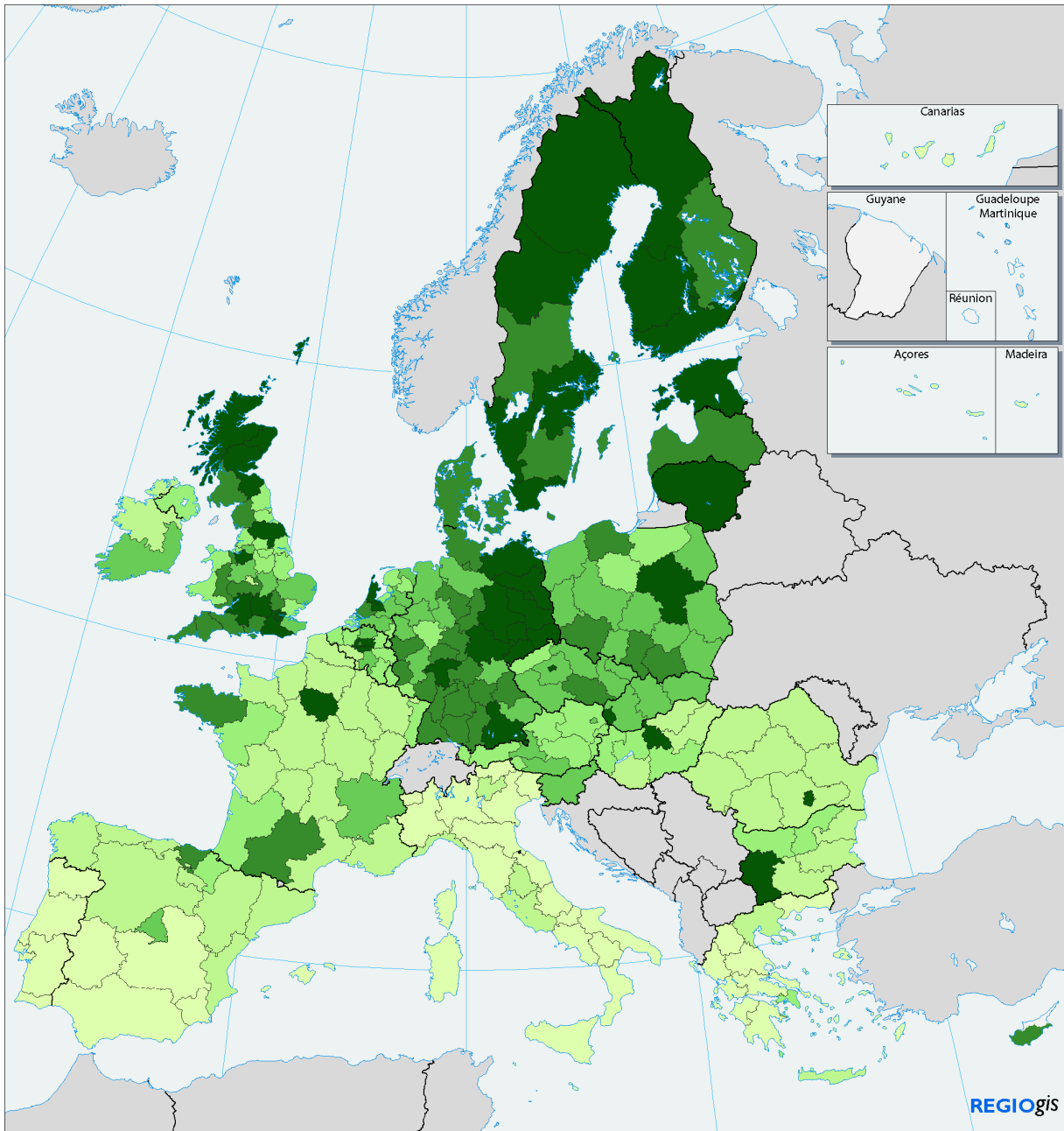
Nevertheless, very substantial differences remain. National values vary between 7.9 in Malta and 24.5 in Estonia.

As reflected by the top ten regions, the highest growth rates have been in Ireland and in Southern European regions. As a result disparities between Member States and between regions have actually declined over the period 2000 – 2007.

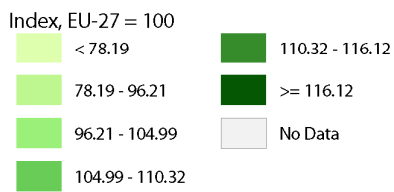
MS	Top ten regions movers	Change in HCI index
This table shows the ten regions in which the human capital index increased most between 2000 and 2007		
IE	Border, Midland and Western	30
IE	Southern and Eastern	26
ES	Galicia	22
ES	Aragón	20
ES	La Rioja	19
PT	Região Autónoma da Madeira	19
ES	País Vasco	18
GR	Kriti	17
GR	Dytiki Ellada	17
ES	Castilla-La Mancha	17

improving as well. These developments point to an increasing endogenous potential for innovation and creativity to be "exploited" as well as a challenge for local institutions and firms.

This trend is set to continue. The differences in HCI concerning the younger age groups in working life are far less pronounced than for the population as a whole. This is the result of increasing participation rates in post-obligatory secondary education in regions that were lagging behind. Moreover much of the growth is actually due to raising shares of high qualifications. The diffusion of medium and higher qualifications in the economies of less developed regions is



**Human capital intensity, 2007**



Sources: Eurostat, DG REGIO



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## 4. Human Capital Intensity by Gender

Measures the quality of the labour force by gender

### Why does this matter?

Human capital is at the core of the knowledge based economy. It is the volume of all knowledge that in a country, a region or a sector is used or is potentially available for the production of goods and services. Traditionally women had less access to medium and high level qualifications than men, reducing thereby the overall potential for innovation and creativity.

**The Human Capital Intensity (HCI)** is calculated from the EUROSTAT Labour Force Survey data by adding the share of population aged 25-64 with a "medium" qualification level to the share of population aged 25-64 with a "high" qualification level times two.

The tertiary educational attainment is weighted by a factor of two because the duration of tertiary education is about twice that of secondary II education (general education and vocational training). Since there is a strong relationship between formal education and an individual's future career path, qualifications acquired in skills-intensive jobs are taken indirectly into account.

MS	Top ten regions	HCI men	HCI women
This table shows the ten regions with the highest HCI for women in 2007			
DE	Leipzig	131	142
DE	Dresden	134	140
EE	Eesti	119	140
DE	Chemnitz	130	139
SE	Stockholm	129	139
FI	Etelä-Suomi	121	137
BG	Yugozapaden	120	136
BE	Prov. Brabant Wallon	129	135
DE	Brandenburg - Südwest	132	134
SE	Mellersta Norrland	109	134

### How do the EU regions score?

EU wide HCI has increased from 17.3 to 18.9 between 2000 and 2007, a

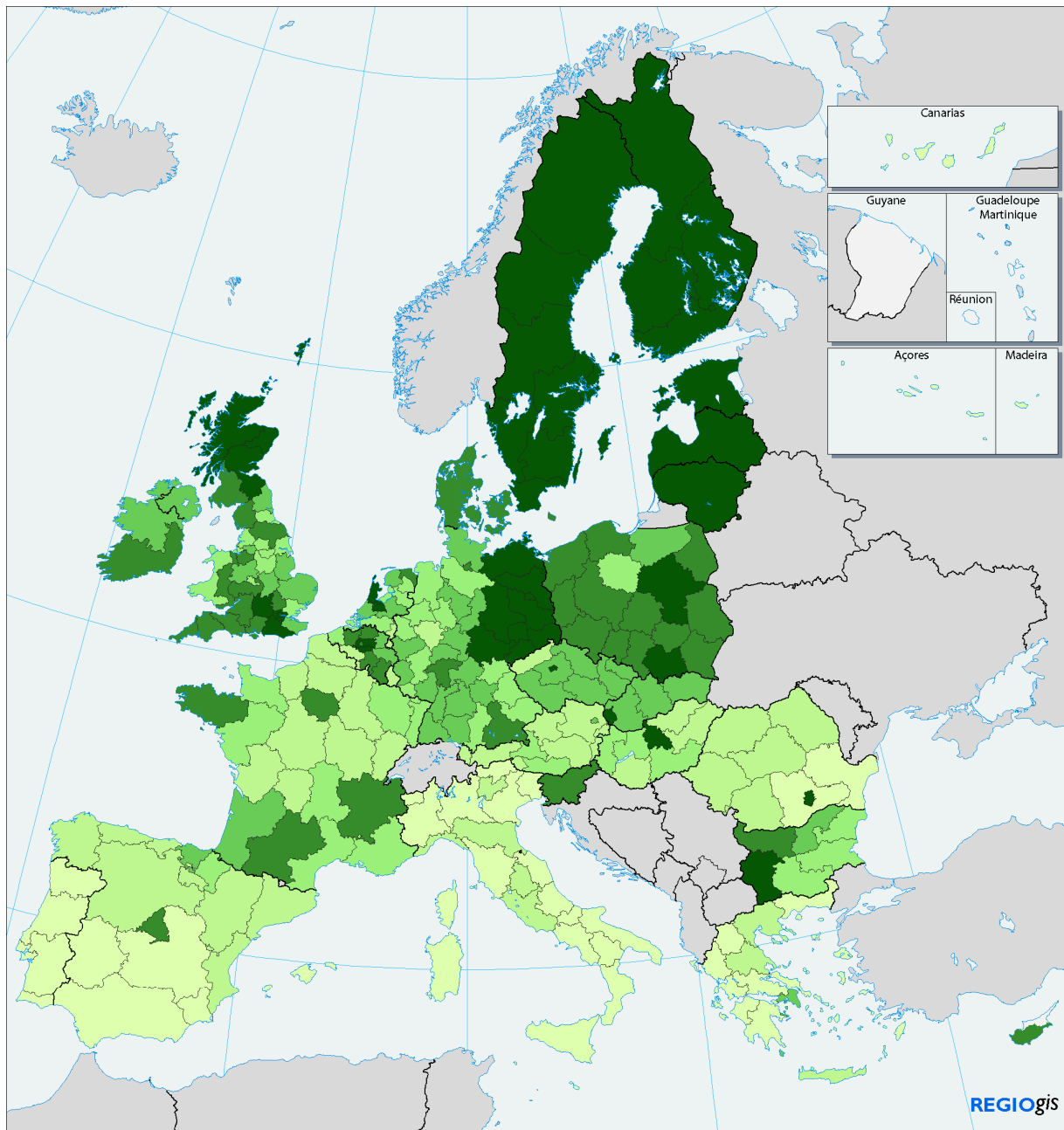
	Convergence	Transition	RCE
HCI Index for women (2007)	96	95	103
Evolution 2000-2007	1.1	6.6	-0.9

remarkable increase of 9% over a period of only 7 years. This is mostly the result of the participation of younger age groups and more particularly young women in post-obligatory secondary and higher education. Over the period 2000-2007 the HCI gap between men and women has reduced from 1.5 to 0.5. In 2000, the HCI index for women was higher or equal than for men in approximately one region in four. It is now the case in nearly half the regions.

MS	Top ten regions movers	Change in HCI index
This table shows the ten regions in which the HCI index for women increased most between 2000 and 2007.		
IE	Border, Midland and Western	31
IE	Southern and Eastern	28
ES	Galicia	22
ES	Aragón	21
ES	Castilla-La Mancha	18
ES	País Vasco	18
GR	Thessalia	18
GR	Kriti	18
ES	Cantabria	17
FR	Nord - Pas-de-Calais	17

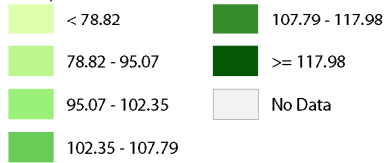
Comparing the 2007 HCI by gender and by age groups gives an insight of the mechanisms underlying this trend. The HCI is higher for the age group 25-34 in virtually all regions higher than for the age group 60-64, though more so for women than for men. While the HCI of men is higher than for women in the age group 55-64, it is generally the reverse in the age groups 25-34. Contrary to the generation that is 20 to 40 years older, young women are now better qualified than young men.

The proportion of the working population prepared to invent new products, to apply new techniques in marketing, to cover local demand for services and adapting to new technologies is growing for both genders and more rapidly for women than for men.



**Human capital intensity (women), 2007**

Index, EU-27 = 100



Sources: Eurostat, DG REGIO



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## 5. Foreign born population of working age

Measures the number of people aged 15-64 residing in country which is different from the country of birth divided by the total population aged 15-64. The data does not take into account seasonal work and education/training (unless they imply a change of residence), movement of workplace over shorter periods (daily commuting) or movement of workplace without a change in permanent residence.

### Why does this matter?

The diffusion of new ideas and practices by people with different backgrounds boosts creativity and productivity. Labour born abroad brings an important diversity to the working process. Migrants are often younger and more dynamic than the people who stay. International mobility of the working age population plays an important role also in the adjustment process to the changes induced by the globalisation, e.g. changes in demand, technologies and so on.

	Convergence	Transition	RCE	The working age population born in a different
Population aged 15-64 born in another country	2.8	10.3	12.5	

country tends to concentrate in wealthier regions. The RCE regions have a considerably higher share of working age population born in a different country. It is four times higher than in the Convergence regions. In the Transition regions, the share is three times higher than in the Convergence regions.

### How do the EU regions score?

The share of working age population born in a different country differs widely between regions and MS.

The capital regions in Western Europe are the most attractive the foreign born working age population and people of different backgrounds in general, which is one of the reasons that many metropolitan regions generate more patents and are more productive.

The Illes Balears and Flevoland form the only exception. In the latter case, the majority of people residing in the region actually work in the capital city. In all the cases, except Luxembourg, the vast majority of the foreign born were born in a country outside the EU.

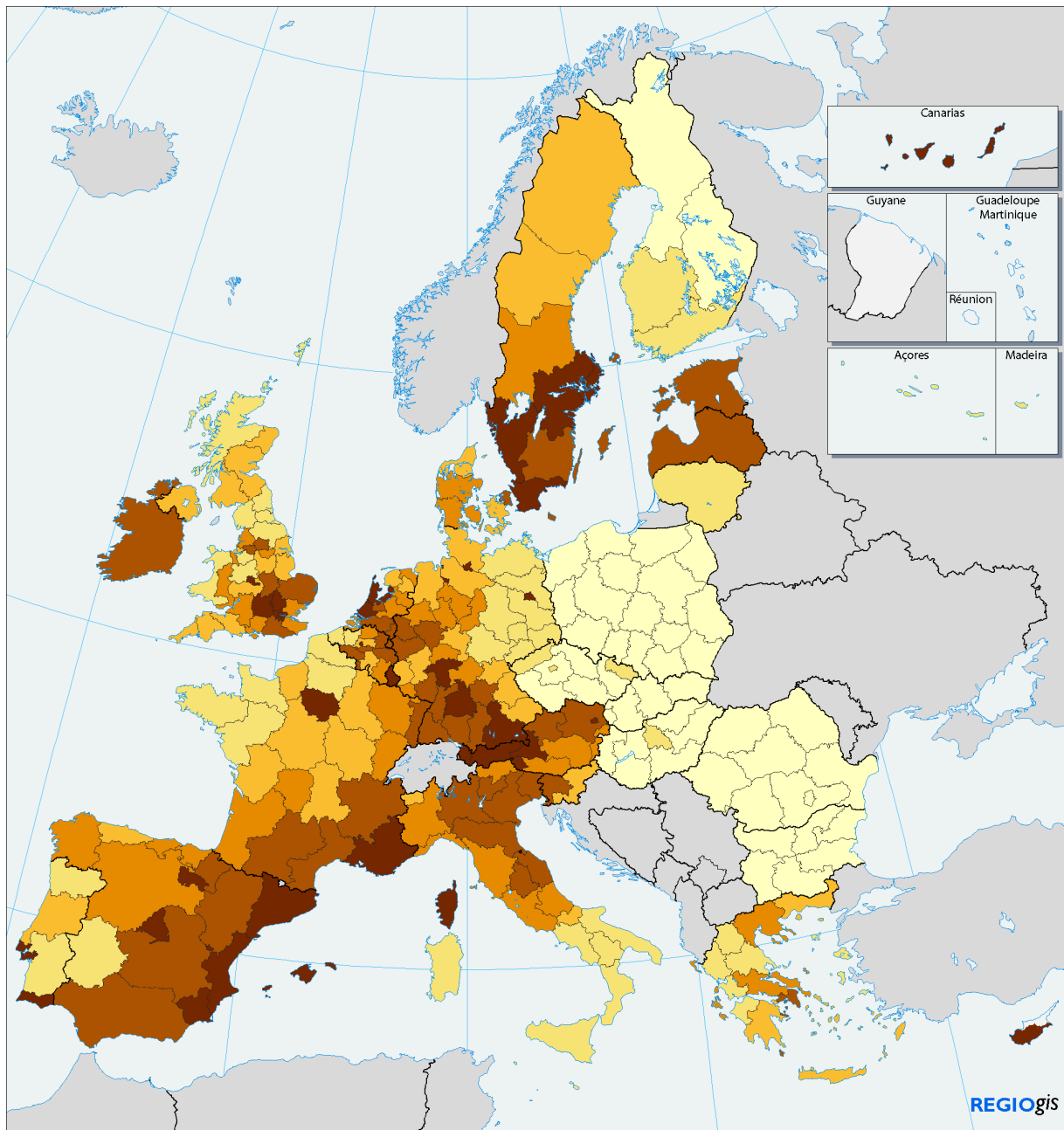
The shares tend to be very low in most of the central and eastern MS. All the regions with a share of working age population born in a different country below 1% are located in Romania, Bulgaria, Poland and Hungary.

Country	Top Ten regions	Population aged 15-64 born in another country, % of total population 15-64
UK	Inner London	45.3
LU	Luxembourg (Grand-Duché)	41.8
BE	Région de Bruxelles-Capitale / Brussels Hoofdstedelijk Gewest	38.1
AT	Wien	36.1
UK	Outer London	34.6
ES	Illes Balears	25.2
FR	Île de France	23.2
SE	Stockholm	22.0
ES	Comunidad de Madrid	21.9
NL	Flevoland	21.8

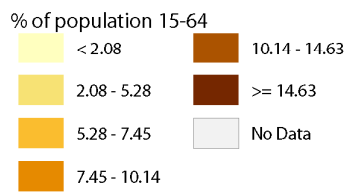
DE: nationality not country of birth

IE: nationality of total population (all ages)

Differences in the innovation capacity and creativity between the richer and poorer regions is one of the reasons for the gap in the economic development.



**Population aged 15-64 born in another country, 2007**



EU27: 9.2  
 Germany: population aged 15-64 of foreign nationality;  
 Ireland: total population of foreign nationality  
 Source: Eurostat (LFS)



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## 6. Hotel arrivals per inhabitant

### Why does this matter?

This indicator measures the number of arrivals per inhabitant in hotels and similar establishments in 2007.

Hotel arrivals are often used to measure the importance the tourism industry. Tourism is a key economic sector in some regions where it provides a substantial number of jobs, in particular for low-skilled workers. Travel and tourism are also important channels conveying new people and new ideas. Besides leisure and recreational activities, hotel arrivals account for business and scientific conferences, which constitute major source of growth in some regions.

### How do the EU regions score?

Regions with a high number of hotel arrivals per inhabitant are generally located in the Western MS which hosts all top ten regions. Most of these regions are in Southern Europe and/or offer an attractive natural environment, notably mountainous areas.

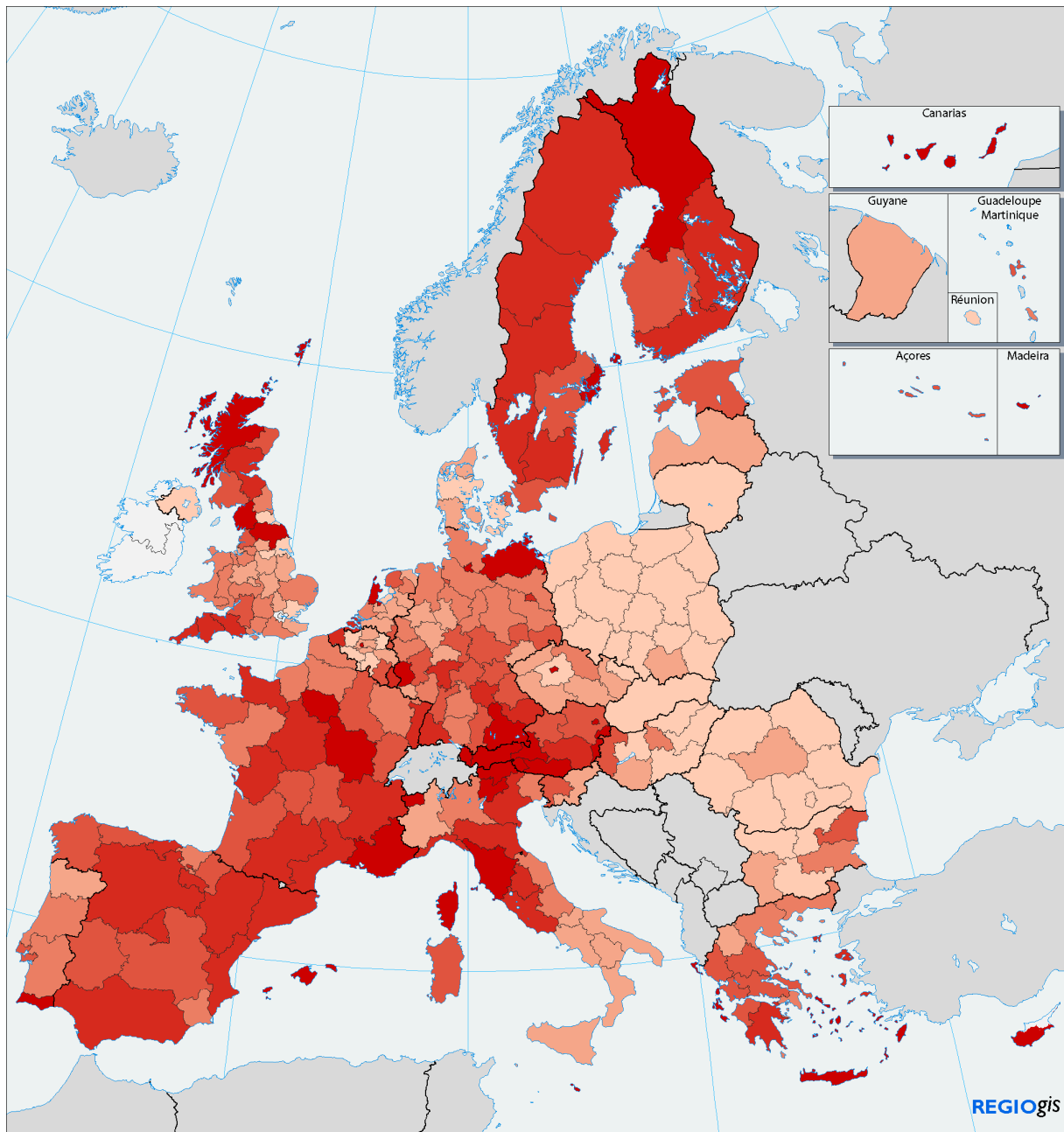
Most regions in the Central and Eastern Member States (CE MS) feature much lower number of hotel arrivals per capita. Regions with the highest number of hotel arrivals are Praha (3.5), Malta (3.0) and Cyprus (3.0). Such records remain exceptional and on average, the number of hotel arrivals is 0.64 in the 10 CE MS against 1.57 in the Western MS.

However, regions where the number of hotel arrivals has grown the fastest are mostly in the CE MS. Between 2000 and 2007, hotel arrivals grew by 22.4% in Lietuva and by 22.3% in Yugoiztochen, Bulgaria. In the other MS, the highest growth rate is in Região Autónoma dos Açores, Portugal but is only 7.6%.

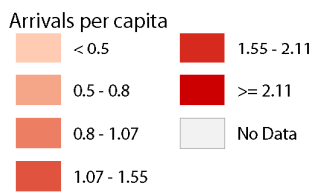
Top Ten Movers		Average annual change in hotel arrivals in %
This table shows the ten regions with the fastest growth of hotel arrivals between 2000 and 2007		
LT	Lietuva	22.4
BG	Yugoiztochen	22.3
LV	Latvija	16.4
BG	Yugozapaden	14.6
BG	Severozapaden	13.3
BG	Severen tsentralen	11.2
PL	Łódzkie	11.2
PL	Lubuskie	10.7
PL	Podlaskie	10.4
RO	București - Ilfov	10.4

Country	Top Ten regions	Hotel arrivals per head
This table shows the ten regions with the highest number of hotel arrivals per inhabitant		
IT	Provincia Autonoma Bolzano/Bozen	9.1
AT	Tirol	8.8
ES	Illes Balears	8.1
AT	Salzburg	7.3
GR	Notio Aigaio	7.0
PT	Algarve	6.0
IT	Valle d'Aosta/Vallée d'Aoste	5.1
GR	Ionia Nisia	4.9
IT	Provincia Autonoma Trento	4.7
UK	Highlands and Islands	4.4

This shows that the potential for tourism related development is far from fully exploited in the CE MS. For some of their regions, these domains still present important opportunities for starting up new activities and therefore constitute a major source of future growth and employment.



**Arrivals in Hotels and similar establishments, 2007**



Source: Eurostat



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## 7. Tolerance Index

This measure is based on nine questions in special Eurobarometer (269) 2008 on discrimination. The index is the share respondents who are comfortable<sup>1</sup> with the following nine situations: Having a woman, or someone of a different ethnicity, a different religion or belief, with a disability or a homosexual in the highest elected political position or (with the exception of a woman) as a neighbour. A difference of more than five % points between MS is statistically significant.

### Why does this matter?

Discrimination greatly reduces the quality of life and the opportunities of its victims. It also hinders social and economic development as often the best candidates for a job or position are not selected and the most dynamic will move away. Innovation thrives in more open and tolerant societies, and in this way also boosts development.

### How do the Member States score?

Overall, the EU is a relatively tolerant place: four out of five respondents said they were comfortable with these situations. Most respondents were comfortable with a neighbour with a disability (93%) and a woman in the highest elected political position (92%). The share of respondents for these questions was consistently high in all MS.

Least respondents were comfortable with someone with a different ethnicity (60%) or religion (65%) or a homosexual (67%) in the highest elected political position. On these questions opinions differed more between MS. For example, in the Netherlands 94% are comfortable with a homosexual in the highest elected political position while in Bulgaria 25%. In Sweden 83% are comfortable with a person with a different ethnicity in the highest elected political position as compared to 29% in Cyprus.

The majority of respondents said that

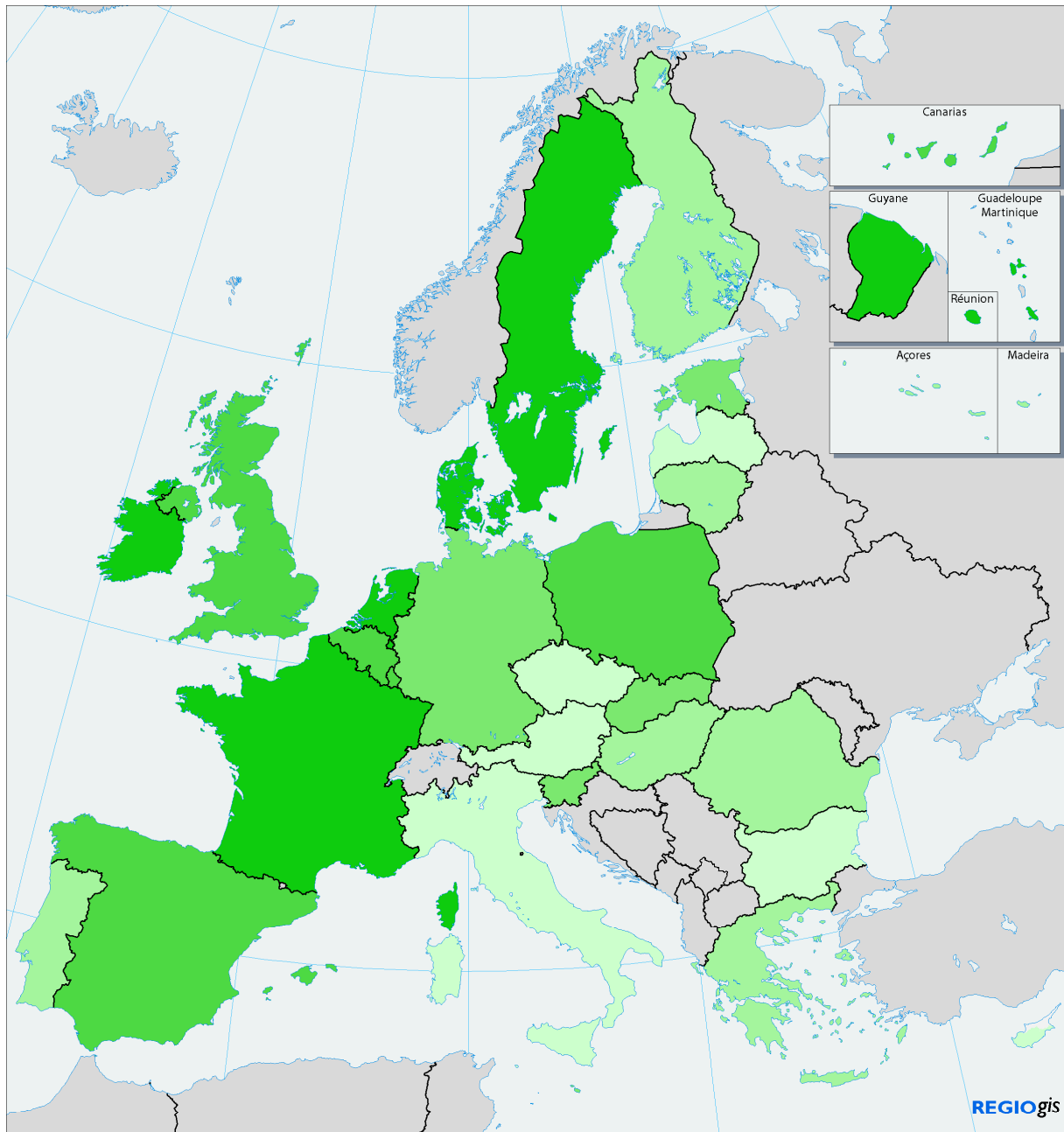
Country	Top Ten MS	Increasing Tolerance index
The ten MS with the highest share of respondents stating that discrimination on the basis of gender, sexual orientation, ethnicity and religion had become less widespread in the past five years in % of respondents, 2008		
CY	Cyprus	81
PL	Poland	78
CZ	the Czech Republic	74
FI	Finland	72
BG	Bulgaria	72
LT	Lithuania	71
EE	Estonia	71
LV	Latvia	70
GR	Greece	70
RO	Romania	69

Country	Top Ten MS	Tolerance index
The ten MS with the highest % of respondents comfortable with someone in the highest elected political position or a neighbour with a different ethnicity, religion or belief, sexual orientation or a woman (for political position), in 2008		
SE	Sweden	91
NL	the Netherlands	90
DK	Denmark	87
FR	France	87
IE	Ireland	86
ES	Spain	85
LU	Luxemburg	84
UK	United Kingdom	84
PL	Poland	83
BE	Belgium	83

discrimination was less widespread than five years ago, in particular for women and the disabled. But the majority said in 15 MS said that ethnic discrimination had become more widespread. For example, in the Netherlands, Denmark and Bulgaria two out three respondents thought that ethnic discrimination had become more widespread in their country.

Overall, the EU is relatively tolerant, but tolerance of neighbours and politicians of a different ethnic group, religion or sexual orientation is lower and discrimination based on ethnicity was perceived as having grown in most MS.

<sup>1</sup> Score of 6 or higher on the range of 1 (very uncomfortable) to 10 (totally comfortable).



### Tolerance index, 2008

% of respondents with a comfort level of six or more (1=very uncomfortable to 10=completely comfortable)



EU27: 78

Q6: How would you feel about having a neighbour who is a disabled person, a homosexual, a person from a different ethnic origin, a person with a different religion or belief?

Q8: How would you feel about having in the highest elected political position in your country a woman, a homosexual, a person from a different ethnic origin, a person with a different religion or belief or a disabled person?



Source: Special Eurobarometer 296 Discrimination in the EU, 2008

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## 8. Core Creative Class,

Measures the share of the population aged 15-64 in professions which require the creation of meaningful new forms as defined by Richard Florida in his book *The Rise of the Creative Class*.

### Why does this matter?

The Core Creative Class has a strong impact on the number of new start-ups and new jobs. They are typically the people who come up with new ideas and put them into practice, which leads to more new and more innovative and productive firms and more jobs. Research has shown that this class has a stronger impact on economic development than the share of tertiary educated.

### How do the EU regions score?

	Convergence	Transition	RCE
% Core creative class on population aged 15-64 2006-07	5,4	6,9	8,3
Change in % core creative class 2000-01 - 2006-07 in % points	1,1	0,9	1,0

The Convergence regions lag behind the RCE regions. On average, the difference is just under three % points.

The top ten regions are either capital regions or regions located close to the capital with a major university. In some MS, the share of creative class tends to be high in most regions such as in the UK, the Netherlands, Finland, Sweden and Belgium, while in others such as Portugal, Bulgaria and Romania only the capital region has a high share.

Over the six year period, the share of creative class grew by 1 % point in the EU to 7%. The top ten movers, however, have increased their share substantially, which allowed all of these regions, with the exception of Śląskie, to surpass the EU average. Also the top ten

Country	Top Ten regions	% of Core Creative Class
The ten regions with the highest share of population aged 15-64 in the core creative class in 2006-07		
SE	Stockholm	15,0
NL	Utrecht	14,3
UK	Inner London	13,6
RO	București - Ilfov	12,6
FI	Etelä-Suomi	12,6
	Berkshire, Buckinghamshire and Oxfordshire	12,6
UK	Berkshire, Buckinghamshire and Oxfordshire	12,6
CZ	Praha	12,5
NL	Noord-Holland	12,4
BE	Prov. Brabant Wallon	12,1
FR	Île de France	11,9

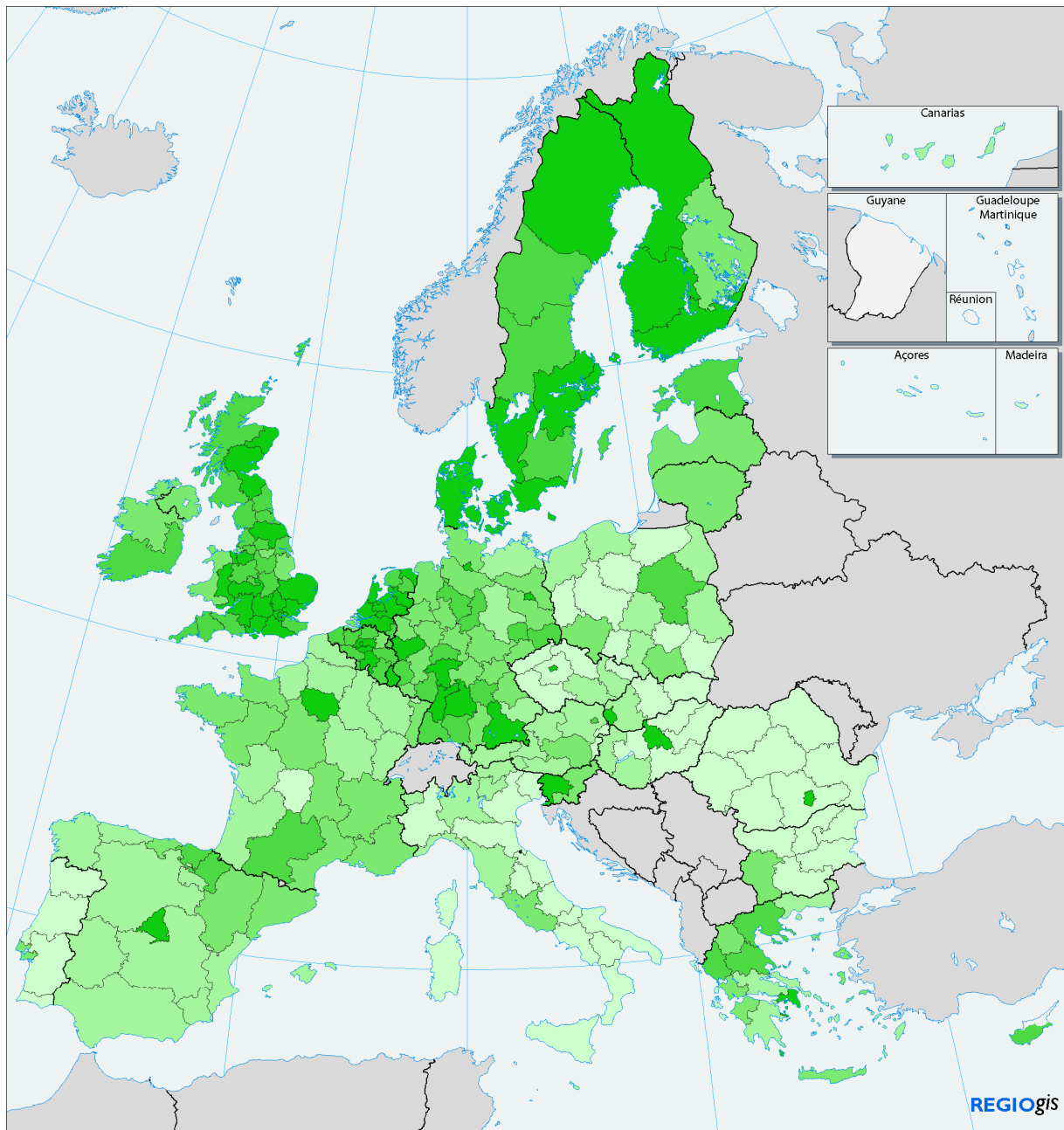
No data FR9 (=DOM) and DK national level

Country	Top Ten Movers	Change in % in core creative class
The ten regions where the share of population aged 15-64 in the core creative class increased most between 2000-01 and 2006-07 in % points		
UK	Cornwall and Isles of Scilly	3,9
SI	Zahodna Slovenija	3,4
GR	Thessalia	2,7
DE	Trier	2,7
PL	Mazowieckie	2,7
ES	País Vasco	2,5
LU	Luxembourg (Grand-Duché)	2,5
GR	Ipeiros	2,5
PL	Śląskie	2,4
GR	Attiki	2,4

No data for RO, FR9 and DK national level

movers contains many capital regions or regions with major universities.

In conclusion, capital regions and regions with major universities are successful at creating jobs for the creative class. This will give these regions an edge when it comes to employment growth and the number of start-ups, especially high-tech start-ups. Although the Convergence regions did not catch up with the RCE regions, they did manage to generate the same increase in the core creative class as the EU.



**Core Creative Class employment, average 2006-2007**

% of population aged 15-64

- < 5.01
- 5.01 - 6.06
- 6.06 - 7.58
- 7.58 - 9.31
- >= 9.31
- No Data

EU27: 7.24  
 Core Creative Class includes International Standard Classification of Occupations (ISCO) codes 21,221,222,23,243,244,245,347 and 521.

Source: Eurostat

0 500 Km

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## 9. Productivity in industry and services

Is Gross Value Added (GVA) divided by persons employed in industry and services.

### Why does this matter?

Productivity growth is the main source of higher economic growth in the Union. Productivity can increase when employment declines or when GVA grows. The first is usually a sign of restructuring, with shifts out of labour-intensive activities. The increase in GVA relative to employment, on the other side, occurs independently from the phase of the economic development and it is an indication of high innovation capacity, high education level, good governance and so on. It has long-term implications for the competitiveness of the regions/countries.

	Convergence	Transition	RCE
Productivity in industry and services (PPS) in EU27=100, 2006	63	90	113
Change in productivity in industry and services, average annual % change, 2000-2006	1.94	1.27	0.94

The Convergence regions score better on productivity in industry and services than on GDP per capita because the high share of employment in agriculture distorts the productivity figures and

because the lower employment rates in these regions are responsible for a part of the gap.

### How do the EU regions score?

The top ten regions are located mainly in capital cities and industrial areas of Northwest Europe. Most of other Dutch regions, the Belgian Vlaams Brabant, the regions in the North-western part of Germany and West of Austria also lie above 120%. On the other end, the Bulgarian and the Romania regions occupy the first ten places having improved from 12% to 25% as compared to the EU average. All the Central and Eastern MS lie below the EU average.

Country	Top Ten regions	Labour productivity in industry and services, in pps, indexed to the EU average
This table shows the ten regions with the highest labour productivity in industry and services in 2006		
NL	Groningen	196
LU	Luxembourg (Grand-Duché)	153
DE	Hamburg	151
FR	Île de France	150
BE	Région de Bruxelles-Capitale / Brussels	148
DE	Oberbayern	141
SE	Stockholm	140
DE	Darmstadt	138
NL	Utrecht	138
BE	Prov. Brabant Wallon	136

*excl. the regions of UK*

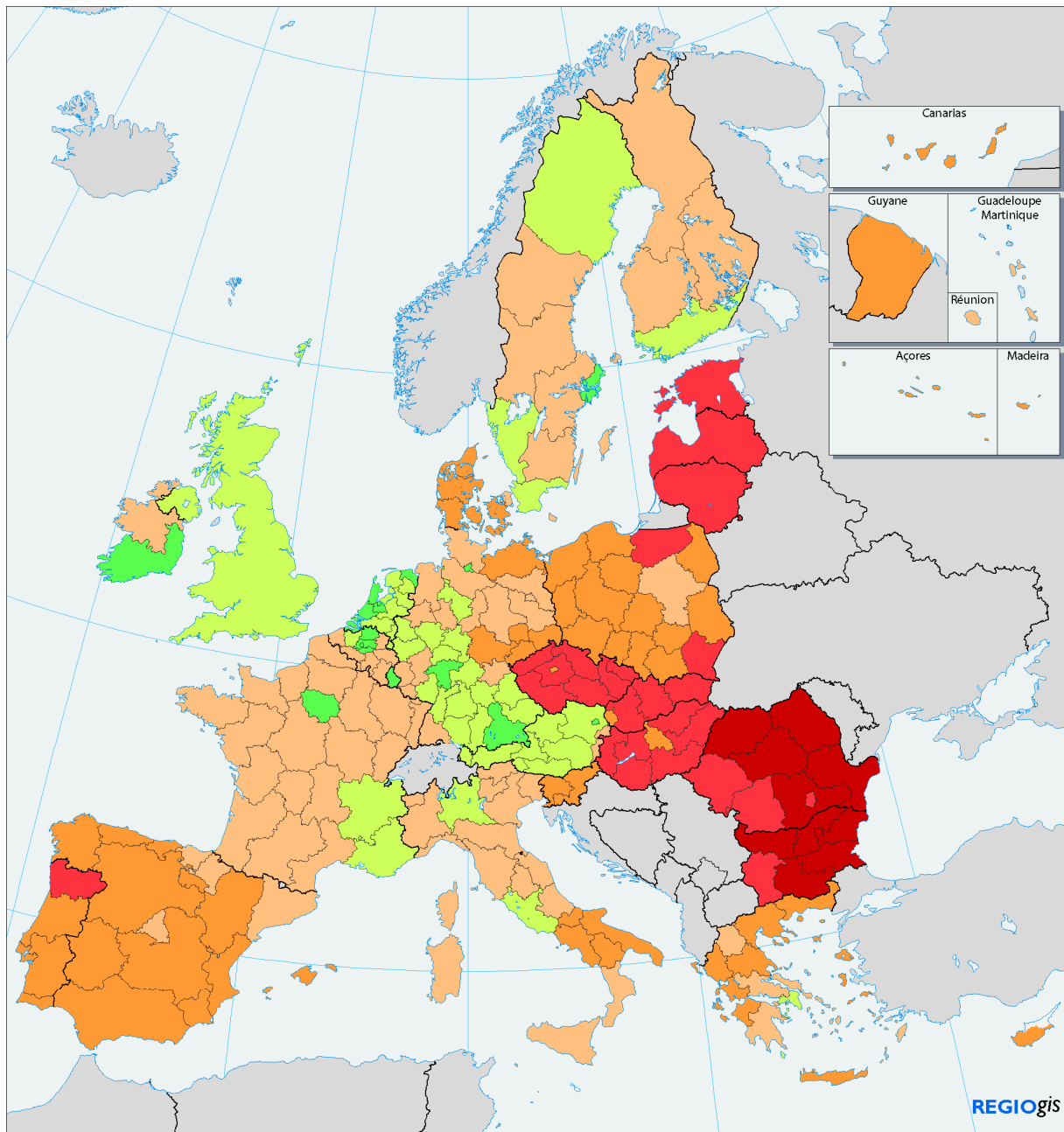
Country	Top Ten Movers	Change in productivity in industry and services, annual average % change, 2000 - 2006
This table shows the ten regions with the fastest growth of labour productivity in industry and services between 2000 and 2006		
LV	Latvija	6.17
EE	Eesti	6.15
LT	Lietuva	5.82
CZ	Moravskoslezsko	5.28
RO	Sud - Muntenia	4.89
SK	Bratislavský kraj	4.72
RO	Sud-Vest Oltenia	4.69
PL	Dolnośląskie	4.67
NL	Groningen	4.58
HU	Közép-Magyarország	4.55

*excl. the regions of UK*

Except Groningen, the average labour productivity of the regions among the top ten movers was below 30% of the EU value in 2007 and 22% in 2000. In fact, all the regions with an annual average % change of three or more are located in the CE MS, except the capital region of Greece. Severozapaden and Yugoiztochen in Bulgaria, but also many regions in the South of Italy, have not followed this trend and recorded a negative change in the industrial and service's labour productivity.

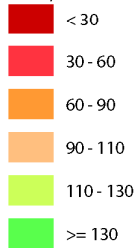
The increase in productivity in the CE MS signals a fast catching-up process to the average EU productivity and

GDP/capita levels.



**Labour productivity in industry and services, in PPS, 2006**

Index, EU-27=100



GVA/persons employed  
 BE, AT: 2005  
 MT: including all sectors  
 UK: national level, including all sectors  
 Source: Eurostat



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## 10. New Foreign Firms

Measures the number of new foreign firms created per million inhabitants

### Why does this matter?

A new foreign firm means a significant amount of foreign direct investment. It could entail building an entirely new factory and employing hundreds of people or taking a controlling stake in a firm, freeing up funds for further investments.

A new foreign firm means a new and often strong competitor for firms who produce a similar product or service in the region. However, it also presents an opportunity to develop a strong cluster and for both competitors and suppliers to learn new business practices. By embedding the firm in the region, positive knowledge spillovers can be enhanced, making the region more innovative and productive.

### How do the EU regions score?

	Convergence	Transition	RCE
New foreign firms per million inhabitants 2005-07	267.5	61.6	224.7
Change in new foreign firms per million inh. 2001-03 to 2005-07	117.9	-33.9	-17.6

The Convergence regions have become an attractive destination for new foreign firms. In less than five years, these regions have almost doubled the number of new foreign firms moving in. In the most recent period, convergence region outperformed the RCE regions.

The top ten regions are located mostly in Romania and the UK. The map also shows the strong preference of new foreign firms to locate in the capital region. Five out of the top ten regions include their national capital. The non-capital regions of Portugal, Slovakia and the Czech Republic score low. All the Greek regions and most of the Italian and Spanish regions also score low.

Overall, the UK, Ireland, Romania, Austria, Poland and the Benelux attract many new foreign firms.

The changes over time have been

Country	Top Ten Movers	Change in new foreign firms per million inhabitants
This table shows the ten regions with the biggest increase in the number of new foreign firms per million inhabitants between the periods 2001-03 and 2005-07		
RO	București - Ilfov	2,602
RO	Vest	1,215
IE	Southern and Eastern	1,123
RO	Centru	1,062
UK	Inner London	979
RO	Nord-Vest	867
RO	Sud-Est	504
UK	Surrey, East and West Sussex	452
SE	Stockholm	358
RO	Sud - Muntenia	353

Excluding ES63 and ES64

trend and which will not, especially in light of the crisis.

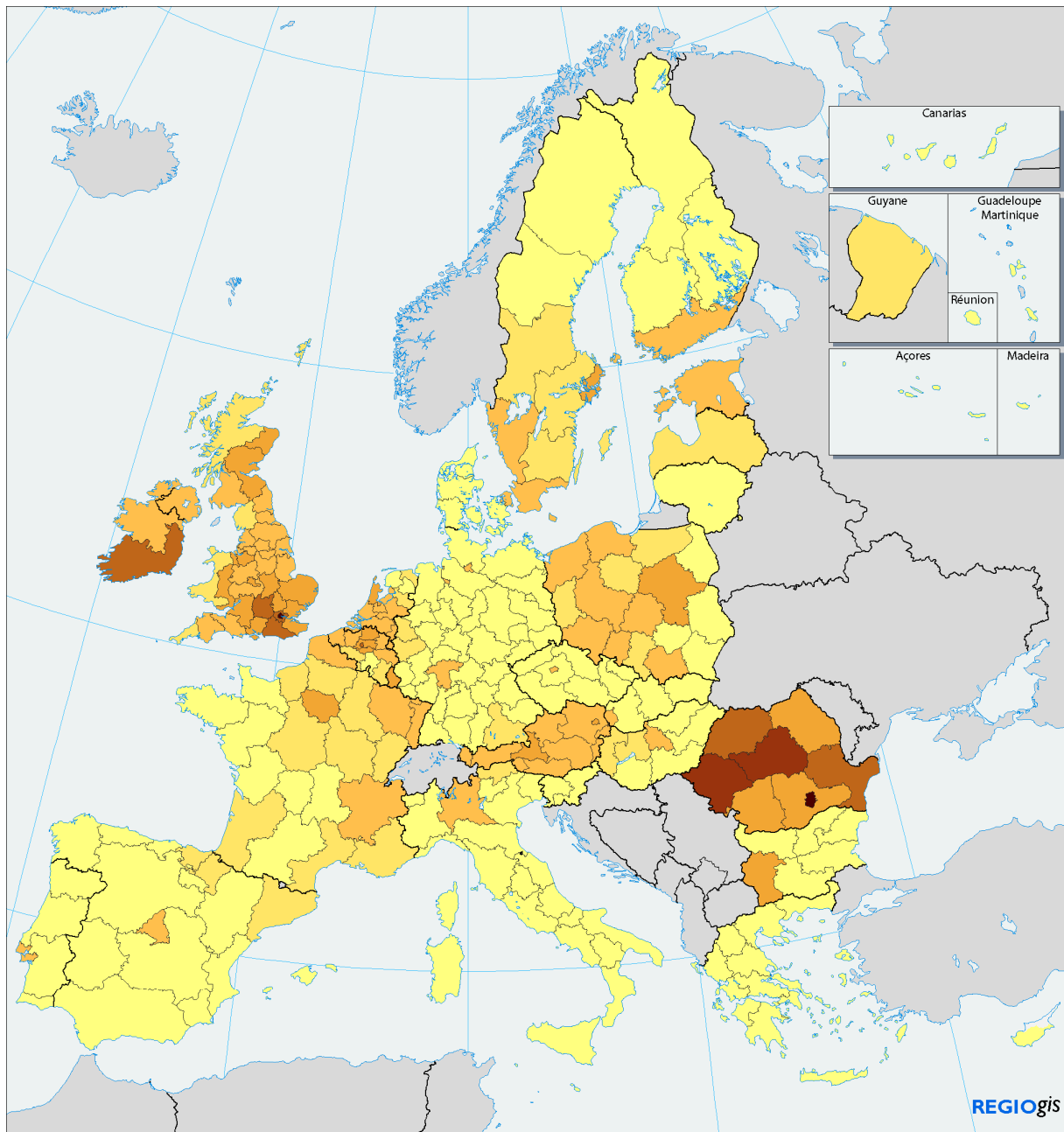
The Convergence regions have become an attractive destination for new foreign firms. In less than five years, these regions have almost

Country	Top Ten regions	New Foreign firms per million inhabitants
This table shows the ten regions with the highest number of new foreign firms per million inhabitants in the period 2005-07		
RO	București - Ilfov	6,813
UK	Inner London	5,143
RO	Vest	1,911
RO	Centru	1,592
RO	Nord-Vest	1,340
UK	Berkshire, Buckinghamshire and Oxfordshire	1,155
IE	Southern and Eastern	1,154
UK	Surrey, East and West Sussex	878
BE	Région de Bruxelles-Capitale / Brussels Hoofdstedelijk Gewest	843
UK	Outer London	771

No data for ES63 and ES64

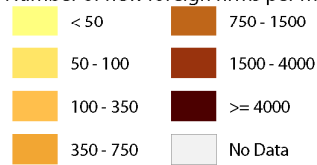
substantial with Romania, Ireland, London and Stockholm improving their already good performance considerably. At the other end of the spectrum several regions also saw a big reduction in the number of new foreign firms. The capital regions of Belgium, Bulgaria, Austria and Denmark, and Hamburg saw the number of new foreign firms per head drop by more than 400 firms.

In conclusion, foreign firms and FDI will continue to play a key role in EU regional development. The key question is which regions will be able to capitalise on this



**New foreign firms, 2005-07**

Number of new foreign firms per million inhabitants



Source: ISLA-Bocconi



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## 11. Business expenditure on R&D

This indicator measures the share of regional GDP invested in business expenditure on research and development (BERD).

### Why does this matter?

BERD indicates the extent to which firms in the region are active in developing innovations and transforming new ideas into market opportunities through R&D. In general, the majority of activities related to R&D take place within the private sector. BERD is therefore also a key indicator of the region's involvement in terms of innovation.

### How do the EU regions score?

Scores on this dimension vary widely across EU regions. BERD is highly concentrated from a geographical point of view. Ten regions account for an 32% of this type of expenditure in the EU.

Regions with the highest BERD to GDP ratio are all located in Germany, the Nordic MS and the UK, with BERD exceeding 3% of GDP. At the other end of the spectrum, a series of regions mainly located in Bulgaria, Greece, Poland, Portugal, Romania and Spain have shares that are practically negligible.

Country	Top Ten regions	BERD in % GDP
The ten regions with the highest Business expenditure on R&D as a % of GDP in 2006		
DE	Stuttgart	4,9
SE	Västsvrige	4,6
DE	Braunschweig	3,9
FI	Pohjois-Suomi	3,7
DE	Oberbayern	3,7
UK	Lancashire	3,6
UK	Essex	3,4
SE	Sydsverige	3,4
SE	Stockholm	3,2
DE	Tübingen	3,2

*BE NUTS1, DK national, no data for FR9 (=DOM) and BG31*

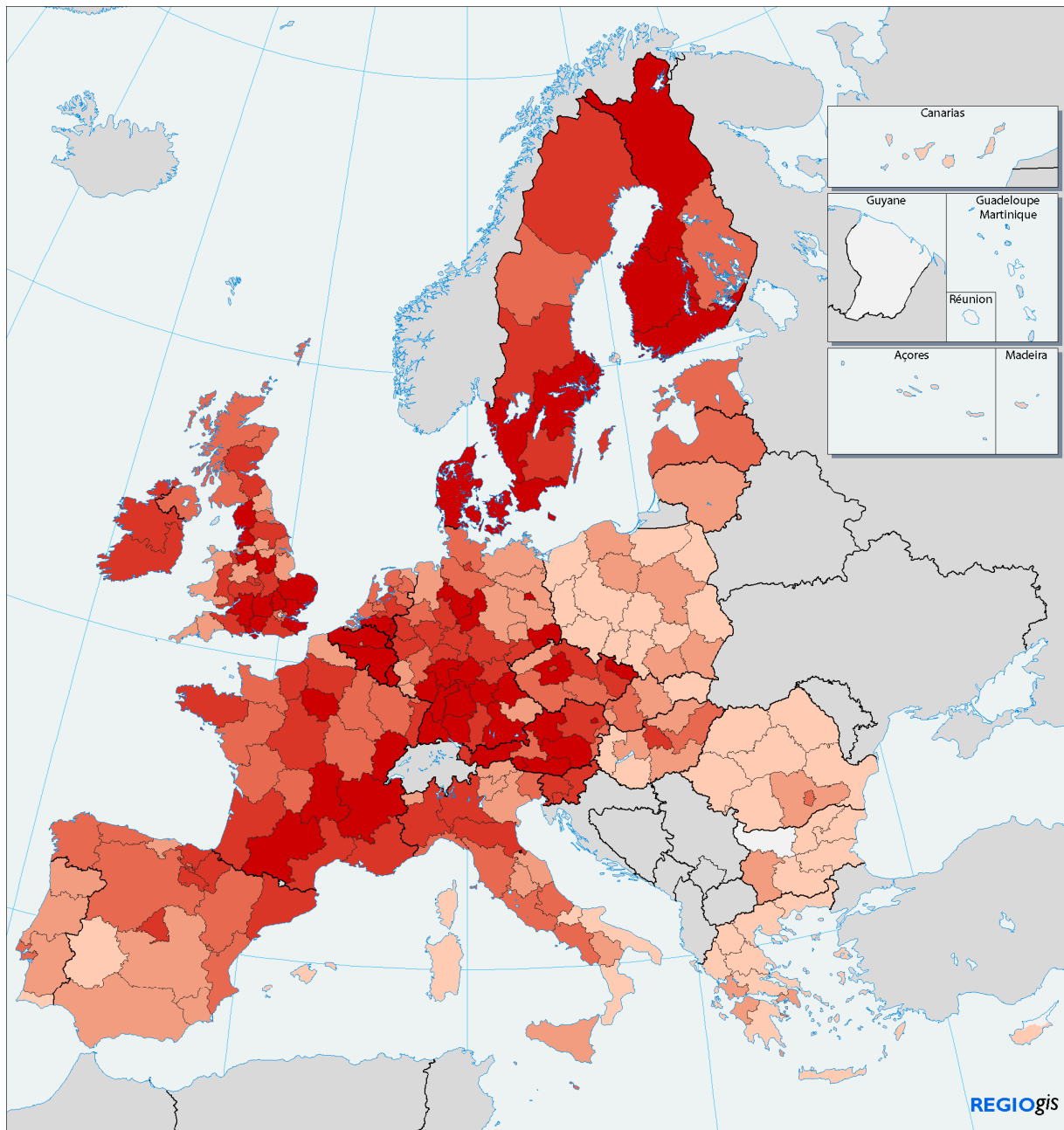
In general, regions in the Western MS have much higher BERD than in the Central and Eastern MS. On average, the share of regional GDP spent of BERD is 1% in the Western 15 MS against 0,3% in the 10 CE MS, Malta and Cyprus.

Changes in the BERD also feature important variations from one region to another. In Midi-Pyrénées and Kärnten, the ratio of BERD to GDP increased respectively by 1,20 and 1,12 percentage points between 2000 and 2006. In Rheinhessen-Pfalz and Střední Čechy, the share of GDP spent on BERD decreased by 0,82 and 0,73 respectively over the same period.

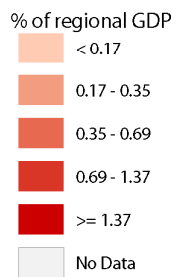
Country	Top Ten Movers	Change in BERD as % of GDP
The ten regions with the biggest increase in % points in BERD as a % of GDP, 2000-2006		
FR	Midi-Pyrénées	1,20
AT	Kärnten	1,12
CZ	Moravskoslezsko	1,05
SE	Västsvrige	0,90
CZ	Praha	0,75
IE	Border, Midland and Western	0,74
AT	Oberösterreich	0,73
ES	Comunidad Foral de Navarra	0,73
AT	Steiermark	0,62
SE	Sydsverige	0,59

*BE and UK NUTS1; BG, DK and SI national, no data for FR9 and 7 PL regions*

Regions with a high growth of BERD are mostly located in the West, with some exceptions such as the two Czech regions. If this trend of high BERD growth in the West continues, R&D based innovation would concentrate even further in this part of the Union.



**R&D expenditure in the business enterprise sector, as % of GDP, 2006**



EU27: 1.18  
 DE, IE, GR, IT, NL, PT, SK, SE, UK: 2005  
 FR: 2004  
 Source: Eurostat



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