

# Flanders Outlook 2012

• Vlaanderen

# FLANDERS OUTLOOK 2012

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A BENCHMARKING OF FLANDERS AMONGST THE EUROPEAN REGIONS

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February 2012



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# CONTENT

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- 1 INTRODUCTION.....2**
  
- 2 ECONOMIC WELFARE.....4**
  
- 3 LABOUR MARKET.....16**
  
- 4 INNOVATION.....21**
  - 4.1 Prerequisites to innovation .....21
  - 4.2 Creation of knowledge .....23
  - 4.3 Innovation and entrepreneurship.....24
  - 4.4 Application of innovation.....25
  - 4.5 Intellectual property .....27
  
- 6 CONCLUSION .....29**
  
- Annex: Key indicators for Flanders and the benchmark regions .....32**

# 1 INTRODUCTION

By means of the plan 'Flanders in Action', the Flemish Government wants to strengthen Flanders' economic and innovative potential so that it will belong to the top of the European regions in 2020. Today Flanders is a prosperous region. Yet, Flanders cannot afford to let things take their own course. The world around us is evolving at a high pace. We are being confronted with challenges such as the unwinding of the economic crisis, the uncertainty on the financial markets, financing problems of certain euro countries, the energy and climate question, changing migration patterns, the ageing of the population and mobility problems. Each country and each region will have to respond to these challenges in its own way.

This analysis starts from a determination of regions that are yet a step ahead of Flanders in the development to truly innovative regions. We want to depict how Flanders is positioned in comparison to those 'excellent' regions. In the process of this exercise a database with statistics of 131 EU regions has been developed. It is downloadable on the website [www.vlaandereninactie.be](http://www.vlaandereninactie.be). The analysis, however, concentrates on the socio-economic performance of Flanders and the limited set of benchmark regions.

In the recent past the Research Centre of the Flemish Government already did such exercises<sup>1</sup>. The benchmark list is composed of 15 regions. They were determined on the basis of innovative indicators: the share of highly educated workers, participation in lifelong learning, R&D intensity, the share of workers in knowledge intensive branches, the share of workers in creative branches and the number of patent applications.

The benchmark list consists of:

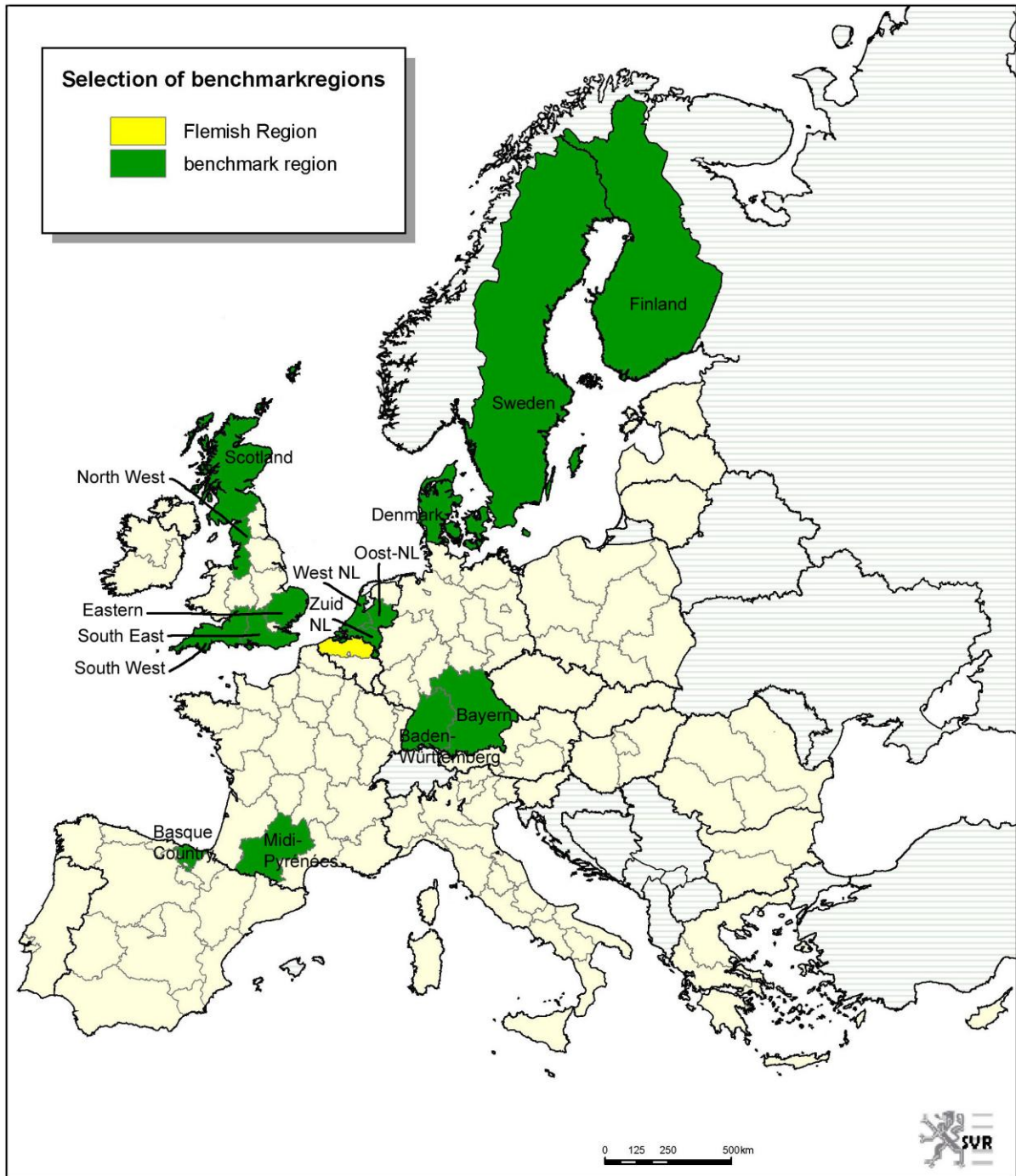
Denmark
Baden-Württemberg
Bayern
The Basque Country
Midi-Pyrénées
Oost-Nederland
West-Nederland
Zuid-Nederland
Finland
Sweden
North West (UK)
Eastern (UK)
South East (UK)
South West (UK)
Scotland

In the statistical analysis hereafter, Flanders will be compared to those other regions in a list of 16 regions (15 benchmark regions + Flanders).

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<sup>1</sup> E.g.: 'Flanders Outlook 2011– A benchmarking of Flanders amongst the European regions', February 2011.

Map 0: Selection of benchmark regions



The broad picture is more important than the focus on the ranking of Flanders amongst the benchmark regions or the whole set of 131 EU regions. It is not an analysis of how the benchmark regions have evolved, but rather of the Flemish socio-economic performance during the last years and in the light of the recent top performance of the benchmark regions. The benchmarking will reveal whether Flanders can catch up with the benchmark regions in the (next) future.



## 2 ECONOMIC WELFARE

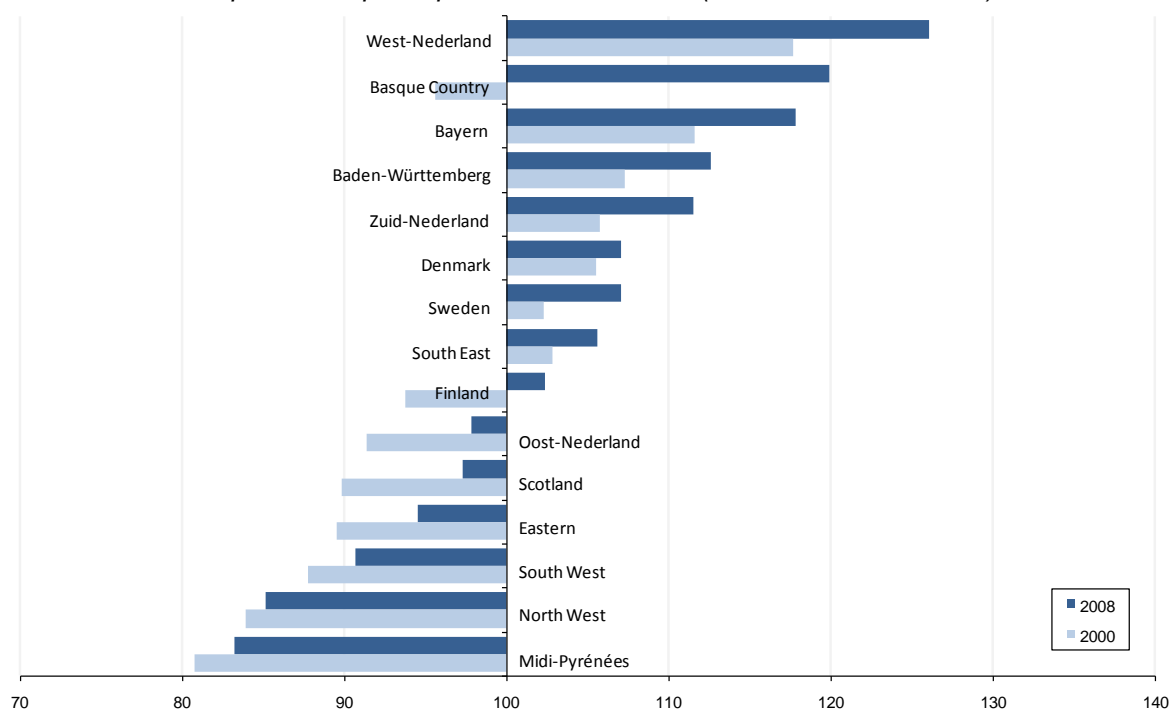
The welfare of a country or region is usually estimated by the **gross domestic product (GDP)**. GDP is a broad measure of the value of goods and services produced within an area. It is a basic indicator in the European System of National Accounts (ESA95). By means of purchasing power standards (PPS), GDP data within the European Union can be compared. By doing so, price differences in relation to income are accounted for.

Flanders is a prosperous region. Its location in the midst of Western Europe allows Flemish citizens to enjoy a high degree of material welfare. The International Monetary Fund (IMF) has set up a list of 33 developed countries. Belgium, and thus Flanders, makes part of it. With 15.1% of the world population these countries produced 53.8% of world output in 2009. The other, less-developed countries (totaling 150) are responsible for 84.9% of the world population and 46.2% of world output.

The Flemish GDP amounts to 28.779 euro per inhabitant in 2008. Thus Flanders ranks 10<sup>th</sup> in the list of benchmark regions, like in 2007. The German and Scandinavian benchmark regions as well as the Basque Country, the British South East and West- and Zuid-Nederland have a relatively higher GDP per inhabitant. The other British benchmark regions, Oost-Nederland and Midi-Pyrénées score less well. The presence of a capital city in a region often gives a boost to GDP performance as appears from the Scandinavian regions and West-Nederland. Flanders' position deteriorated from a 5<sup>th</sup> place in 1995 to a 9<sup>th</sup> in 2003. From then on to 2006 Flanders stayed at a 9<sup>th</sup> place. The effect of the financial-economic crisis began to reveal itself clearly in 2008: GDP per inhabitant decreased slightly in 2008 in Flanders and in most benchmark regions.

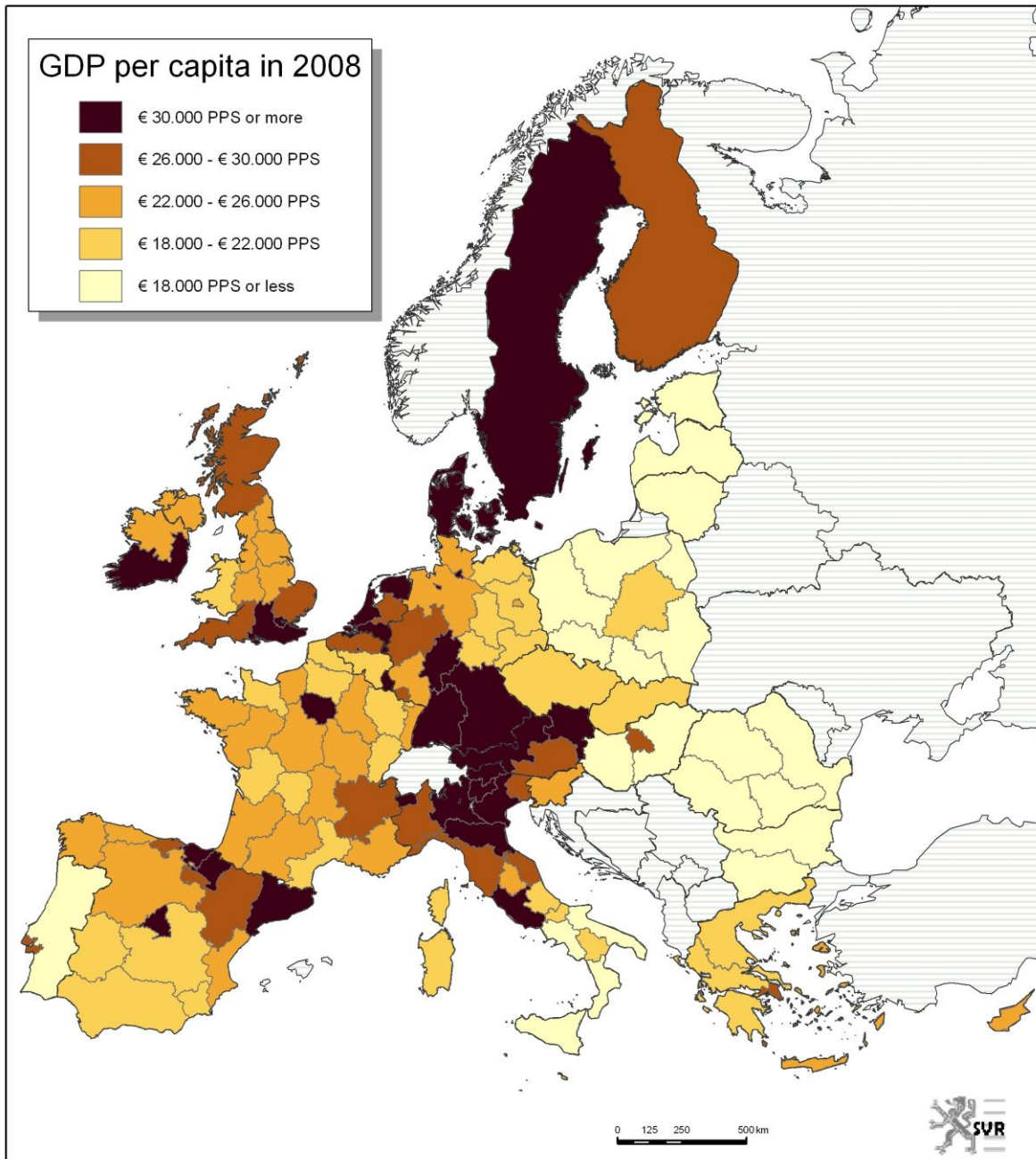
The benchmark regions were determined on the basis of their good economic and technological performance. So it does not surprise that Flanders lost some terrain during the last years. The challenge for Flanders is to keep pace with the benchmark regions from now on.

Graph 1: GDP per capita in 2000 and 2008 (indices, Flanders = 100)



Source: Eurostat, Research Centre of the Flemish Government

Map 1: GDP per capita in 2008



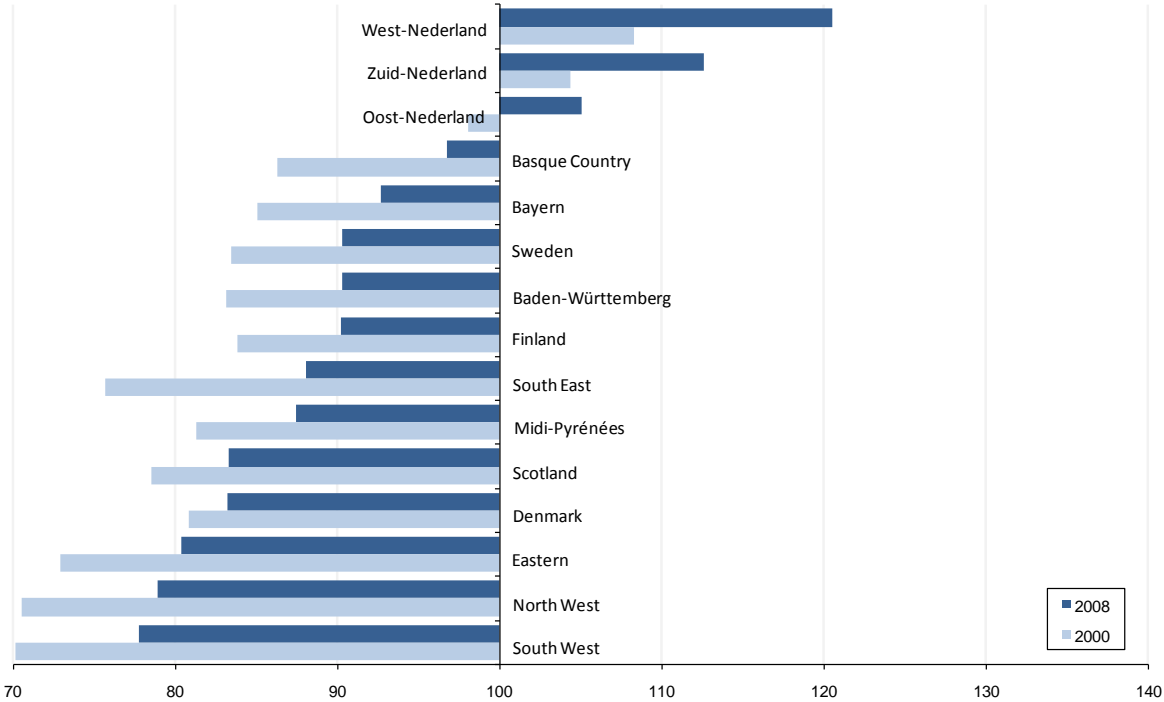
Capital regions are generating much welfare because of the location of decision centres of big companies and administrations. The Brussels region is geographically small, contrary to other capital regions such as Île-de-France, Greater London, Lazio Roma. This means that commuting between work and place of living often takes place between the Brussels and the Flemish or Walloon region. Thus lots of Flemish people go to work in Brussels and thus contribute to the Brussels GDP (instead of the Flemish). So in an overall ranking which also contains capital cities Flanders cannot claim a top position: on the whole set of 131 European regions Flanders ranks 33rd in 2008, just outside the first quartile. The best performers are Luxemburg (€ 69,890 PPS), Brussels Capital Region (€ 54,138 PPS) and London (€ 49,200 PPS), followed by more capital city regions. The position of Flanders gradually worsened over time. In 1995 Flanders was 26th. Flanders then preceded Noord- and Zuid-Nederland, Southern and Eastern Ireland and some Spanish regions (of which the Basque Country and Catalonia). On the other hand, Flanders was able to overtake the Italian regions of Piemonte and Toscana. In comparison with 2007 Flanders lost another place.



GDP per head can be decomposed into three factors: labour productivity, the number of jobs as a % of the population aged 15-64 years and the share of the population aged 15-64 years in total population. All three factors have an impact on the creation of welfare.

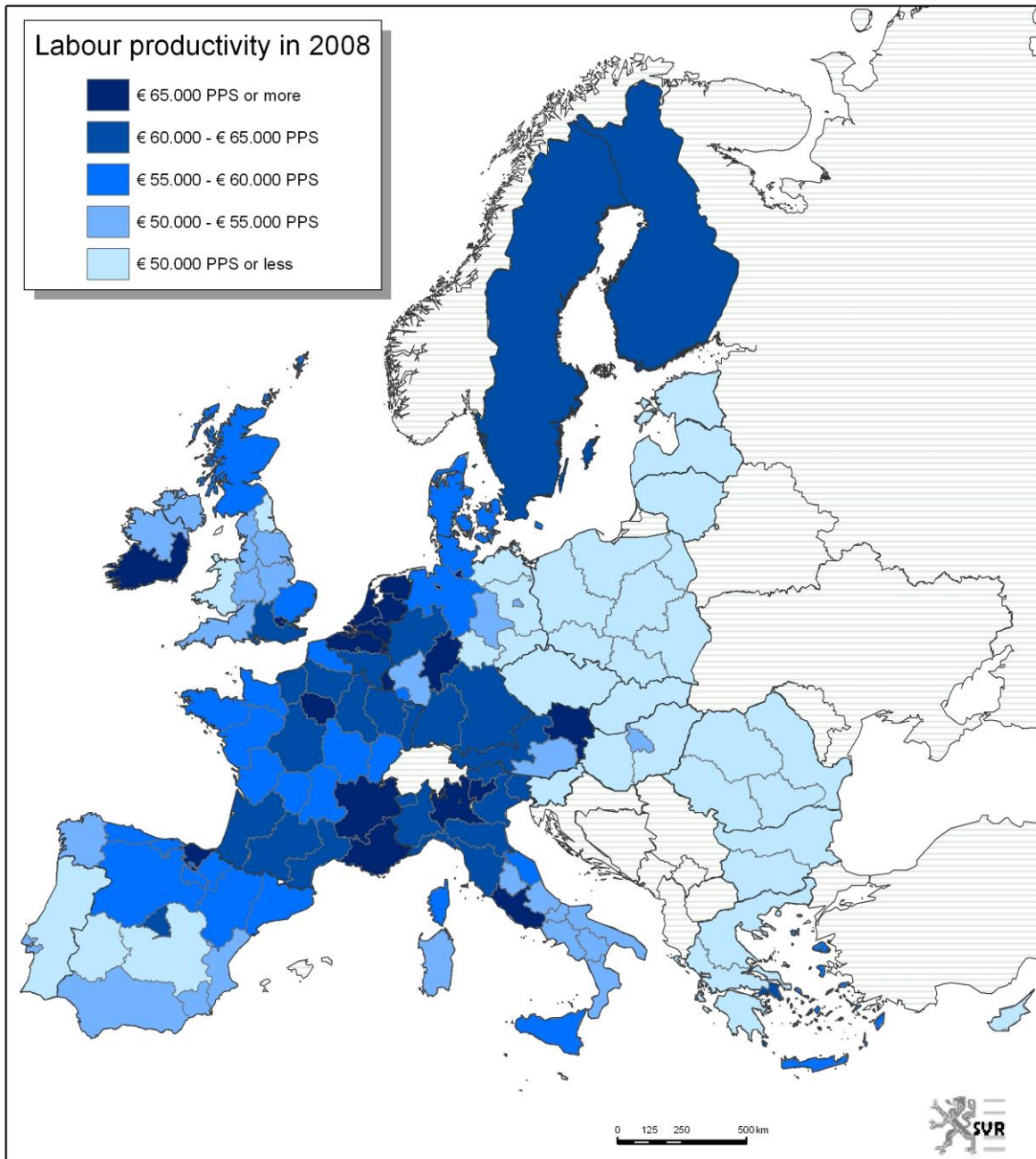
Flanders owes its prosperity first and foremost to a high **labour productivity**. This is a structural feature of the Flemish economy. With € 68,887 PPS per worker Flanders ranks 4<sup>th</sup> amongst the benchmark areas in 2008 (same position as in 2007). The three Dutch benchmark areas have a higher labour productivity. Furthermore, the German benchmark Länder, the Basque Country, Finland and Sweden are doing relatively good. Throughout the years labour productivity was always an asset for Flanders, but Flanders did a bit better in 1995 (2<sup>nd</sup> place after West-Nederland). In comparison with all 131 EU regions, Flanders ranks 12<sup>th</sup>. This is still good, given the fact that Flanders has no capital region.

Graph 2: Labour productivity in 2000 and 2008 (indices, Flanders = 100)



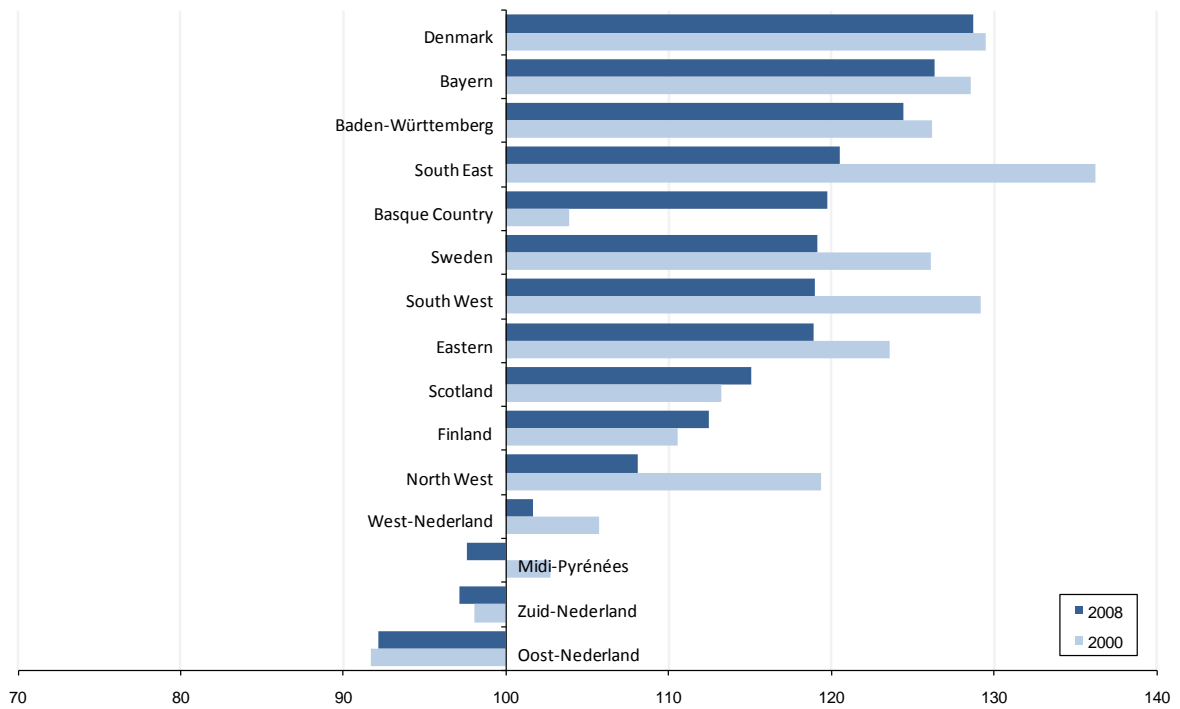
Source: Eurostat, Research Centre of the Flemish Government

Map 2: Labour productivity in 2008



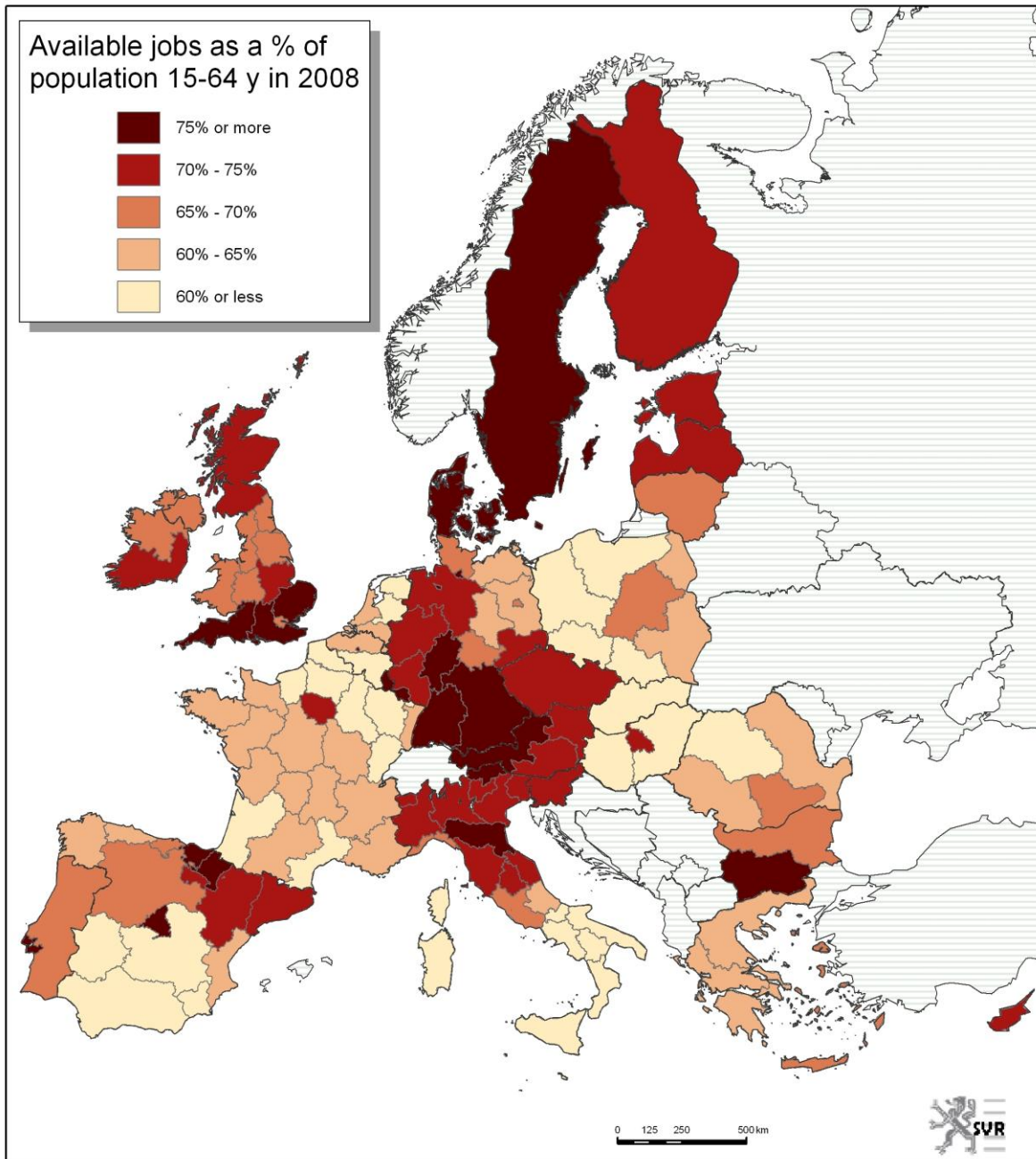
Flanders counts 63.3 **jobs per 100 people aged 15-64** in 2008. So Flanders can be found on a 13<sup>th</sup> place amongst the 16 benchmark regions. Part of the mediocre performance of Flanders must be sought in the fact that quite a lot of people commute to the Brussels region. Due to the small geographical area of the Brussels Capital Region the place of living (income) and the place of working (employment and generation of GDP) are located in two areas. Denmark and the two German benchmark Länder have the highest value (around 80%). Only Oost- and Zuid-Nederland and Midi-Pyrénées score lower than Flanders. Since 1995 this indicator gradually increased, as in the other regions. Thus Flanders' position amongst the benchmark regions did not alter much. But in the list of 131 regions, Flanders ranks 78<sup>th</sup> in 2008. There's a gradual improvement of its position (91<sup>st</sup> in 1995, 83<sup>th</sup> in 2007). Brussels and some other capital regions as well as West German Länder, Northern Italy and some Spanish and British regions have a high score in the broad ranking. There are relatively few jobs in Southern Italy and some Polish and French areas.

Graph 3: Available jobs / population 15-64 years in 2000 and 2008 (indices, Flanders = 100)



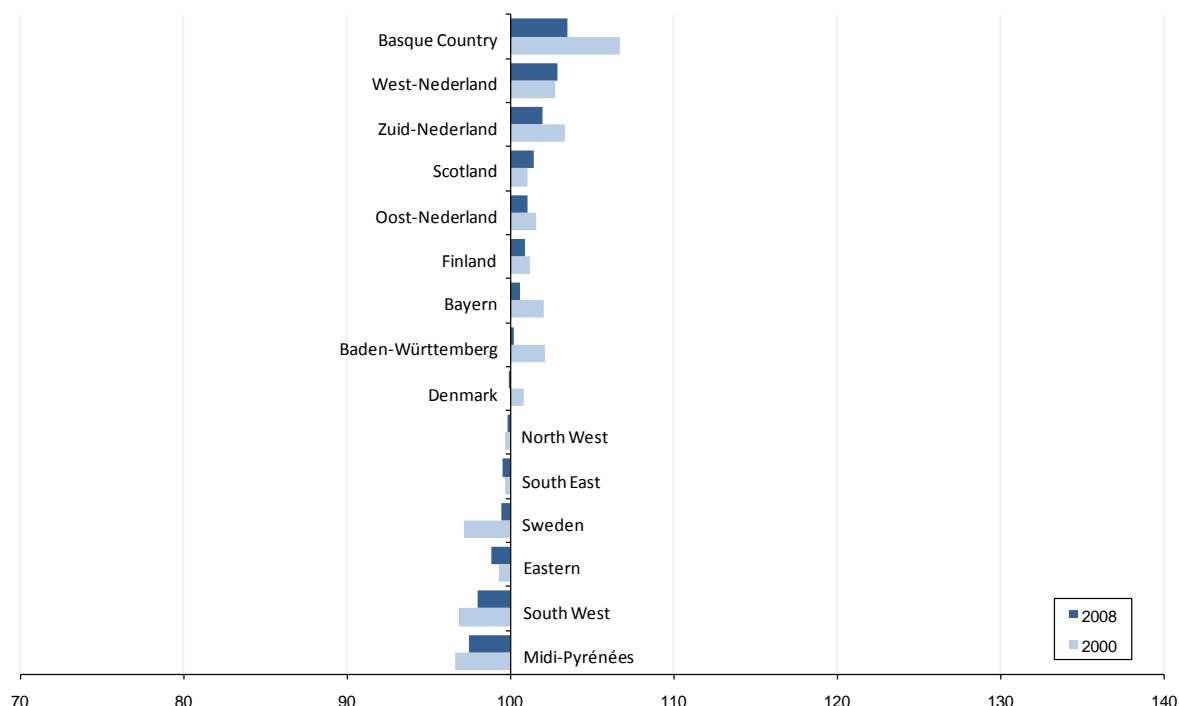
Source: Eurostat, Research Centre of the Flemish Government

Map 3: Available jobs as a percentage of population 15-64 y in 2008



The third factor of importance in GDP/head is the **share of people aged 15-64 years**. As in 2007 this demographic indicator amounts to 66.0% in 2008. This is rather weak compared to other benchmark regions (9<sup>th</sup> place), but nevertheless Flanders improved its position by two places in 2008. The Basque country (68.3%) and West- and Zuid-Nederland (67.9% and 67.3%) lead the benchmark ranking. Midi-Pyrénées (64.3%) and the British South East (64.6%) have the lowest share of people on intermediate age. In a longer time perspective, the indicator slightly decreased (66.9% in 1995). Flanders was 8<sup>th</sup> in 1995. The indicator is highest in many regions of the new member states (Slovakia, Poland, Czech Republic, Romenia...).

Graph 4: Share of the population of 15-64 years in 2000 and 2008 (indices, Flanders = 100)



Source: Eurostat, Research Centre of the Flemish Government

Wages and income are key indicators of the welfare of the inhabitants of regions.

The **unit labour cost** is the average wage per employee. In Flanders the unit wage cost amounts to 46,809 euro per employee in 2008. With that Flanders is 13<sup>th</sup> amongst the 16 benchmark regions (ranking from lowest to highest). Only West- and Zuid-Nederland and Denmark have a higher average wage cost. The German and British benchmark regions and the Basque Country have the lowest cost. In comparison to 2007, Flanders lost a place. But in the second half of the nineties, Flanders was 15<sup>th</sup>. This indicator is not so important as such; it must be seen in relation to labour productivity.

The ratio between them is the **wage cost per unit of output**. In Flanders wages make out 56% of gross value added in 2008. This is quite good (5<sup>th</sup> place in the list of 16 benchmark regions). Only the German Länder, Finland and the Basque Country score lower (= better). The indicator is especially high in Denmark (69%), and to a lesser extent in Sweden and the British benchmark areas. Indeed the high labour productivity neutralises to a great extent the high labour cost in Flanders. Yet, Flanders' position deteriorated somewhat over the years; in 1995 it stood 2<sup>nd</sup> (4<sup>th</sup> in 2007). In a broader perspective of 131 EU regions Flanders does less well (93<sup>th</sup> place in 2008). The Mediterranean and Eastern regions generally have lower wage costs per unit of output.

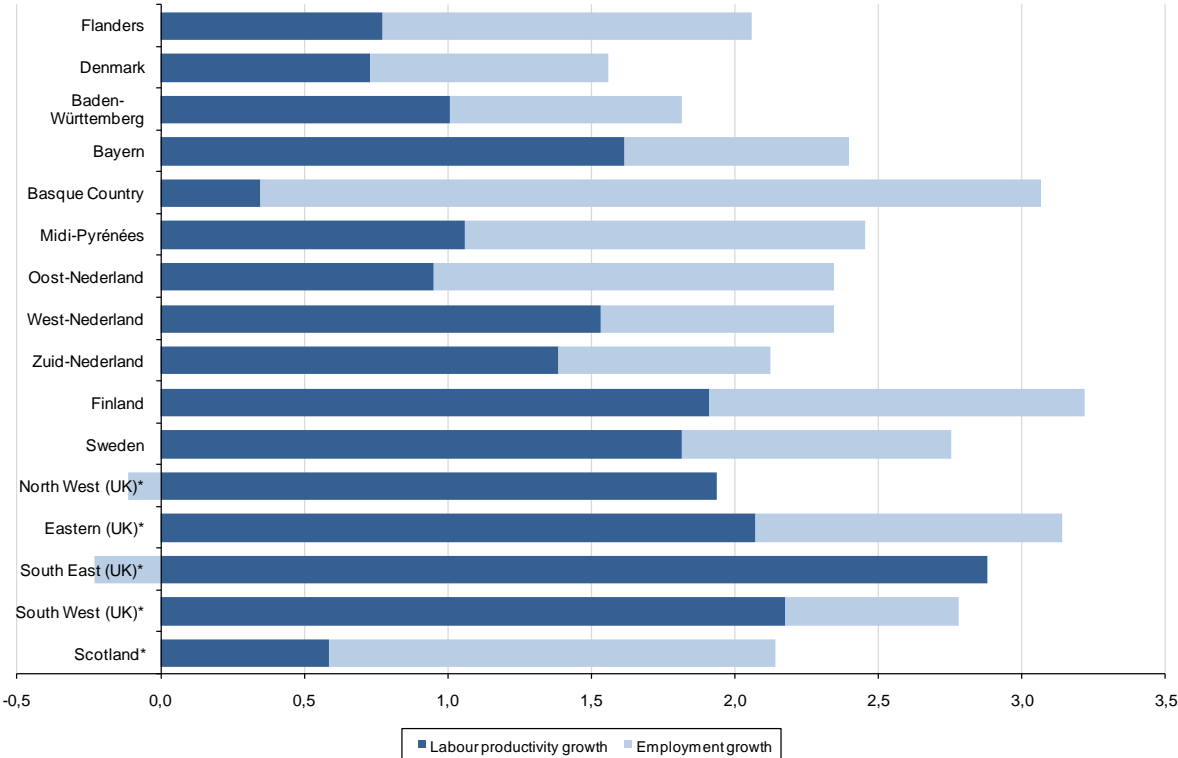
A region can be an important producer of welfare, but the income generated by it does not necessarily accrue to the inhabitants of that region. By means of commuting the place of living and of working can be in geographical different locations. The **net disposable income** in Flanders amounts to € 17,139 PPS per head (based on final consumption) in 2007. This allows for a 7<sup>th</sup> place amongst the 16 benchmark regions. Baden-Württemberg, Bayern, the Basque Country and some British regions have a higher income per head. The Scandinavian countries are worst off. In 2006 Flanders was 8<sup>th</sup>, but in 1995 it was 3<sup>rd</sup>, only behind the two German Länder. Though a complete set for all 131 EU regions is lacking, there are indications that Flanders is doing less well than in the GDP ranking. Mainly capital areas, but

also many German, British, North Italian and French regions have a higher net disposable income per head.

According to Eurostat, the average Flemish **growth rate of gross value added** was 1.5% during 2000-2009. The recession of 2009 (-3.4%) had an important downward influence on that average. In comparison to regions for which data for the same time period are available, Flanders' performance is average. However, the recession was less severe in Flanders than in the German regions, the Basque Country, Denmark and most of the Dutch benchmark regions. The other regions have no recent data. A comparison is thus a bit awkward (due to the significant influence of 2009 on the data).

During 2000-2008, real growth in Flanders was primarily due to **employment growth**. In the majority of benchmark regions, however, labour productivity increase was the major factor (i.e. the German Länder, Finland, Sweden, most Dutch and British benchmark regions).

Graph 5: Components of real GDP growth, average of 2000-2008 (in percentage points)



Source: Eurostat, Research Centre of the Flemish Government  
 \* British regions: average of 2000-2007

**Investments** lead to the changing of worn out capital goods or to the utilisation of new capital goods, all of which are a prerequisite to create GDP. Flanders typically has a high investment ratio (22.9% in 2007). Though recent data are lacking, it appears that Flanders is one of the top performers amongst the benchmark regions.

The economic position of countries and regions can also be linked to the presence and development of branches.

On a European regional level, only a breakdown of gross value added (GVA) in six branches is available (2008 data). The **primary sector** is least importance in every benchmark region. Finland (2.9%) and Midi-Pyrénées (2.6%) score highest. Baden-Württemberg is by far the



most **industrialised** benchmark region (34.5%). The Basque Country, Bayern and Finland follow in second degree (between 25 and 30%). With 20.0% Flanders has an average position. Industry is less well represented in the British areas, Midi-Pyrénées and Oost- en West-Nederland. The Basque Country is specialised in **construction** (9.7%). To a lesser extent this is also the case for Midi-Pyrénées. On the contrary, construction accounts for only 4 till 5 % of GVA in the two German Länder. Flanders has a share of 6.3%. Then a rather big sector that comprises **hotels and restaurants, transport and communication** stands for 24.2% of GVA in Flanders: this is the greatest share of all benchmark regions. West-Nederland and some British regions also score high. The two German benchmark Länder have the lowest share (between 15 and 16%).

The British South East is specialised in **financial and business services** (35.1%) which does not surprise because the financial centre of London borders to that region. Bayern and West-Nederland also generate a relatively big share of their GVA in that branch. Flanders' position is mediocre (27.9%). The Basque Country is less well known for financial and business services (19.2%).

Finally **public administration, health, personal and cultural services** are relatively important in Denmark and Midi-Pyrénées (both 27.8%). Oost-Nederland and some British regions also score relatively well. Flanders has a low share (20.8%), because an important part of its public administration is located in Brussels and thus contributes to the Brussels' GVA.

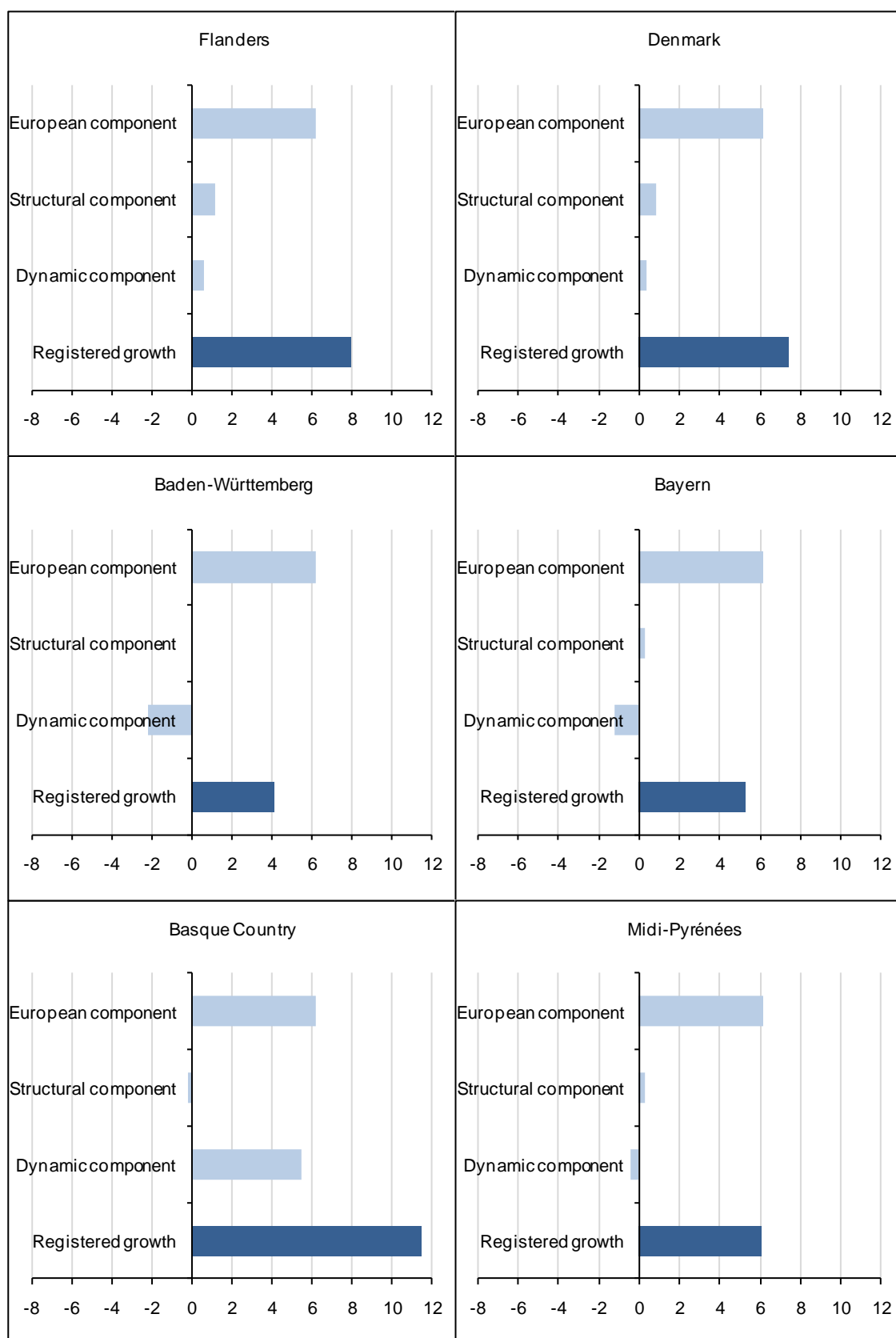
The composition in branches also has an influence on growth. Hereafter, this will be analysed for the **employment variable**<sup>2</sup>.

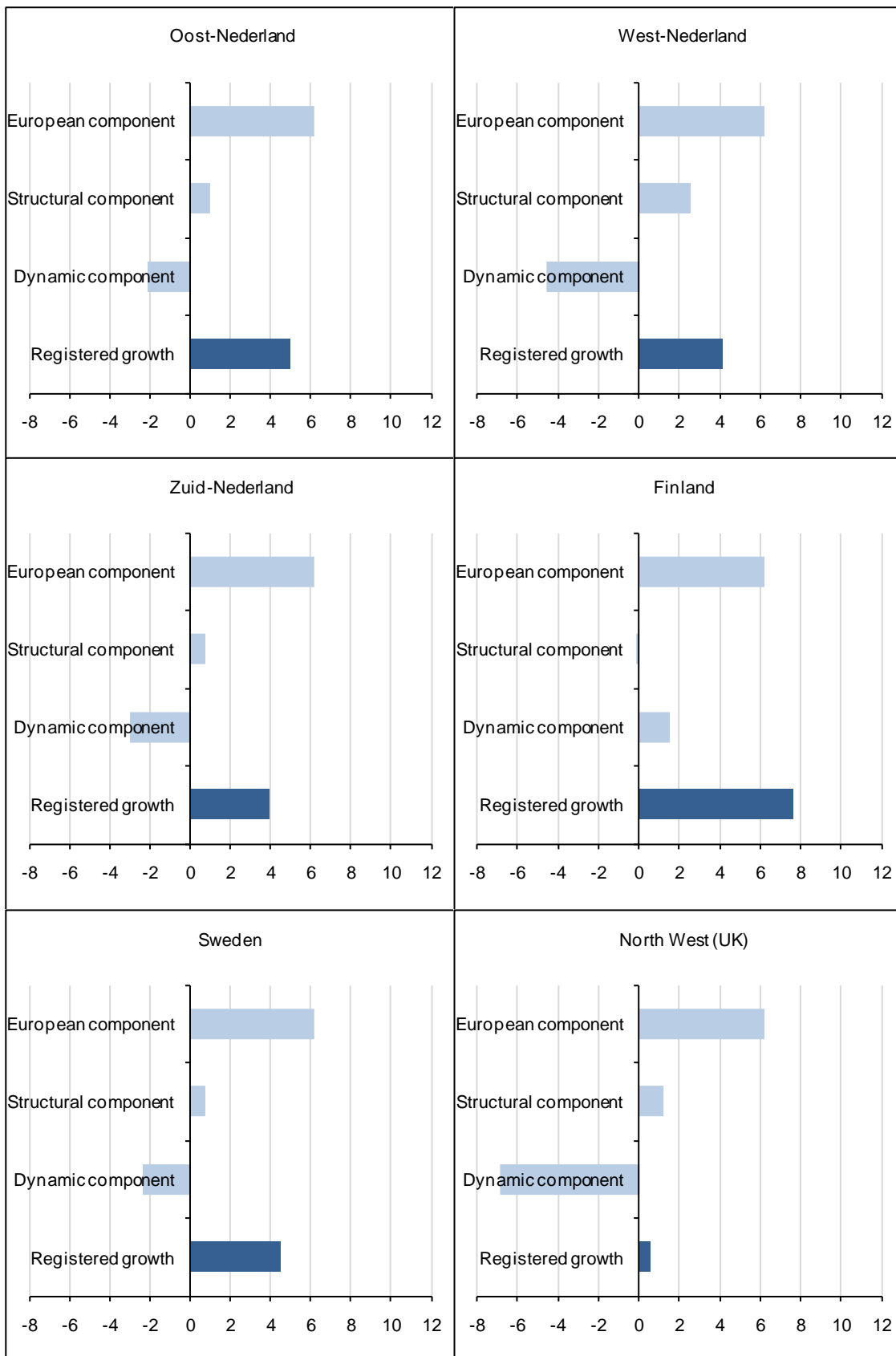
During 2000-2008 total employment increased by 7.9% in Flanders. Only the Basque Country did better (+11.5%). The British regions were generally performing weakest, though there was positive growth everywhere. EU27 employment growth was 6.2%. Flanders outperformed the EU27 because of two reasons: it has a relatively better mix of branches, which means that growth sectors are more present in Flanders. This is the so-called structural component (+1.2 percentage points or ppt). But most branches also had a relatively larger employment increase than their EU27 counterpart. This is the dynamic component (+0.6 ppt). It must be noted that most 16 benchmark regions have a positive structural component. Employment growth differences are far more due to differences in the dynamic component. The Basque performance is solely due to a large dynamic component (the largest of all benchmark regions). There is no effect of the mix of branches. The two German Länder had a smaller employment increase than in the EU27 because of a negative dynamic component, the contribution of the sectoral mix not being noteworthy. The performance of Midi-Pyrénées is quite close to the EU27 average. The three Dutch areas have negative dynamic components that can only partly be compensated for by their positive structural components. This is also the case for the British benchmark regions and Sweden. The Danish experience resembles that in Flanders. Finally, employment growth in Finland during 2000-2008 was stronger than in the EU27, because of a positive dynamic component only.

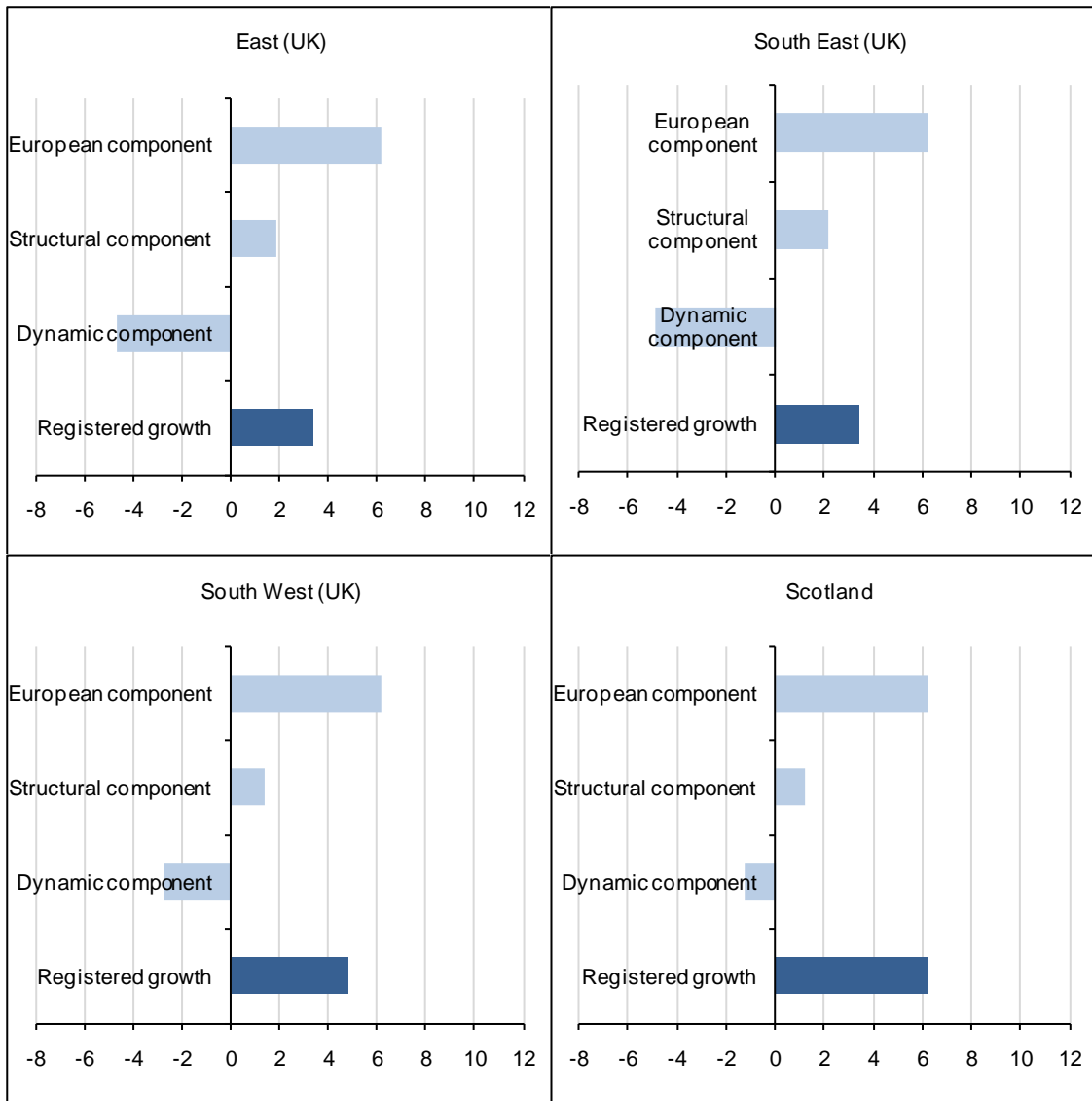
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<sup>2</sup> Due to inflation differences over time it is not appropriate to use gross value added in this regional exercise.

Graph 6: Decomposition of employment growth in the benchmark regions, 2000-2008 (registered growth in %, decomposition in percentage points)







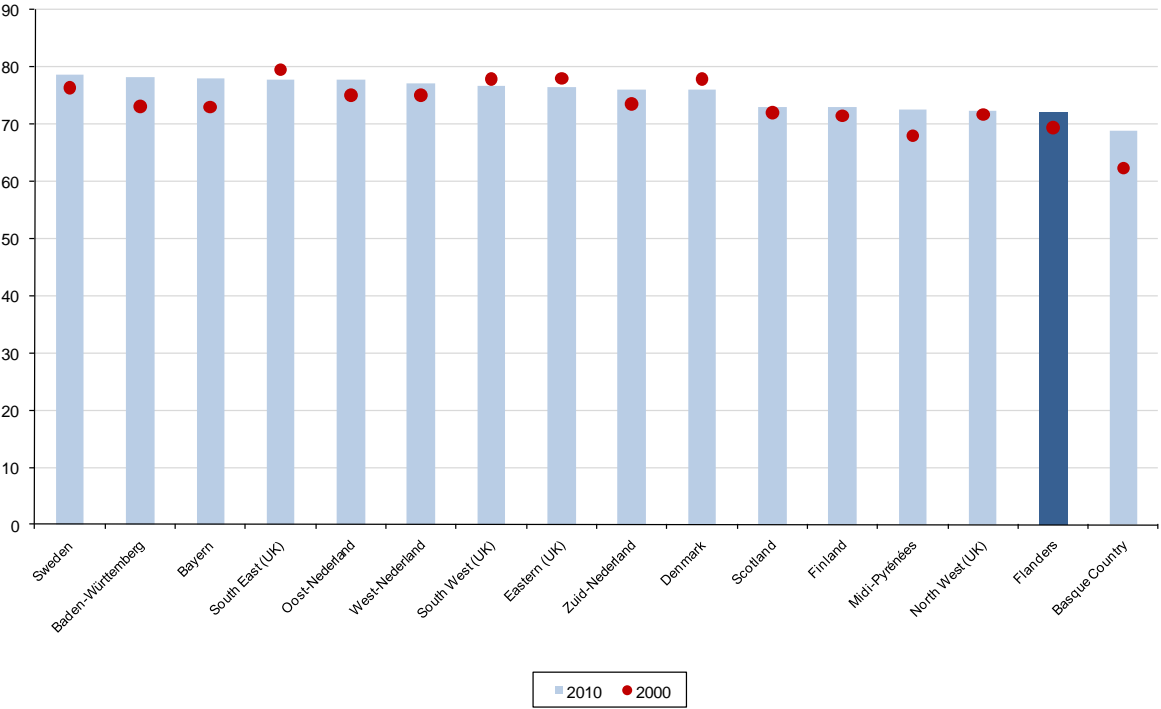
Source: Eurostat, Research Centre of the Flemish Government

### 3 LABOUR MARKET

According to Eurostat, the Flemish employment rate<sup>3</sup> is 72.1% in 2010. This is quite low, as only the Basque Country has a lower value. Sweden and the two German benchmark Länder have the highest ratio (between 78 and 79%). The British North West, Midi-Pyrénées and Sweden have a ratio barely higher than Flanders.

Throughout the years the employment rate was always relatively low in Flanders: during the last three years Flanders stood 15th in a list of 16 benchmark regions, roughly the same as in earlier years. But in real terms, there was an increase (in 1999 it was 67.9%). Furthermore, it is noteworthy that Flemish employment rate increased in 2010 compared to the crisis year 2009. The majority of the benchmark regions faced further decreases in 2010. Another positive point is the improvement of Flanders in the ranking of all 131 EU regions: in 2010 Flanders is 36th compared to a 56th place in 2006 (mainly Scandinavian, German, Austrian and British regions performing better). All this indicates that Flanders coped relatively well with the crisis in comparison to other European regions.

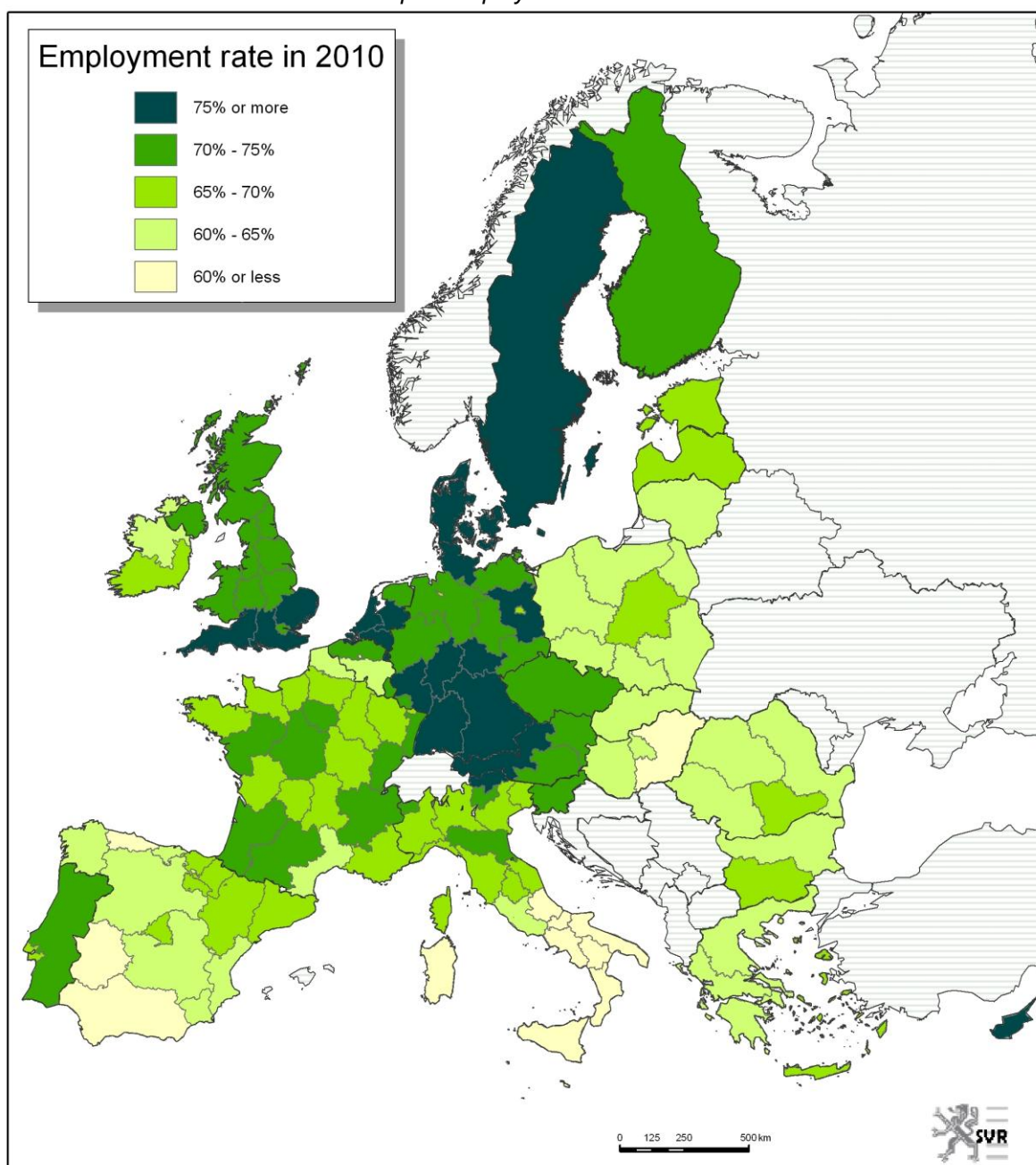
Graph 7: Employment rate in 2000 and 2010 (in %)



Source: Eurostat, Research Centre of the Flemish Government

<sup>3</sup> The number of workers living in a region as a % of the people on active age. In accordance with the Europe 2020 strategy the latter comprises people aged 20-64 years (formerly it was 15-64 y.).

Map 4: Employment rate in 2010



Flanders has the lowest **employment rate of people aged 55-64 years** of all benchmark regions (38.2% in 2010). This explains for a large part its overall low employment rate amongst the 16 areas. There are often huge differences between the regions. Employment rate of elder workers is highest in Sweden (70.5%). This country also leads the ranking of all EU regions. Furthermore, Baden-Württemberg and the British South East also have quite high ratios (64.0% and 63.7%). All other benchmark regions have a value between 50 and 60% with the exception of Midi-Pyrénées (39.5%) and the Basque Country (43.5%). Though there is a gradual improvement throughout the years (23.8% in 1995) Flanders was always last since the start of the series in 1999. In the list of the 131 EU regions Flanders is 93<sup>rd</sup> in 2010. This is not good, but – again – it is better than some years ago (117<sup>th</sup> in 2006).

There are currently more men at work than women. In 2010 the ratio between the employment share and the population share for women was 0.90 in Flanders. This is lower than in most benchmark regions (13<sup>th</sup> place), but Flanders is picking up: in 1999 the ratio was



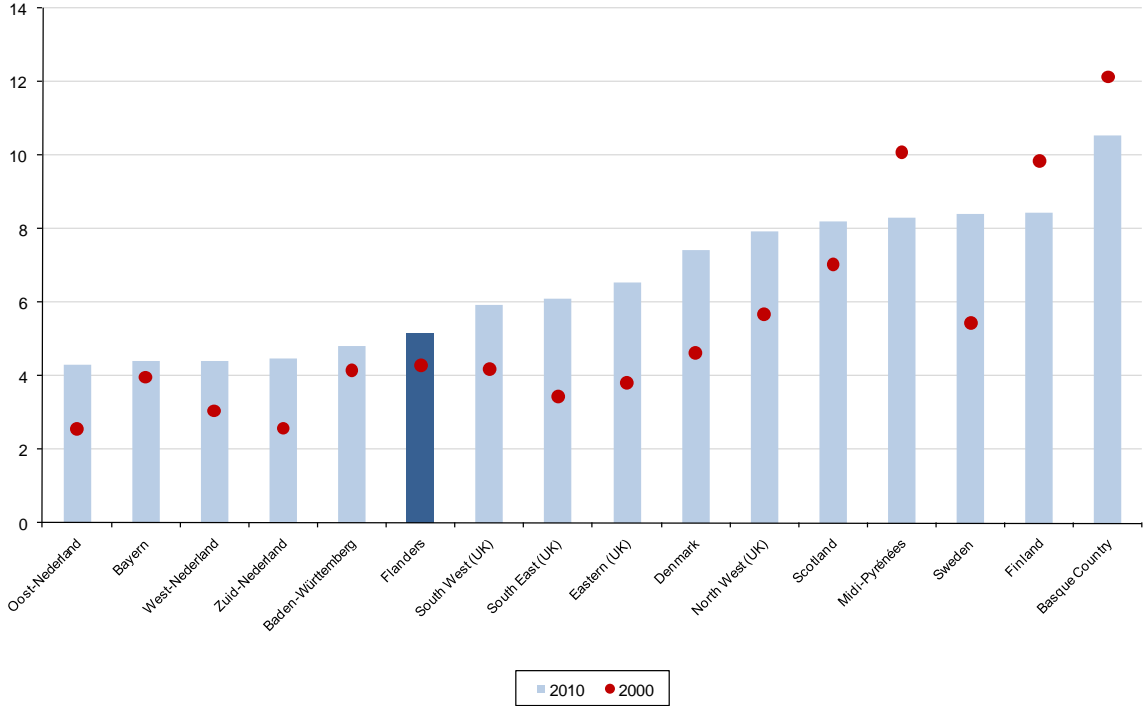
0.83, good for a 15<sup>th</sup> place. In the listing of 131 EU regions Flanders is 56<sup>th</sup> in 2010. In the southern and eastern European regions women are often less well represented in the workforce compared to their population share.

Flemish **unemployment rate** is 5.1% in 2010. Flanders is 6<sup>th</sup> on the benchmark list. This is somewhat better than in 2009 (4.9%, 4<sup>th</sup> place) because the two German Länder were able to reduce their unemployment rate in 2010 below the Flemish rate. Apart from them the Dutch regions also have a lower unemployment rate. The Basque Country has an important unemployment problem (10.5%). Furthermore Sweden and Finland also face relatively high unemployment rates (both 8.4%). The same goes for Midi-Pyrénées (8.3%).

The evolution of unemployment depends to a large part on the business cycle. In 1999 the unemployment rate in Flanders was not much higher than today. Troughs were reached in 2001 and 2008, somewhat later than the peak of the business cycle because of the lagging reaction of unemployment. During the last decade the unemployment rate was highest in 2003 (5.7%). Throughout the years, and until recently, Flanders was able to improve its position (8<sup>th</sup> in 1999, 10<sup>th</sup> in 2002, 2003 and 2005). In the ranking of 131 EU regions, Flanders is 13<sup>th</sup> in 2010, one place worse than in 2009. But in a longer time horizon it clearly is an improvement (36<sup>th</sup> in 2003).

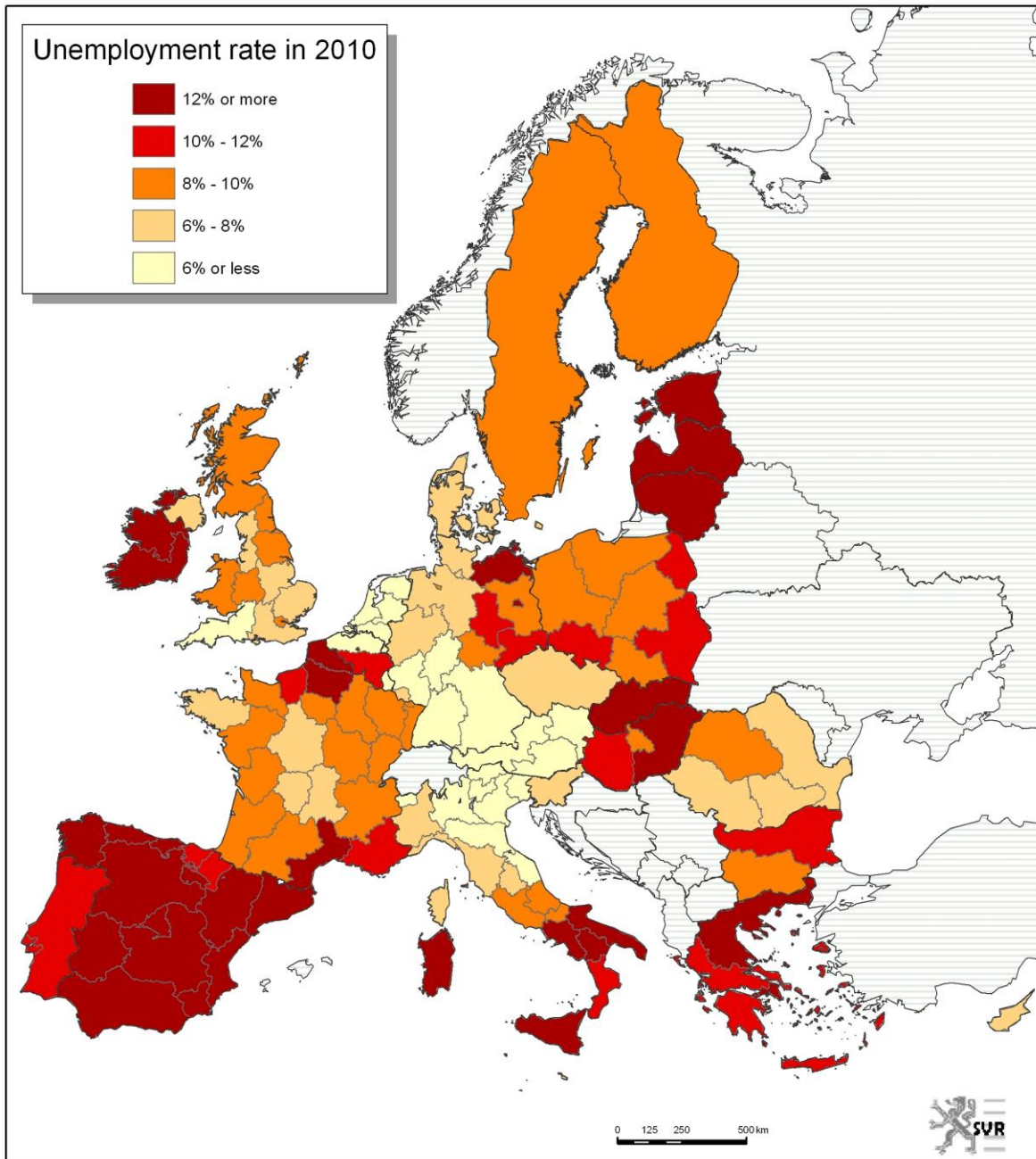
The male unemployment rate amounts to 5.2% in 2010; the female is 5.1%. Since the start of the series in 1999 it is the first year that the male rate is higher than the female. The recent crisis was all the more perceptible in industry – a branch that employs proportionally more men than women. That caused the male unemployment rate to rise faster. Flanders ranks 6<sup>th</sup> amongst the benchmark regions for the male as well as for the female rate. But on the larger ranking, Flanders is 21<sup>st</sup> for the males and 13<sup>th</sup> for the females. The long term improvement of Flanders in the larger ranking is primarily due to the female unemployment rate.

Graph 8: Unemployment rate in 2000 and 2010 (in %)



Source: Eurostat, Research Centre of the Flemish Government

Map 5: Unemployment rate in 2010



The **long term unemployment rate** (longer than one year) in Flanders amounts to 1.9% in 2010. As in 2009 this is good for a 10<sup>th</sup> place in the benchmark list, which is less good than the ranking on overall unemployment. However, in a longer time perspective Flanders did improve its position in absolute as well as in relative terms. The long term unemployment rate was 2.5% in 1999. Flanders was 13<sup>th</sup> then. In comparison to 2009 the Flemish long term unemployment rate increased with 0.4 percentage points. There was also an increase in most other benchmark regions, so Flanders did not change its position in the ranking. The Scandinavian areas generally score better on long term unemployment than on general unemployment. Furthermore, the long term unemployment rate is quite low in the three Dutch benchmark regions and highest in the Basque Country and Midi-Pyrénées, analogous to their position in the ranking of the total unemployment rate. In the ranking of all 131 European areas, Flanders was 20<sup>th</sup> in 2010. This is the same as in 2009, but is still the best result since the start of the series in 1999.

**Part time employment** makes up 24.7% of total employment in Flanders (2010 data). In the Dutch benchmark regions roughly half of the workers are in part time employment. Most regions have a ratio between 25 and 30%. Part time employment is less common in the Basque Country, Finland and Midi-Pyrénées (less than 20%). Throughout the years there is an increase of the share of part time employment in most regions (apart from some regions in the new EU member states). Flanders is no exception.

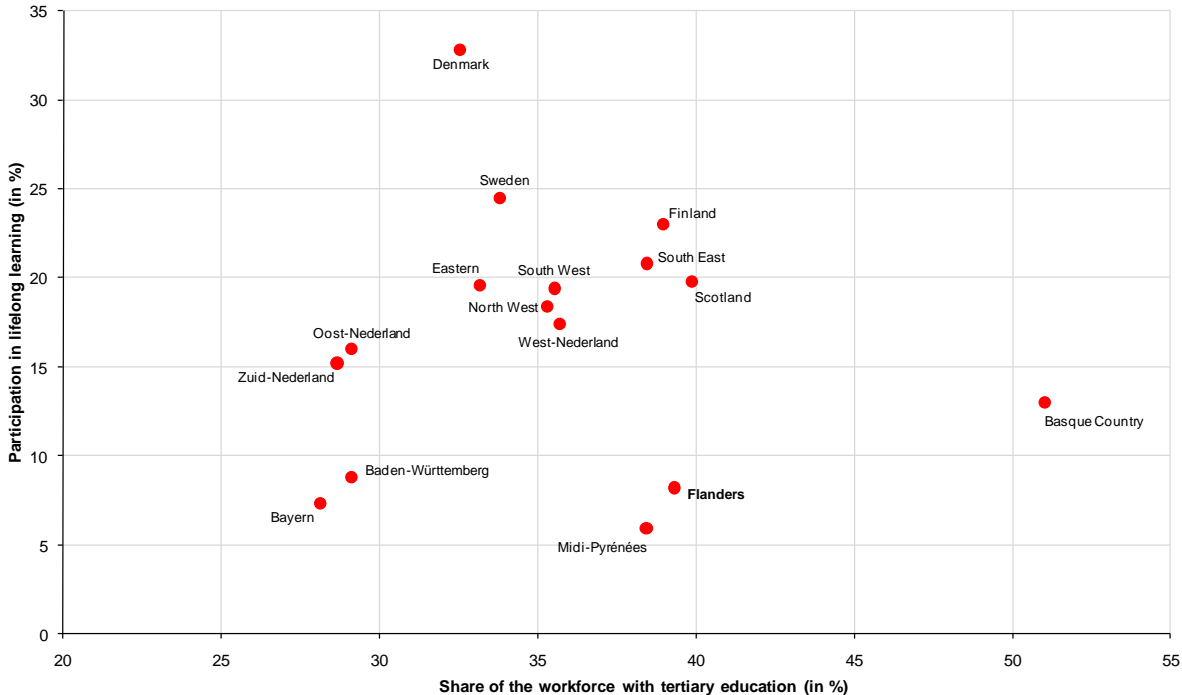
## 4 INNOVATION

The innovation process can be divided into five steps<sup>4</sup>. These reflect the different stages of the innovation process: in order to start innovation a region must dispose of a well educated workforce and workers must be able and willing to learn new techniques whilst at work. This is an important prerequisite for the actual research and development. But this can only be turned into welfare if the knowledge is implemented in products and services that can be sold. Entrepreneurship thus makes part of the process. Therefore enough people must be working in knowledge intensive or creative sectors. Finally patents are the last step in the process: these ensure that the knowledge created will remain the property of the inventor, long enough so that money can be made with it.

### 4.1 Prerequisites to innovation

Flanders has a well **educated workforce**. In 2010 39.3% of the workforce had tertiary education. With that Flanders is 3<sup>rd</sup> amongst the benchmark regions. The Basque Country has by far the highest score (51.0%). Scotland (39.9%) overtakes Flanders in 2010. Furthermore Midi-Pyrénées and Finland also have high ratios. The German benchmark Länder and Zuid- en Oost-Nederland have the lowest share of tertiary educated workers (less than 30%). Since 1999 every benchmark region was able to increase its share. Apparently Flanders was relatively more successful in it, as it was 5<sup>th</sup> in 1999. In the list of 131 EU regions Flanders is 14<sup>th</sup> in 2010, two places lower than in 2009. Flanders is, however, losing some terrain in this broader ranking. The broader top consists mainly of capital areas and some Spanish regions.

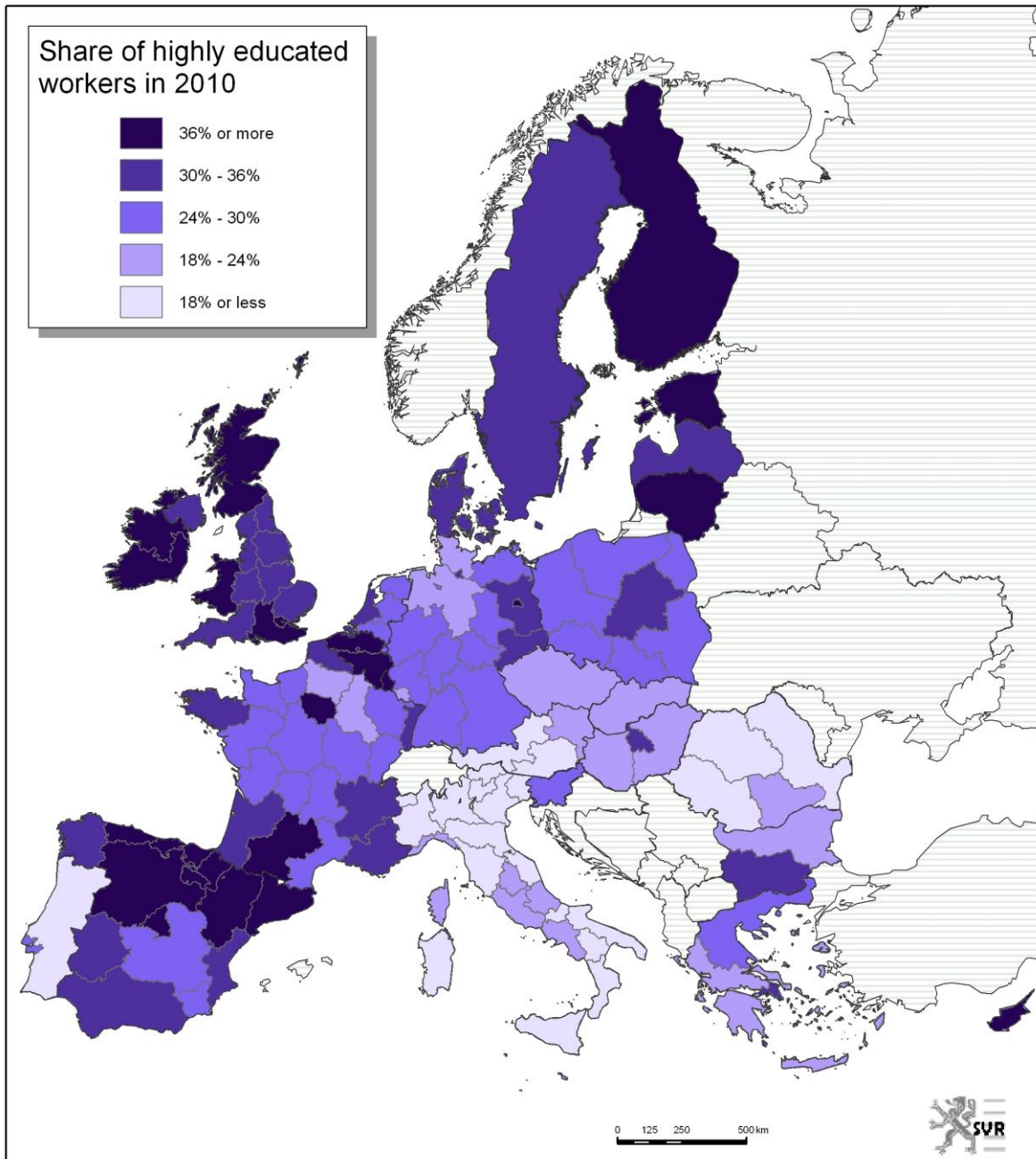
Graph 9: Share of the workforce with tertiary education and participation in lifelong learning in 2010 (in %)



Source: Eurostat, Research Centre of the Flemish Government

<sup>4</sup> Inspiration was found in the European Innovation Scoreboard and the reports on economic and social cohesion of the European Commission.

Map 6: Share of highly educated workers in 2010



Flanders does less well on **lifelong learning**: in 2010 8.2% of the adult population participated in lifelong learning. Only Midi-Pyrénées and Bayern do worse. The Scandinavian countries have far higher rates: Denmark (32.8%), Sweden (24.5%) and Finland (23.0%). And all other benchmark regions have at least a double digit rate, except for Baden-Württemberg (8.8%). In 2002 the Flemish share of lifelong learning was 6.7%. This increased to 9.8% in 2004. From then on a decline set in to 2009 (7.4%). So the year 2010 may be a turning point for increasing rates?

The good news is that Flanders increased its position in the benchmark ranking by one place. In the overall ranking of 131 areas Flanders is 48<sup>th</sup>. This is also an improvement with respect to 2009 (55<sup>th</sup>). The top of the 131 EU regions is largely composed of Scandinavian, British and Spanish regions. Lifelong learning is least widespread in the Romanian and Bulgarian regions.

## 4.2 Creation of knowledge

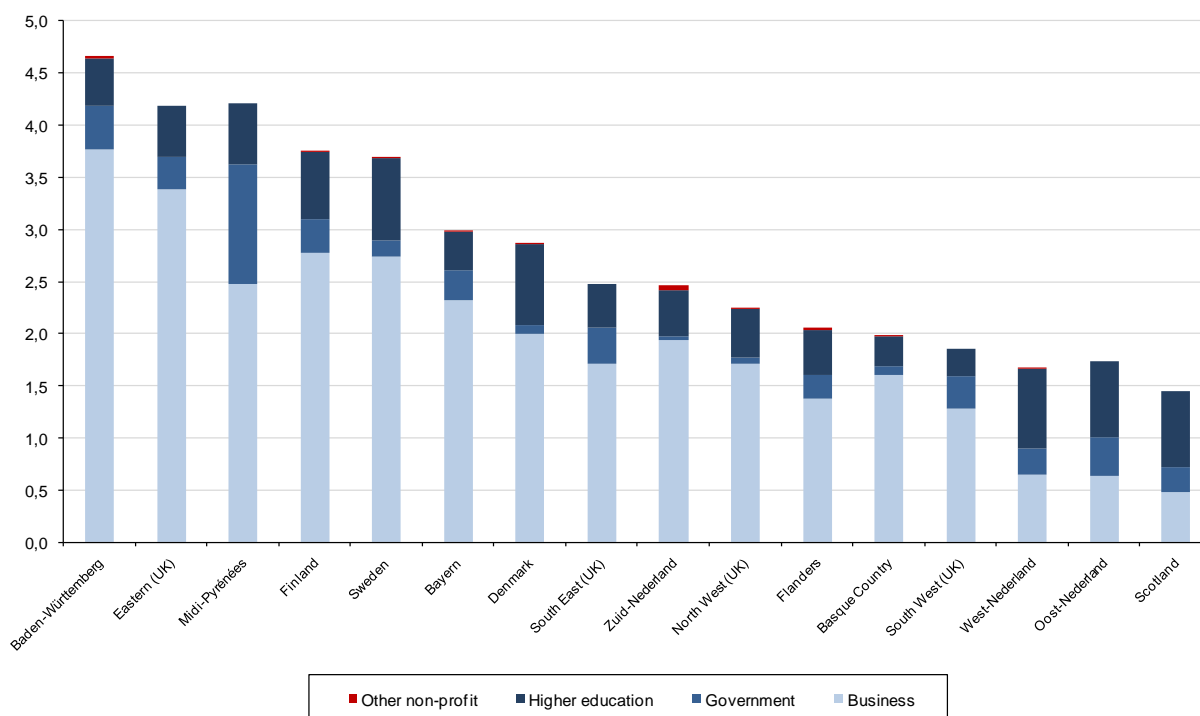
According to Eurostat, Flemish **expenditures for research and development (R&D)** are 2.06% of GDP in 2008. This is more than in 2007 (1.99%), but nevertheless Flanders was not able to improve its position (11<sup>th</sup>). Baden-Württemberg is the top region (4.67%), followed by the British Eastern (4.19%) and Midi-Pyrénées (4.18%). Finland and Sweden are also successful in this respect (3.74% and 3.70%). Scotland (1.46%) and Oost- (1.67%) and West-Nederland (1.68%) spend the least of their GDP on R&D. These three regions are also below the EU27 average. In the larger ranking of 131 regions Flanders is 27<sup>th</sup> in 2008. Its position gradually deteriorated during the last decade (24<sup>th</sup> in 2007, 19<sup>th</sup> in 1999). The leading five benchmark regions are also on top in the list of 131 areas. Regions from the EU15 are doing best.

**Business R&D** is generally the most important component. In Flanders this amounts to 1.38% of GDP in 2008, or a 12<sup>th</sup> place amongst the benchmark regions. Here also Baden-Württemberg and the British Eastern lead the ranking. Oost- and West-Nederland and Scotland have a business R&D of less than 1%. In the broader EU regional ranking Flanders is 26<sup>th</sup>, a worsened position since 1999.

**Government R&D** stands for 0.23% of Flemish GDP in 2008. Here Midi-Pyrénées is by far the top region (1.15%). Flanders is 11<sup>th</sup> amongst the benchmark areas and 44<sup>th</sup> in the broader ranking in 2008, as in 2007.

The R&D expenditures of **higher education** represent 0.43% of Flemish GDP in 2008 (12<sup>th</sup> place). Higher education is a relatively more important source in Sweden, Denmark, West- and Oost-Nederland and Scotland (between 0.7 and 0.8% of GDP). Flanders' position in the ranking of 131 European regions is mediocre (53<sup>rd</sup>).

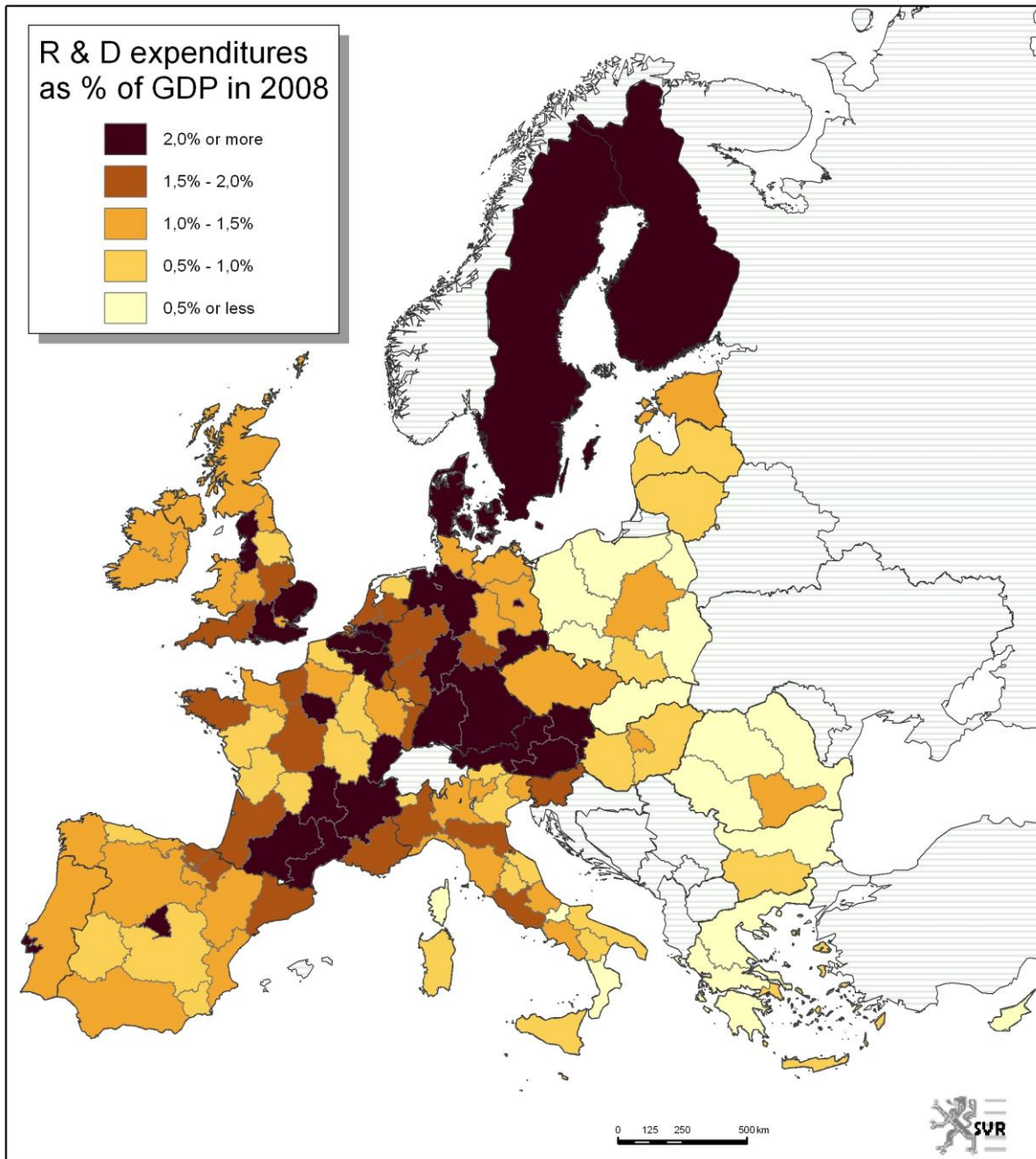
Graph 10: R&D spending as a proportion of GDP in 2008 (in %)



Source: Eurostat, Research Centre of the Flemish Government



Map 7: R&D expenditures as a % of GDP in 2008



### 4.3 Innovation and entrepreneurship

Two indicators will be presented: the share of self-employed, which is a broad measure of existing entrepreneurship, and the share of the adult population that is involved in setting up a business.

In 2010 14.6% of the Flemish workforce is **self-employed**. This is less than in 2009 (15.1%). There thus is a drop in Flanders' position from a 4<sup>th</sup> place in 2009 to an 8<sup>th</sup> in 2010. But the differences between the top and the middle regions are not huge. Midi-Pyrénées has the highest ratio (16.5%). Self-employment, however, is relatively low in Denmark (8.8%), Sweden (10.9%) and Baden-Württemberg (11.0%). On the broader ranking Flanders is 71<sup>st</sup> in 2010, also losing some terrain during the last years. Self-employment is more widespread in Mediterranean and Eastern EU regions which can be due to the lack of sufficient salaried jobs.

The Global Entrepreneurship Monitor (GEM) is an international survey designed to measure new entrepreneurship. A well-known indicator from that survey is the Total Entrepreneurial Activity (TEA) rate. This is the **share of the adult population that is currently setting up a business or running a young business**.

Table 1: Total Entrepreneurial Activity (TEA) rate in the benchmark regions (in %)

	2006	2007	2008	2009	2010
Flanders	3.0	3.4	3.0	3.3	3.6
Denmark	5.3	5.4	4.4	3.6	3.8
Baden-Württemberg	4.6*	n.a.	n.a.	n.a.	n.a.
Bayern	5.5*	n.a.	n.a.	n.a.	n.a.
Basque Country	5.4	6.4	6.9	3.0	2.5
Netherlands**	5.4	5.2	5.2	7.2	7.2
France***	4.4	3.2	5.6	4.3	5.8
Finland	5.0	6.9	7.3	5.2	5.7
Sweden	3.5	4.2	n.a.	n.a.	4.9
North West (UK)	4.9	5.3	5.5	4.9	n.a.
Eastern (UK)	5.7	6.1	7.3	6.9	n.a.
South East (UK)	6.2	5.3	5.5	6.2	n.a.
South West (UK)	7.6	6.5	5.9	5.8	n.a.
Scotland	4.2	4.6	4.5	3.6	3.7****

Source: Global entrepreneurship Monitor.

\* average for 2005/2006

\*\* no data for the Dutch regions

\*\*\* no data for the French regions

\*\*\*\* using landlines only for the inquiry; using landlines and mobiles: 4.2%.

Flanders has a TEA rate of 3.6% in 2010. Although there are data lacking for some regions and for some years, it is obvious that Flanders has a comparatively low TEA. The Netherlands have a rate twice as high. Furthermore, some British regions and France and Finland have also clearly higher TEA's. The TEA of the Basque Country, Scotland and Denmark does not differ much of Flanders'. One has to be careful in interpreting this indicator: it only deals with adult people starting up a new business. The intra family takeover of businesses is not taken into account, a common practise in Flanders.

#### 4.4 Application of innovation

Innovative ideas have to be applied in products and services. Therefore, a country or region needs enough **people working in knowledge intensive branches**. These branches have a high R&D percentage with respect to turnover. It concerns companies in the medium-high-tech or high-tech industry or high-tech services (e.g. construction of telecommunication equipment, chemistry, computers, electrical appliances, research,...). Starting from 2008 the definition makes use of the new NACE\_2008 classification of branches. A comparison with previous years is thus not straightforward.

In 2009 9.3% of the Flemish workforce was occupied in **knowledge intensive branches**. This is rather good (5<sup>th</sup> place). In 2008 Flanders was 6<sup>th</sup> in the benchmark list. The top regions are Baden-Württemberg (18.8%), Bayern (15.8%) and the Basque Country (12.3%). Flanders belongs to a group with between 8 and 10%, to which the Scandinavian countries and the British South East also belong. Scotland and Oost- and West-Nederland have the

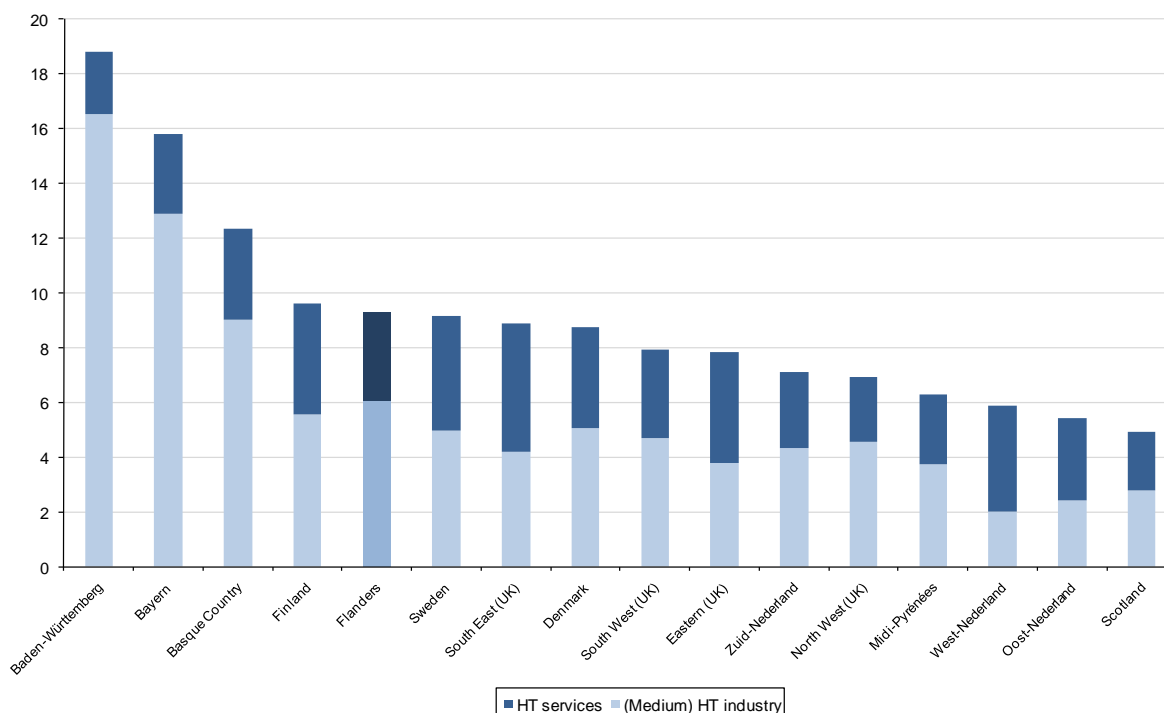
lowest share (between 4 and 6%). In the broader ranking of all 131 EU regions Flanders occupied the 35th place, 4 places worse than in 2008. The regions that have a higher ratio than Flanders are scattered across Europe: some German, French, Irish, Italian, Hungarian, Polish, Slovakian and Slovenian regions score higher.

Flanders does relatively well in the subcategory of the **medium-high-tech and high-tech industry** (6.1% in 2009 – new NACE\_2008 classification). Only three benchmark regions have a higher score: Baden-Württemberg and Bayern are the top regions (16.5% and 12.9%), followed by the Basque Country (9.0%). The British regions and Oost- and West-Nederland are laggards. Although a comparison over time is difficult due to the change in classification, it appears that only the German benchmark Länder, the Basque Country and Finland were able to maintain or even increase their share compared to the base year 1995. In the ranking of all 131 EU regions Flanders is 36<sup>th</sup>. Mainly German and Northern Italian regions, but also some regions from the new member states have a greater weight of this industrial sector in their economies.

Flanders does less well in the ranking of **knowledge intensive services**. These encompass high-tech, market and financial services. With 12.2% in 2009 Flanders is 11<sup>th</sup> amongst the benchmark regions in 2009 (9<sup>th</sup> in 2008). The British South East, Eastern and West-Nederland have the highest ratios (18.0%, 17.7% and 16.1%). The differences of the subsequent regions are not great. In this ranking Baden-Württemberg is last (10.8%). Knowledge intensive services are becoming gradually more important in most economies. In the broader ranking of 131 EU regions Flanders is 31<sup>st</sup>. Capital areas are generally scoring highest.

- In the subsector of **high-tech services** Flanders has a ratio of 3.2% in 2009 (8<sup>th</sup> place). The British South East and Eastern and also Sweden and Finland are the leading benchmark regions (more than 4%). Flanders was able to improve its position in comparison to 2008 (13<sup>th</sup>). Flanders does also relatively well on a broader scale of 131 EU regions (24<sup>th</sup> in 2009).
- **Knowledge intensive market services** are not a Flemish specialty (5.7% in 2009). Only Baden-Württemberg does worse (4.8%). In the British South East this is 9.0%. Flanders' position in the ranking of all EU areas is mediocre (53<sup>th</sup>).
- Finally 3.3% of Flemish workers are in **financial services**. The British and German benchmark regions are all doing better. So Flanders is 9<sup>th</sup>. But compared to 2008 (3<sup>rd</sup>), there is a remarkable decline. Most regions were able to increase their share, contrary to Flanders. In the ranking of 131 EU regions Flanders drops from a 15<sup>th</sup> place in 2008 to a 32<sup>nd</sup> in 2009.

Graph 11: Share of knowledge-intensive workers in 2009 (in %)



Source: Eurostat, Research Centre of the Flemish Government

**Creative industries** are important for the development of regions. An economy certainly needs entrepreneurs and workers who elaborate ideas and who turn them into practical appliances, material (e.g. designers) or non-material (e.g. artists). In 2010 44.3% of the Flemish labour force was working in creative industries. For three consecutive years this is good for a 9<sup>th</sup> place amongst the benchmark regions, be it that in absolute value, the indicator is increasing since 2008.

The differences amongst the benchmark regions are not big. West-Nederland scores highest (52.4%). All other benchmark regions have a value between 40 and 50%, with the exception of Scotland (39.3%) and the British North West (39.8%) who are close to 40% anyway.

#### 4.5 Intellectual property

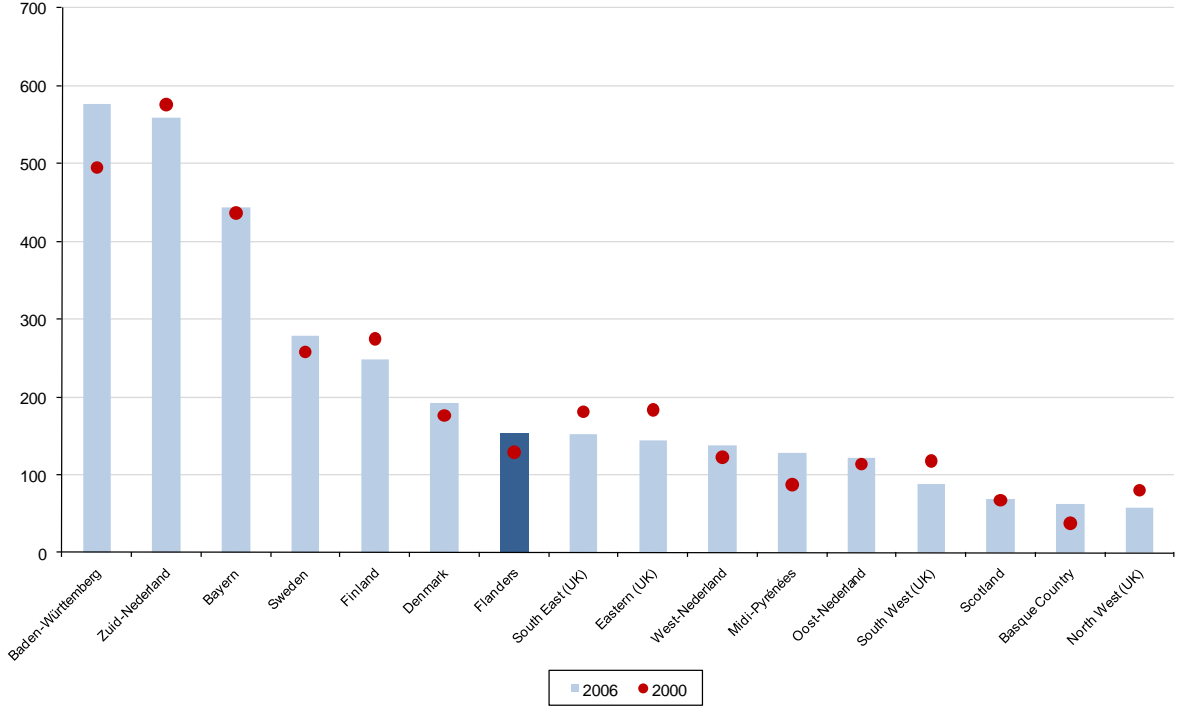
The final step in the innovation process is the **patent application**. But not all research automatically results in a patent application. Therefore some caution is needed in interpreting these data. The most recent data pertain to 2006.

Flanders counted 154 patent applications per million inhabitants in 2006. This allowed for a 7<sup>th</sup> place in the benchmark listing. There are huge differences among the benchmark regions. Baden-Württemberg (576), Zuid-Nederland (559) and to a lesser extent Bayern (444) are clearly areas with an intensive patent application. This contrasts with the Basque Country and some British regions that have less than 100 patent applications per million inhabitants. In 1995, Flanders stood 6<sup>th</sup>. Shortly after, its position deteriorated to a 9<sup>th</sup> place in 1998, remaining so until 2005 and 2006, when it steadily improved. In the set of all European regions Flanders can be found on a 21<sup>st</sup> position.

In the subcategory of **high-tech, biotech and ICT patent applications**, Flanders did worse (10<sup>th</sup> place in 2006, 88 per million inhabitants). Zuid-Nederland is by far the best performing

region (444 applications). The German regions and Finland are also doing well (more than 200 applications). This lesser performance of Flanders is mainly due to ICT and high-tech activity (10<sup>th</sup> and 9<sup>th</sup> place). In biotech applications, the Flemish position is somewhat better (6<sup>th</sup> in 2006).

Graph 12: Number of patent applications per million inhabitants in 2000 and 2006



Source: Eurostat, Research Centre of the Flemish Government

## 6 CONCLUSION

Flanders ranks high on the socio-economic indicators of the 131 EU regions. It is thus a prosperous region. But its welfare is not something that can be taken for granted. Flanders must continue to evolve as an innovation driven economy. It must dispose of a well educated workforce that is able to turn R&D into products and services that can be sold and ensures a high value added. On the basis of technological and innovative indicators 15 regions have been determined to be ahead of Flanders. So these regions act as benchmark areas.

With a GDP per capita of € 28,779 PPS in 2008, Flanders ranks 10<sup>th</sup> on a list of 16 benchmark regions or 33<sup>rd</sup> amongst the 131 EU regions. Since the mid nineties Flanders lost some places in both rankings. Its position didn't change much since 2007 however.

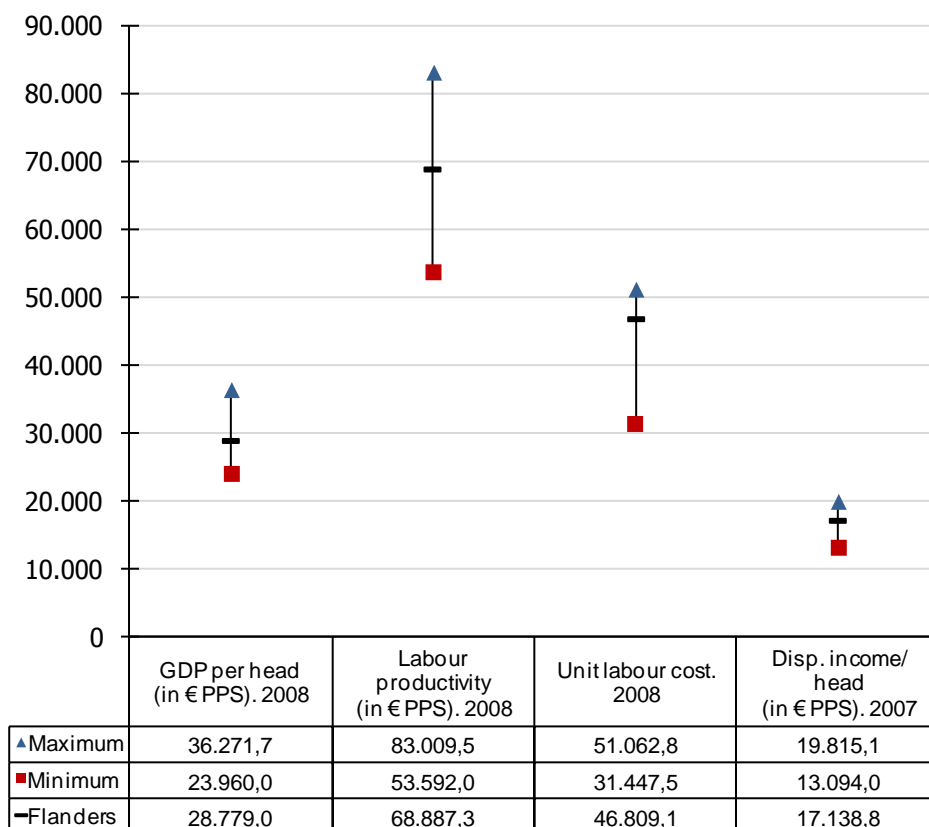
A high labour productivity is the main driver of Flemish welfare. Here Flanders is one of the best performers, with only a very slight deterioration during the last five years.

The number of jobs is relatively moderate due to the economic hub of neighbouring Brussels. So many Flemish workers commute to the Brussels capital region, contribute to the Brussels GDP, but take their income home to where they live.

The share of people aged 15-64 years is not an asset for Flanders. Flanders has a relatively high unit wage cost, but that is compensated for by a high labour productivity.

So Flanders does quite well compared to the benchmark regions. Its position in the larger ranking of 131 EU regions is less good (due to the good performance of Southern and Eastern EU regions). The inhabitants of Flanders have, on average, a relatively high disposable income. During the last years some benchmark regions tended to perform better, but this deterioration was put to a halt in 2007.

Graph 13a: Summary of economic indicators



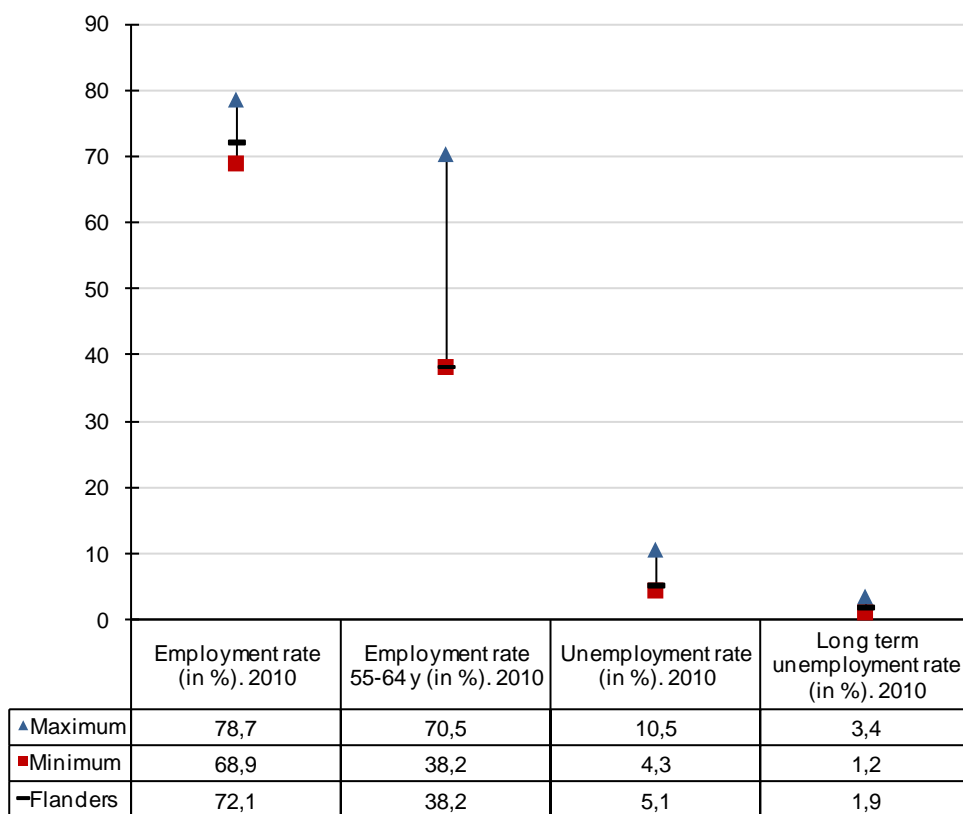
Source: Eurostat, Research Centre of the Flemish Government



The employment rate has always been relatively low in Flanders, especially in the older age classes. However, Flanders is doing gradually better on the broader ranking of 131 EU regions.

But on the other hand the unemployment rate is quite low in Flanders. In 2010 Flanders lost 2 places in the benchmark list, due to the good performance of the German benchmark Länder. The long term unemployment rate is higher than in most benchmark regions, but Flanders is improving its position.

Graph 13b: Summary of labour market indicators



Source: Eurostat, Research Centre of the Flemish Government

The performance of Flanders in the innovation process remains mixed: it has a well educated workforce, but lifelong learning is less common than in most benchmark regions.

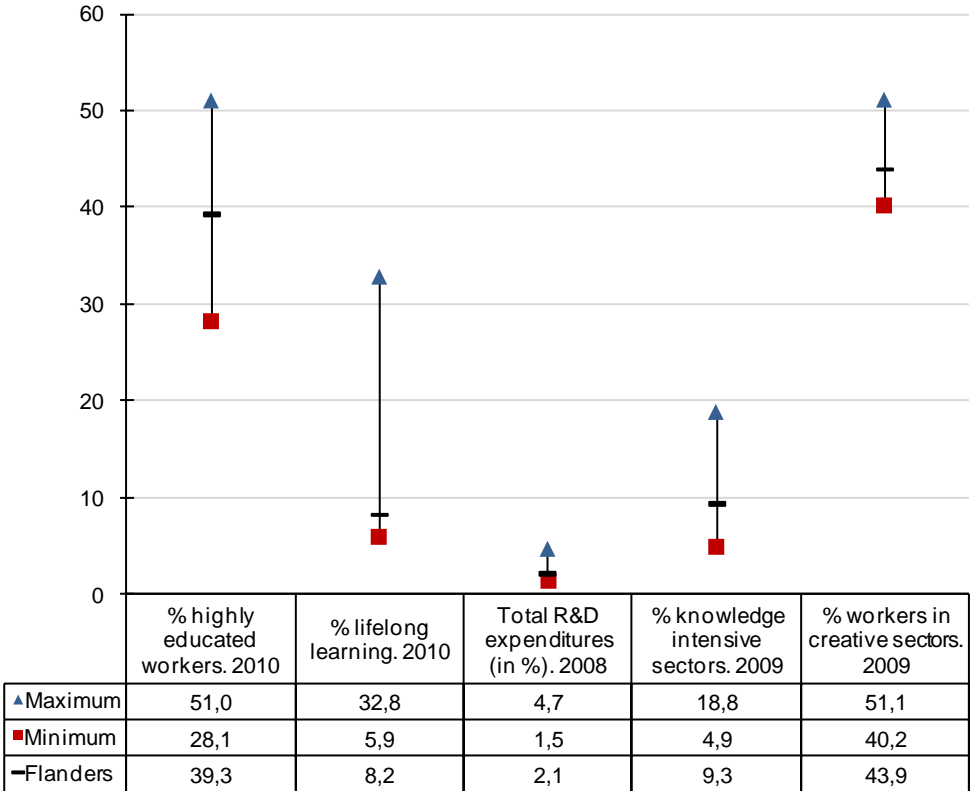
R&D spending as a % of GDP is moderate in comparison with the other benchmark regions. Flanders did not improve its position in 2008. But the strong achievement of the benchmark regions is no surprise, given that this was one of the indicators used to determine better performing regions. Also, compared to all 131 EU regions, Flanders is in the first quarter of best performing areas. The share of self-employment lowered in 2010, pushing Flanders to a mediocre position amongst the benchmark regions. In a broader setting of 131 EU regions, Flanders also has a mediocre position, but that has also to do with the need for self-employment as a means of living in Southern and Eastern EU regions.

New entrepreneurship is less common spread in Flanders, certainly not in comparison with the benchmark areas. However, there was an increase in 2010 compared to 2009.

Flanders is gradually doing better on the number of workers in knowledge intensive sectors. It is 5<sup>th</sup> amongst the benchmark regions in 2009, better than 10 years earlier. Flanders is also catching up on the number of patent applications during the last years. On both last

indicators Flanders is in the first quarter of best performing EU regions. But in order to enhance our future capability of welfare generation Flanders must make sure to improve its performance on the innovative indicators. This is all the most urgent because many countries and regions are aware of the importance of innovation as a welfare driver.

Graph 13c: Summary of innovative indicators



Source: Eurostat, Research Centre of the Flemish Government

## Annex: Key indicators for Flanders and the benchmark regions

	Population	Population density (inhabitants / km <sup>2</sup> )	Employment rate 20-64 y (in %)	Employment rate 55-64 y (in %)	Unemployment rate (in %)	Long term unemployment rate (in %)
	1/1/2009	1/01/2009	2010	2010	2010	2010
EU27	499,691,750	114	68.5	46.3	9.6	3.9
EU25	470,586,583	116	68.8	46.6	9.7	3.9
EU15	396,345,509	120	69.5	48.3	9.6	3.8
<i>be</i> Belgium	10,741,572	352	67.6	37.3	8.3	4.0
<i>cz</i> Czech Republic	10,467,542	133	70.4	46.5	7.3	3.0
<i>dk</i> Denmark	5,511,451	128	76.1	57.6	7.4	1.4
<i>de</i> Germany	82,002,356	230	74.9	57.7	7.1	3.3
<i>ee</i> Estonia	1,340,415	31	66.7	53.8	16.9	7.7
<i>gr</i> Greece	11,260,402	85	64.0	42.3	12.5	5.6
<i>es</i> Spain	45,828,172	91	62.5	43.6	20.1	7.3
<i>fr</i> France	64,367,000	102	68.8	39.7	9.7	4.1
<i>ie</i> Ireland	4,450,030	64	64.9	50.0	13.5	6.6
<i>it</i> Italy	60,045,068	199	61.1	36.6	8.4	4.1
<i>cy</i> Cyprus	796,875	140	75.5	56.8	6.2	1.3
<i>lv</i> Latvia	2,261,294	35	65.0	48.2	18.7	8.4
<i>lt</i> Lithuania	3,349,872	51	64.4	48.6	17.8	7.4
<i>lu</i> Luxembourg (Grand-Duché)	493,500	191	70.7	39.6	4.4	1.3
<i>hu</i> Hungary	10,030,975	108	60.4	34.4	11.2	5.5
<i>mt</i> Malta	413,609	1,311	59.9	30.2	6.9	3.2
<i>nl</i> Netherlands	16,485,787	397	76.8	53.7	4.5	1.2
<i>at</i> Austria	8,355,260	100	74.9	42.4	4.4	1.1
<i>pl</i> Poland	38,135,876	122	64.6	34.0	9.6	3.0
<i>pt</i> Portugal	10,627,250	116	70.5	49.2	10.8	5.6
<i>si</i> Slovenia	2,032,362	100	70.3	35.0	7.2	3.1
<i>sk</i> Slovakia	5,412,254	110	64.6	40.5	14.4	9.2
<i>fi</i> Finland	5,326,314	16	73.0	56.3	8.4	2.0
<i>se</i> Sweden	9,256,347	21	78.7	70.5	8.4	1.5
<i>uk</i> United Kingdom	61,595,000	253	73.6	57.1	7.8	2.5
<i>bg</i> Bulgaria	7,606,551	69	65.4	43.5	10.2	4.7
<i>ro</i> Romania	21,498,616	90	63.3	41.1	7.3	2.5

<i>be1</i> Brussels Hoofdstedelijk Gewest	1,062,253	6,598	59.2	40.6	17.3	9.7
<i>be2</i> Vlaams Gewest	6,199,571	458	72.1	38.2	5.1	1.9
<i>be3</i> Région Wallonne	3,479,749	207	62.2	35.1	11.4	6.3
<i>cz0</i> Czech Republic	10,467,542	133	70.4	46.5	7.3	3.0
<i>dk0</i> Denmark	5,511,451	128	76.1	57.6	7.4	1.4
<i>de1</i> Baden- Württemberg	10,749,506	301	78.2	64.0	4.8	1.9
<i>de2</i> Bayern	12,519,728	177	78.1	59.0	4.4	1.7
<i>de3</i> Berlin	3,431,675	3,848	68.8	53.8	13.2	7.5
<i>de4</i> Brandenburg	2,522,493	86	75.9	59.7	9.9	5.1
<i>de5</i> Bremen	661,866	1,637	69.8	54.2	8.1	4.1
<i>de6</i> Hamburg	1,772,100	2,347	74.9	58.5	7.1	3.0
<i>de7</i> Hessen	6,064,953	287	75.5	57.0	5.9	2.4
<i>de8</i> Mecklenburg- Vorpommern	1,664,356	72	72.8	56.4	12.4	6.3
<i>de9</i> Niedersachsen	7,947,244	167	74.8	56.6	6.5	3.2
<i>dea</i> Nordrhein- Westfalen	17,933,064	526	72.1	54.4	7.5	3.6
<i>deb</i> Rheinland-Pfalz	4,028,351	203	75.9	58.3	5.5	2.5
<i>dec</i> Saarland	1,030,324	401	71.2	53.1	7.0	3.3
<i>ded</i> Sachsen	4,192,801	227	73.9	57.7	11.3	5.9
<i>dee</i> Sachsen-Anhalt	2,381,872	116	73.6	56.7	11.4	6.5
<i>def</i> Schleswig-Holstein	2,834,260	180	75.5	59.8	6.8	3.2
<i>deg</i> Thüringen	2,267,763	140	76.0	58.1	8.6	4.3
<i>ee0</i> Estonia	1,340,415	31	66.7	53.8	16.9	7.7
<i>gr1</i> Voreia Ellada	3,580,472	63	62.3	42.3	13.5	6.8
<i>gr2</i> Kentriki Ellada	2,475,170	46	65.0	48.0	11.9	6.0
<i>gr3</i> Attiki	4,088,447	1,074	64.3	38.0	12.3	5.0
<i>gr4</i> Nisia Aigaiou, Kriti	1,116,313	64	66.0	46.4	11.9	3.5
<i>es11</i> Galicia	2,738,930	93	63.6	44.8	15.4	5.5
<i>es12</i> Principado de Asturias	1,058,923	100	59.6	37.5	16.0	5.9
<i>es13</i> Cantabria	576,418	108	63.6	39.8	13.9	5.2
<i>es21</i> Pais Vasco	2,136,061	295	68.9	43.5	10.5	3.4
<i>es22</i> Comunidad Foral de Navarra	614,526	59	69.8	44.8	11.8	3.0
<i>es23</i> La Rioja	315,718	63	67.8	51.3	14.3	4.9
<i>es24</i> Aragón	1,313,735	28	67.0	48.4	14.8	5.2
<i>es30</i> Comunidad de Madrid	6,295,011	784	69.5	51.2	16.1	5.7
<i>es41</i> Castilla y León	2,510,545	27	64.4	45.2	15.8	5.2
<i>es42</i> Castilla-la Mancha	2,022,647	25	60.6	40.3	21.0	7.0
<i>es43</i> Extremadura	1,080,439	26	56.9	38.4	23.0	7.8
<i>es51</i> Cataluña	7,290,292	227	67.1	48.4	17.7	7.5
<i>es52</i> Comunidad Valenciana	4,991,789	215	60.1	40.7	23.3	8.7

<i>es61</i> Andalucía	8,150,467	93	54.2	35.2	28.0	9.8
<i>es62</i> Región de Murcia	1,443,383	128	60.1	46.6	23.4	8.3
<i>fr10</i> Île de France	11,746,000	981	71.2	48.7	8.9	3.7
<i>fr21</i> Champagne-Ardenne	1,336,000	52	68.7	41.8	9.6	4.0
<i>fr22</i> Picardie	1,906,000	98	65.9	34.0	12.0	5.9
<i>fr23</i> Haute-Normandie	1,822,000	148	66.7	35.3	10.2	4.0
<i>fr24</i> Centre	2,544,000	65	72.4	40.0	7.3	2.9
<i>fr25</i> Basse-Normandie	1,467,000	83	68.3	36.3	8.6	3.2
<i>fr26</i> Bourgogne	1,637,000	52	68.7	40.4	9.4	3.8
<i>fr30</i> Nord - Pas-de-Calais	4,022,000	324	62.5	32.1	13.1	6.4
<i>fr41</i> Lorraine	2,342,000	100	68.9	35.5	9.8	4.0
<i>fr42</i> Alsace	1,847,000	224	72.2	42.2	8.3	2.9
<i>fr43</i> Franche-Comté	1,168,000	72	70.6	40.1	8.7	3.6
<i>fr51</i> Pays de la Loire	3,538,000	111	71.4	36.8	8.9	2.9
<i>fr52</i> Bretagne	3,163,000	117	69.9	35.1	7.2	1.9
<i>fr53</i> Poitou-Charentes	1,759,000	68	69.5	30.0	8.1	3.3
<i>fr61</i> Aquitaine	3,200,000	78	70.4	38.8	8.5	3.1
<i>fr62</i> Midi-Pyrénées	2,865,000	64	72.5	39.5	8.3	2.7
<i>fr63</i> Limousin	741,000	44	69.9	38.0	7.4	2.8
<i>fr71</i> Rhône-Alpes	6,160,000	142	71.1	42.3	8.5	3.1
<i>fr72</i> Auvergne	1,343,000	52	69.5	38.5	7.4	3.0
<i>fr81</i> Languedoc-Roussillon	2,616,000	96	60.9	36.8	14.4	6.8
<i>fr82</i> Provence-Alpes-Côte d'Azur	4,940,000	158	67.1	41.0	10.2	4.3
<i>fr83</i> Corse	307,000	36	66.9	38.4	6.2	3.2
<i>ie01</i> Border, Midlands and Western	1,199,297	36	62.6	48.1	14.0	6.7
<i>ie02</i> Southern and Eastern	3,250,733	89	65.7	50.8	13.3	6.6
<i>itc1</i> Piemonte	4,432,571	174	67.5	34.5	7.6	3.6
<i>itc2</i> Valle d'Aosta/Vallée d'Aoste	127,065	39	71.5	38.3	4.4	1.5
<i>itc3</i> Liguria	1,615,064	298	67.0	38.2	6.5	2.7
<i>itc4</i> Lombardia	9,742,676	408	69.4	34.9	5.6	2.4
<i>itd1</i> Provincia Autonoma Bolzano-Bozen	498,857	67	75.8	44.9	2.7	0.5
<i>itd2</i> Provincia Autonoma Trento	519,800	84	70.8	37.7	4.3	1.2
<i>itd3</i> Veneto	4,885,548	266	68.7	35.4	5.8	2.2
<i>itd4</i> Friuli-Venezia Giulia	1,230,936	157	67.6	33.1	5.7	2.2
<i>itd5</i> Emilia-Romagna	4,337,979	196	71.5	39.1	5.7	2.0
<i>ite1</i> Toscana	3,707,818	161	67.8	40.1	6.1	2.9
<i>ite2</i> Umbria	894,222	106	67.1	36.1	6.6	2.9
<i>ite3</i> Marche	1,569,578	162	68.0	41.2	5.7	2.5
<i>ite4</i> Lazio	5,626,710	326	63.5	40.9	9.3	4.6

<i>itf1</i> Abruzzo	1,334,675	124	59.7	37.0	8.8	4.5
<i>itf2</i> Molise	320,795	72	55.2	37.5	8.4	4.1
<i>itf3</i> Campania	5,812,962	428	43.7	34.9	14.0	8.3
<i>itf4</i> Puglia	4,079,702	211	48.2	31.9	13.5	7.0
<i>itf5</i> Basilicata	590,601	59	51.3	38.2	13.0	7.4
<i>itf6</i> Calabria	2,008,709	133	46.1	37.6	11.9	6.5
<i>itg1</i> Sicilia	5,037,799	196	46.6	35.9	14.7	8.5
<i>itg2</i> Sardegna	1,671,001	69	54.6	37.0	14.1	6.5
<i>cy0</i> Cyprus	796,875	140	75.5	56.8	6.2	1.3
<i>lv0</i> Latvia	2,261,294	35	65.0	48.2	18.7	8.4
<i>lt0</i> Lithuania	3,349,872	51	64.4	48.6	17.8	7.4
<i>lu0</i> Luxembourg (Grand-Duché)	493,500	191	70.7	39.6	4.4	1.3
<i>hu1</i> Közép- Magyarország	2,925,500	423	65.0	39.9	8.9	4.5
<i>hu2</i> Dunántúl	3,054,301	83	61.7	34.3	10.4	5.1
<i>hu3</i> Alföld és Észak	4,051,174	82	55.9	30.3	13.6	6.7
<i>mt0</i> Malta	413,609	1,311	59.9	30.2	6.9	3.2
<i>nl1</i> Noord-Nederland	1,708,821	150	74.7	50.1	4.9	1.5
<i>nl2</i> Oost-Nederland	3,499,946	319	77.8	55.0	4.3	1.2
<i>nl3</i> West-Nederland	7,719,856	650	77.2	55.2	4.4	1.2
<i>nl4</i> Zuid-Nederland	3,557,164	488	76.2	51.2	4.5	1.3
<i>at1</i> Ostösterreich	3,575,511	152	73.4	42.2	5.4	1.5
<i>at2</i> Südösterreich	1,768,084	68	74.0	38.7	4.1	1.0
<i>at3</i> Westösterreich	3,011,665	88	77.1	44.9	3.4	0.7
<i>pl1</i> Centralny	7,753,356	144	68.4	36.9	8.1	2.1
<i>pl2</i> Poludniowy	7,932,801	288	63.2	30.8	9.1	3.3
<i>pl3</i> Wschodni	6,725,581	90	64.8	37.2	10.9	3.5
<i>pl4</i> Północno- Zachodni	6,099,536	91	63.4	32.2	10.0	3.3
<i>pl5</i> Poludniowo- Zachodni	3,910,099	133	62.8	32.6	10.9	3.3
<i>pl6</i> Północny	5,714,503	95	62.7	33.3	9.9	2.7
<i>pt17</i> Lisboa	2,819,433	972	69.8	44.0	11.3	5.6
<i>ptx</i> Rest van Portugal - vasteland	7,315,876	85	70.7	51.4	10.9	5.8
<i>si0</i> Slovenia	2,032,362	100	70.3	35.0	7.2	3.1
<i>sk0</i> Slovakia	5,412,254	110	64.6	40.5	14.4	9.2
<i>fi1</i> Manner-Suomi	5,298,858	16	72.9	56.1	8.4	2.0
<i>se0</i> Sverige	9,256,347	21	78.7	70.5	8.4	1.5
<i>ukc</i> North East	2,587,463	302	70.0	49.8	9.3	3.4
<i>ukd</i> North West (including Merseyside)	6,916,579	490	72.2	54.4	7.9	2.5
<i>uke</i> Yorkshire and The Humber	5,230,500	339	72.0	54.3	9.2	2.9
<i>ukf</i> East Midlands	4,446,308	285	73.9	58.4	7.6	2.6
<i>ukg</i> West Midlands	5,433,168	418	72.2	58.6	9.0	3.3

<i>ukh</i> Eastern	5,733,596	300	76.6	59.5	6.6	1.9
<i>uki</i> London	7,639,962	4,860	71.5	55.7	9.0	3.1
<i>ukj</i> South East	8,400,998	441	77.8	63.7	6.1	1.7
<i>ukk</i> South West	5,228,889	219	76.6	59.8	5.9	1.8
<i>ukl</i> Wales	3,006,994	145	70.3	50.9	8.6	2.8
<i>ukm</i> Scotland	5,191,537	67	73.1	55.7	8.2	2.7
<i>ukn</i> Northern Ireland	1,779,107	126	70.5	48.3	7.2	3.1
<i>bg3</i> Severna i iztochna Bulgaria	3,953,367	58	62.0	40.5	12.0	5.7
<i>bg4</i> Yugozapadna i yuzhna centralna Bulgaria	3,653,184	86	68.9	46.9	8.6	3.9
<i>ro1</i> Macroregiunea unu	5,247,530	77	60.2	34.0	8.5	3.4
<i>ro2</i> Macroregiunea doi	6,535,967	90	63.7	46.6	7.1	2.7
<i>ro3</i> Macroregiunea trei	5,532,879	153	66.0	39.9	6.8	2.0
<i>ro4</i> Macroregiunea patru	4,182,240	68	63.3	43.2	6.9	2.1



	GDP per head (in € PPS)	Labour productivity (in € PPS per worker)	Number of jobs / people 15-64 y (in %)	Share of people 15-64 y (in %)	Unit labour cost	Disposable income per head (in € PPS based on the final consumption)
	2008	2008	2008	2008	2008	2007
EU27	25,051	55,607	67.0	67.2	31,664	n.d.
EU25	25,893	57,495	67.2	67.0	32,894	n.d.
EU15	27,748	61,216	68.3	66.4	36,276	n.d.
<i>be</i> Belgium	28,771	69,183	63.0	66.1	47,357	16,175
<i>cz</i> Czech Republic	20,178	39,773	71.4	71.1	15,102	9,754
<i>dk</i> Denmark	30,806	57,237	81.7	65.9	47,335	13,093
<i>de</i> Germany	29,008	59,134	74.2	66.1	34,147	18,093
<i>ee</i> Estonia	17,011	34,288	73.0	67.9	13,397	7,861
<i>gr</i> Greece	23,469	55,039	63.6	67.0	27,669	14,817
<i>es</i> Spain	25,907	57,442	65.7	68.7	30,026	14,792
<i>fr</i> France	26,693	65,906	62.3	65.1	42,441	17,307
<i>ie</i> Ireland	33,403	70,474	69.4	68.3	46,229	15,708
<i>it</i> Italy	25,961	61,217	64.4	65.9	33,682	16,055
<i>cy</i> Cyprus	24,358	48,815	71.2	70.1	22,994	n.d.
<i>lv</i> Latvia	14,128	28,586	71.6	69.0	11,544	7,736
<i>lt</i> Lithuania	15,291	33,808	65.7	68.9	10,684	8,092
<i>lu</i> Luxembourg (Grand-Duché)	69,890	97,982	105.0	67.9	52,636	n.d.
<i>hu</i> Hungary	16,153	39,395	59.6	68.8	13,528	8,052
<i>mt</i> Malta	19,481	46,881	59.4	70.0	17,193	n.d.
<i>nl</i> Netherlands	33,453	80,781	61.5	67.3	49,186	15,566
<i>at</i> Austria	31,093	60,949	75.6	67.5	38,799	19,022
<i>pl</i> Poland	14,090	34,115	58.1	71.1	11,177	8,094
<i>pt</i> Portugal	19,479	40,199	72.1	67.2	19,424	11,215
<i>si</i> Slovenia	22,828	46,653	70.2	69.7	23,093	12,294
<i>sk</i> Slovakia	18,131	43,745	57.3	72.4	12,166	8,904
<i>fi</i> Finland	29,494	62,053	71.4	66.6	40,786	13,454
<i>se</i> Sweden	30,803	62,210	75.4	65.6	41,512	14,982
<i>uk</i> United Kingdom	28,700	60,612	71.5	66.2	35,507	17,438
<i>bg</i> Bulgaria	10,878	21,677	72.5	69.2	4,428	4,217
<i>ro</i> Romania	11,681	26,832	62.3	69.9	9,012	5,197

<i>be1</i> Brussels Hoofdstedelijk Gewest	54,138	85,214	94.9	66.9	56,518	15,432
<i>be2</i> Vlaams Gewest	28,779	68,887	63.3	66.0	46,809	17,140
<i>be3</i> Région Wallonne	21,008	60,925	52.3	65.9	42,865	14,656
<i>cz0</i> Czech Republic	20,178	39,773	71.4	71.1	15,102	9,754
<i>dk0</i> Denmark	30,806	57,334	81.5	65.9	47,265	13,093
<i>de1</i> Baden-Württemberg	32,408	62,195	78.8	66.1	36,837	19,815
<i>de2</i> Bayern	33,906	63,850	80.0	66.4	35,927	19,348
<i>de3</i> Berlin	24,690	51,612	68.8	69.5	33,528	15,038
<i>de4</i> Brandenburg	20,516	49,495	61.5	67.4	28,369	15,248
<i>de5</i> Bremen	39,545	66,715	89.6	66.2	35,270	20,247
<i>de6</i> Hamburg	47,142	74,931	91.8	68.5	39,943	22,911
<i>de7</i> Hessen	34,807	67,833	77.5	66.2	38,117	18,658
<i>de8</i> Mecklenburg-Vorpommern	20,374	46,532	64.5	67.9	26,590	14,331
<i>de9</i> Niedersachsen	25,551	55,528	71.0	64.8	32,527	17,356
<i>dea</i> Nordrhein-Westfalen	29,086	60,134	73.7	65.6	34,679	18,922
<i>deb</i> Rheinland-Pfalz	25,146	54,651	70.2	65.6	33,070	17,515
<i>dec</i> Saarland	28,689	58,076	75.3	65.6	33,454	17,766
<i>ded</i> Sachsen	21,533	46,370	71.0	65.4	27,882	14,998
<i>dee</i> Sachsen-Anhalt	21,389	50,516	63.8	66.3	27,660	14,358
<i>def</i> Schleswig-Holstein	24,882	55,442	69.6	64.5	30,986	17,436
<i>deg</i> Thüringen	21,106	46,743	67.2	67.2	27,325	15,412
<i>ee0</i> Estonia	17,011	34,288	73.0	67.9	13,397	7,861
<i>gr1</i> Voreia Ellada	19,605	47,761	62.5	65.7	27,465	13,020
<i>gr2</i> Kentriki Ellada	20,882	49,657	64.3	65.4	26,734	12,146
<i>gr3</i> Attiki	28,227	63,882	63.6	69.4	28,382	18,251
<i>gr4</i> Nisia Aigaiou, Kriti	24,208	55,780	65.4	66.3	26,626	14,005
<i>es11</i> Galicia	22,293	52,860	62.9	67.1	28,079	13,747
<i>es12</i> Principado de Asturias	24,327	58,311	61.4	68.0	30,380	15,837
<i>es13</i> Cantabria	26,261	57,777	65.9	69.0	29,592	15,593
<i>es21</i> Pais Vasco	34,505	66,640	75.8	68.3	33,943	19,630
<i>es22</i> Comunidad Foral de Navarra	32,880	59,165	82.1	67.7	31,784	19,389
<i>es23</i> La Rioja	27,780	57,883	70.5	68.0	29,173	15,614
<i>es24</i> Aragón	28,314	57,180	74.1	66.8	30,622	16,266
<i>es30</i> Comunidad de Madrid	33,566	63,587	75.6	69.9	33,213	17,612
<i>es41</i> Castilla y León	25,174	57,227	66.6	66.0	29,211	15,254
<i>es42</i> Castilla-la Mancha	20,001	49,748	59.8	67.3	28,459	12,183
<i>es43</i> Extremadura	18,266	48,303	56.8	66.5	26,648	11,723
<i>es51</i> Cataluña	30,285	59,769	74.0	68.5	30,982	16,660
<i>es52</i> Comunidad Valenciana	23,242	54,277	61.8	69.3	28,427	13,335

es61 Andalucia	19,958	53,196	54.3	69.1	27,354	11,780
es62 Región de Murcia	21,405	52,857	58.5	69.2	26,762	11,863
fr10 Île de France	41,983	87,799	70.4	68.0	57,006	21,050
fr21 Champagne-Ardenne	24,580	63,186	59.8	65.1	39,435	16,389
fr22 Picardie	20,979	60,254	53.1	65.6	38,222	16,551
fr23 Haute-Normandie	24,184	62,179	59.6	65.2	39,271	16,868
fr24 Centre	23,314	60,013	61.1	63.6	38,637	17,406
fr25 Basse-Normandie	21,540	55,260	61.6	63.3	36,409	16,513
fr26 Bourgogne	23,237	58,601	62.7	63.3	37,493	17,311
fr30 Nord - Pas-de-Calais	21,718	59,856	55.2	65.7	39,201	14,923
fr41 Lorraine	21,502	60,964	53.5	65.9	39,150	16,632
fr42 Alsace	24,909	62,289	60.0	66.6	41,692	17,499
fr43 Franche-Comté	21,892	57,699	58.7	64.6	38,175	16,860
fr51 Pays de la Loire	24,072	58,514	64.4	63.8	36,987	16,474
fr52 Bretagne	23,271	58,577	62.6	63.4	37,670	16,432
fr53 Poitou-Charentes	21,954	57,924	60.3	62.9	36,902	16,497
fr61 Aquitaine	24,013	62,475	60.0	64.1	39,222	16,941
fr62 Midi-Pyrénées	23,960	60,265	61.8	64.3	39,920	16,546
fr63 Limousin	21,309	55,810	61.2	62.4	36,981	17,303
fr71 Rhône-Alpes	26,823	65,152	63.1	65.2	42,010	17,611
fr72 Auvergne	22,216	57,004	61.1	63.8	37,181	17,407
fr81 Languedoc-Roussillon	20,951	60,242	54.8	63.4	37,155	15,609
fr82 Provence-Alpes-Côte d'Azur	25,171	65,430	60.5	63.6	40,347	17,009
fr83 Corse	20,869	57,034	56.4	64.9	37,510	14,973
ie01 Border, Midlands and Western	23,347	53,498	65.4	66.7	41,556	14,109
ie02 Southern and Eastern	37,107	76,052	70.8	68.9	47,664	16,293
itc1 Piemonte	28,489	61,069	72.2	64.7	34,788	18,480
itc2 Valle d'Aosta/Vallée d'Aoste	30,291	63,551	72.8	65.5	35,611	18,935
itc3 Liguria	27,123	64,441	67.9	61.9	33,778	17,985
itc4 Lombardia	33,548	69,008	73.5	66.2	35,518	19,365
itd1 Provincia Autonoma Bolzano-Bozen	34,266	64,456	80.6	65.9	35,240	19,575
itd2 Provincia Autonoma Trento	30,675	65,682	71.3	65.5	34,603	17,082
itd3 Veneto	30,459	62,430	73.6	66.3	34,002	17,538
itd4 Friuli-Venezia Giulia	29,236	60,736	74.5	64.6	33,680	18,142
itd5 Emilia-Romagna	31,899	62,503	79.1	64.5	33,642	20,114
ite1 Toscana	28,462	60,780	72.8	64.3	33,944	17,979
ite2 Umbria	24,353	53,562	70.9	64.2	30,169	16,123
ite3 Marche	26,454	55,526	74.0	64.4	31,426	16,680
ite4 Lazio	30,837	67,155	69.1	66.5	36,687	17,115

<i>itf1</i> Abruzzo	21,413	53,877	60.5	65.6	33,398	13,577
<i>itf2</i> Molise	20,084	51,598	59.6	65.3	31,041	12,742
<i>itf3</i> Campania	16,419	53,850	45.2	67.4	30,361	11,344
<i>itf4</i> Puglia	16,896	51,365	49.1	66.9	30,762	11,745
<i>itf5</i> Basilicata	19,124	52,719	54.9	66.1	31,060	12,538
<i>itf6</i> Calabria	16,412	51,912	47.3	66.8	28,952	11,435
<i>itg1</i> Sicilia	16,638	55,192	45.6	66.2	32,178	11,365
<i>itg2</i> Sardegna	19,709	53,075	53.8	69.0	30,316	12,901
<i>cy0</i> Cyprus	24,358	48,815	71.2	70.1	22,994	n.d.
<i>lv0</i> Latvia	14,128	28,586	71.6	69.0	11,544	7,736
<i>lt0</i> Lithuania	15,291	33,808	65.7	68.9	10,684	8,092
<i>lu0</i> Luxembourg (Grand-Duché)	69,890	97,982	105.0	67.9	52,636	n.d.
<i>hu1</i> Közép- Magyarország	26,813	54,633	71.0	69.2	18,378	10,506
<i>hu2</i> Dunántúl	13,834	33,685	59.2	69.4	11,335	7,491
<i>hu3</i> Alföld és Észak	10,267	29,194	51.7	68.1	10,379	6,408
<i>mt0</i> Malta	19,481	46,881	59.4	70.0	17,118	n.d.
<i>nl1</i> Noord-Nederland	34,441	95,547	54.3	66.4	47,058	14,156
<i>nl2</i> Oost-Nederland	28,151	72,378	58.3	66.7	46,733	14,773
<i>nl3</i> West-Nederland	36,272	83,009	64.4	67.9	51,063	16,287
<i>nl4</i> Zuid-Nederland	32,084	77,568	61.5	67.3	47,841	15,375
<i>at1</i> Ostösterreich	32,384	65,225	73.4	67.6	41,002	19,432
<i>at2</i> Südösterreich	26,649	53,663	74.1	67.0	36,598	18,277
<i>at3</i> Westösterreich	32,174	60,248	78.9	67.7	37,478	18,976
<i>pl1</i> Centralny	19,220	39,043	69.9	70.5	12,896	9,588
<i>pl2</i> Poludniowy	13,950	35,274	55.5	71.3	11,344	8,327
<i>pl3</i> Wschodni	10,134	23,187	62.4	70.0	8,800	6,630
<i>pl4</i> Północno- Zachodni	13,741	36,907	51.6	72.1	11,196	8,152
<i>pl5</i> Poludniowo- Zachodni	14,305	37,129	53.4	72.2	11,153	7,955
<i>pl6</i> Północny	12,211	33,545	51.0	71.4	10,706	7,506
<i>pt17</i> Lisboa	27,192	51,461	78.8	67.0	23,526	14,374
<i>ptx</i> Rest van Portugal - vasteland	16,342	34,877	69.8	67.1	17,348	10,000
<i>si0</i> Slovenia	22,828	46,653	70.2	69.7	23,093	12,294
<i>sk0</i> Slovakia	18,131	43,745	57.3	72.4	12,166	8,904
<i>fi1</i> Manner-Suomi	29,459	62,147	71.2	66.6	40,795	13,440
<i>se0</i> Sverige	30,803	62,210	75.4	65.6	41,512	14,982
<i>ukc</i> North East	22,200	49,622	67.9	65.8	32,017	14,881
<i>ukd</i> North West (including Merseyside)	24,500	54,344	68.5	65.9	31,447	15,827
<i>uke</i> Yorkshire and The Humber	24,000	51,454	69.9	66.7	31,132	15,657
<i>ukf</i> East Midlands	25,100	51,758	73.2	66.3	33,893	16,143
<i>ukg</i> West Midlands	24,200	53,597	69.3	65.1	31,525	15,718

<i>ukh</i> Eastern	27,200	55,384	75.3	65.2	34,619	18,303
<i>uki</i> London	49,200	102,620	68.0	70.5	48,238	21,889
<i>ukj</i> South East	30,400	60,684	76.3	65.6	36,396	19,592
<i>ukk</i> South West	26,100	53,592	75.3	64.6	32,745	17,300
<i>ukl</i> Wales	21,200	48,102	68.5	64.4	30,950	15,230
<i>ukm</i> Scotland	28,000	57,407	72.9	66.9	33,744	16,526
<i>ukn</i> Northern Ireland	22,800	52,003	66.4	66.0	29,517	15,188
<i>bg3</i> Severna i iztochna Bulgaria	8,282	18,099	67.0	68.3	3,932	3,761
<i>bg4</i> Yugozapadna i yuzhna centralna Bulgaria	13,690	24,908	78.2	70.3	4,832	4,715
<i>ro1</i> Macroregiunea unu	10,756	25,774	59.1	70.6	7,804	5,006
<i>ro2</i> Macroregiunea doi	8,279	19,416	62.0	68.7	7,422	4,324
<i>ro3</i> Macroregiunea trei	17,306	37,497	65.4	70.6	11,635	6,423
<i>ro4</i> Macroregiunea patru	10,726	24,523	62.4	70.1	8,542	5,185

	Share of highly educated workers (in %)	Share of adult population involved in lifelong learning (in %)	Total R&D expenditures / GDP (in %)	Business R&D expenditures / GDP (in %)	Government R&D expenditures / GDP (in %)	Share of workers in knowledge intensive sectors (in %)	Share of workers in (medium) HT industry (in %)	Share of workers in HT services (in %)	Share of workers in creative sectors (in %)	Number of patent applications per million inhabitants
	2010	2010	2008	2008	2008	2009	2009	2009	2010	2006
EU27	28.9	9.1	1.84	1.15	0.24	8.3	5.7	2.6	39.3	114
EU25	29.5	9.6	1.87	1.18	0.24	8.4	5.7	2.7	40.2	121
EU15	30.2	10.4	1.98	1.26	0.24	8.5	5.7	2.8	40.8	142
<i>be</i> Belgium	40.5	7.2	1.96	1.32	0.16	8.5	5.2	3.3	45.5	136
<i>cz</i> Czech Republic	18.4	7.5	1.47	0.91	0.31	12.1	9.5	2.6	40.7	15
<i>dk</i> Denmark	32.5	32.8	2.87	2.01	0.07	8.7	5.1	3.7	45.6	194
<i>de</i> Germany	27.7	7.7	2.68	1.86	0.38	12.7	10.2	2.5	42.7	284
<i>ee</i> Estonia	38.5	10.9	1.28	0.56	0.15	6.3	4.1	2.2	42.8	8
<i>gr</i> Greece	27.6	3.0	0.58	0.16	0.12	3.2	1.5	1.7	34.2	9
<i>es</i> Spain	36.7	10.8	1.35	0.74	0.25	6.7	3.7	3.0	34.7	30
<i>fr</i> France	32.8	5.0	2.11	1.32	0.34	7.8	5.0	2.9	42.0	130
<i>ie</i> Ireland	43.0	6.7	1.45	0.94	0.10	8.7	5.0	3.7	43.0	63
<i>it</i> Italy	17.5	6.2	1.23	0.65	0.15	8.3	6.0	2.3	37.8	83
<i>cy</i> Cyprus	37.7	7.7	0.42	0.10	0.10	3.0	0.7	2.3	32.2	9
<i>lv</i> Latvia	30.7	5.0	0.61	0.15	0.17	3.4	1.4	2.0	40.3	5
<i>lt</i> Lithuania	39.9	4.0	0.80	0.19	0.18	3.8	2.1	1.7	42.5	3
<i>lu</i> Luxembourg (Grand-Duché)	39.0	13.4	1.51	1.22	0.25	4.1	0.9	3.3	54.8	218
<i>hu</i> Hungary	24.3	2.8	1.00	0.52	0.23	10.1	7.9	2.2	35.2	16
<i>mt</i> Malta	18.6	5.7	0.57	0.37	0.03	7.6	4.3	3.3	36.4	19
<i>nl</i> Netherlands	32.1	16.5	1.76	0.88	0.21	6.0	2.7	3.3	49.4	220
<i>at</i> Austria	19.5	13.7	2.67	1.88	0.14	7.6	5.0	2.6	37.9	204
<i>pl</i> Poland	27.6	5.3	0.60	0.19	0.21	6.8	4.8	1.9	35.0	4
<i>pt</i> Portugal	16.7	5.8	1.50	0.75	0.11	4.7	3.0	1.7	25.5	10
<i>si</i> Slovenia	26.2	16.2	1.65	1.07	0.36	11.7	8.5	3.2	41.0	48
<i>sk</i> Slovakia	20.1	2.8	0.47	0.20	0.15	10.6	8.6	2.0	37.4	7
<i>fi</i> Finland	38.9	23.0	3.72	2.76	0.30	9.6	5.5	4.0	45.5	248
<i>se</i> Sweden	33.8	24.5	3.70	2.74	0.16	9.2	5.0	4.2	46.9	279
<i>uk</i> United Kingdom	37.2	19.4	1.77	1.10	0.16	6.9	3.8	3.1	42.9	90
<i>bg</i> Bulgaria	27.2	1.2	0.47	0.15	0.27	5.9	3.8	2.1	30.0	4
<i>ro</i> Romania	16.0	1.3	0.58	0.17	0.24	5.9	4.6	1.3	21.9	1



<i>be1</i> Brussels Hoofdstedelijk Gewest	50.9	9.1	1.43	0.79	0.14	7.6	2.6	4.9	53.2	113
<i>be2</i> Vlaams Gewest	39.3	8.2	2.06	1.38	0.23	9.3	6.1	3.2	44.3	154
<i>be3</i> Région Wallonne	39.8	4.7	2.13	1.61	0.02	7.2	4.3	2.9	45.7	110
<i>cz0</i> Czech Republic	18.4	7.5	1.47	0.91	0.31	12.1	9.5	2.6	40.7	14
<i>dk0</i> Denmark	32.5	32.8	2.87	2.01	0.07	8.7	5.1	3.7	45.6	193
<i>de1</i> Baden-Württemberg	29.1	8.8	4.67	3.76	0.42	18.8	16.5	2.3	43.6	576
<i>de2</i> Bayern	28.1	7.3	2.98	2.32	0.28	15.8	12.9	2.9	42.7	444
<i>de3</i> Berlin	39.2	9.9	3.51	1.44	1.18	9.9	4.9	5.0	56.0	207
<i>de4</i> Brandenburg	31.2	7.4	1.30	0.34	0.70	7.2	5.5	1.7	41.7	107
<i>de5</i> Bremen	27.3	8.7	2.32	0.91	0.82	10.0	8.7	1.3	44.3	116
<i>de6</i> Hamburg	31.2	9.3	2.07	1.22	0.43	10.3	6.9	3.4	57.2	206
<i>de7</i> Hessen	29.1	8.7	2.79	2.24	0.18	13.1	9.9	3.2	45.1	308
<i>de8</i> Mecklenburg-Vorpommern	28.2	7.1	1.39	0.40	0.58	6.2	3.5	2.7	35.1	56
<i>de9</i> Niedersachsen	23.3	6.7	2.63	1.80	0.37	11.4	9.8	1.7	40.6	167
<i>dea</i> Nordrhein-Westfalen	24.7	6.9	1.88	1.17	0.27	11.7	9.2	2.5	41.5	241
<i>deb</i> Rheinland-Pfalz	25.0	7.9	1.99	1.46	0.16	12.5	10.3	2.2	41.3	275
<i>dec</i> Saarland	23.0	7.1	1.15	0.46	0.34	9.8	6.5	3.3	39.9	152
<i>ded</i> Sachsen	33.8	6.7	2.75	1.41	0.72	10.6	8.2	2.3	40.5	97
<i>dee</i> Sachsen-Anhalt	25.8	7.0	1.18	0.35	0.39	5.5	4.2	1.3	35.0	48
<i>def</i> Schleswig-Holstein	23.1	8.0	1.25	0.56	0.32	9.6	6.8	2.8	39.7	146
<i>deg</i> Thüringen	29.4	8.2	1.90	0.96	0.46	10.0	8.0	2.0	39.9	114
<i>ee0</i> Estonia	38.5	10.9	1.28	0.56	0.15	6.3	4.1	2.2	42.8	8
<i>gr1</i> Voreia Ellada	26.8	2.6	0.42	0.06	0.07	2.0	1.1	1.0	32.2	7
<i>gr2</i> Kentriki Ellada	19.9	2.1	0.37	0.07	0.03	1.6	1.0	0.5	28.0	3
<i>gr3</i> Attiki	35.0	4.1	0.78	0.28	0.18	5.7	2.5	3.2	41.0	14
<i>gr4</i> Nisia Aigaiou, Kriti	18.9	1.8	0.53	0.03	0.21	1.2	0.4	0.9	28.3	10
<i>es11</i> Galicia	35.4	10.6	1.04	0.50	0.14	6.0	4.3	1.7	34.8	12
<i>es12</i> Principado de Asturias	40.3	8.9	0.97	0.42	0.15	5.5	2.8	2.8	35.7	14
<i>es13</i> Cantabria	41.5	8.4	1.01	0.39	0.17	6.0	4.7	1.3	32.9	23
<i>es21</i> Pais Vasco	51.0	13.0	1.98	1.60	0.09	12.3	9.0	3.3	42.7	62
<i>es22</i> Comunidad Foral de Navarra	44.1	13.2	1.94	1.34	0.15	9.4	8.4	1.0	34.9	75
<i>es23</i> La Rioja	40.8	11.1	1.01	0.57	0.20	4.7	3.4	1.2	33.8	25
<i>es24</i> Aragón	37.6	11.7	1.03	0.61	0.21	8.2	6.0	2.3	34.4	38
<i>es30</i> Comunidad de Madrid	45.7	11.4	2.01	1.16	0.52	10.8	2.8	8.1	45.5	41
<i>es41</i> Castilla y León	37.3	11.2	1.27	0.79	0.13	5.6	3.6	1.9	31.6	15
<i>es42</i> Castilla-la Mancha	29.6	10.4	0.72	0.40	0.09	3.7	2.5	1.2	28.7	10
<i>es43</i> Extremadura	30.3	10.2	0.86	0.17	0.22	2.2	1.1	1.1	32.9	3
<i>es51</i> Cataluña	36.1	9.9	1.62	0.99	0.27	9.6	6.7	2.9	32.5	73
<i>es52</i> Comunidad Valenciana	33.1	11.6	1.05	0.46	0.13	4.3	2.9	1.4	32.6	19

es61 Andalucia	32.4	10.2	1.03	0.35	0.24	4.0	1.8	2.2	32.0	9
es62 Región de Murcia	29.7	10.6	0.86	0.34	0.17	2.9	1.7	1.2	25.6	12
fr10 Île de France	43.5	5.0	3.15	2.03	0.52	10.7	4.3	6.5	55.1	264
fr21 Champagne-Ardenne	23.8	4.5	0.77	0.55	0.01	4.6	3.7	0.9	33.7	73
fr22 Picardie	23.6	4.2	1.18	0.94	0.04	8.1	6.6	1.5	31.2	69
fr23 Haute-Normandie	26.4	5.1	1.65	1.35	0.02	10.9	9.3	1.6	39.0	130
fr24 Centre	28.9	5.2	1.65	1.22	0.18	9.8	7.6	2.1	39.9	97
fr25 Basse-Normandie	27.7	4.7	1.03	0.65	0.07	7.2	6.1	1.2	34.1	53
fr26 Bourgogne	26.6	5.2	0.98	0.64	0.08	6.0	4.2	1.8	33.7	59
fr30 Nord - Pas-de-Calais	33.7	4.7	0.69	0.29	0.06	6.7	4.7	2.0	40.4	42
fr41 Lorraine	28.9	4.0	1.18	0.54	0.13	7.6	6.7	0.9	34.7	67
fr42 Alsace	34.7	6.4	1.63	0.86	0.07	12.8	10.6	2.2	45.0	177
fr43 Franche-Comté	26.1	6.1	2.09	1.71	0.01	10.5	9.3	1.2	33.6	149
fr51 Pays de la Loire	29.6	5.2	0.91	0.54	0.12	7.1	4.9	2.2	34.6	70
fr52 Bretagne	31.4	5.6	1.62	0.98	0.27	5.3	3.2	2.1	37.6	130
fr53 Poitou-Charentes	25.8	4.2	0.81	0.42	0.07	6.7	5.4	1.3	31.3	48
fr61 Aquitaine	32.8	5.0	1.65	1.13	0.10	6.2	3.8	2.4	42.9	51
fr62 Midi-Pyrénées	38.4	5.9	4.18	2.48	1.15	6.3	3.7	2.6	46.5	128
fr63 Limousin	28.2	5.1	0.84	0.48	0.01	4.7	2.5	2.2	35.8	69
fr71 Rhône-Alpes	32.4	5.3	2.54	1.64	0.32	8.4	5.8	2.5	40.8	238
fr72 Auvergne	27.8	5.1	2.57	1.99	0.21	6.6	3.7	2.9	35.0	99
fr81 Languedoc-Roussillon	29.7	4.4	2.11	0.67	0.91	4.0	1.4	2.6	39.5	56
fr82 Provence-Alpes-Côte d'Azur	30.3	4.4	1.94	1.09	0.46	5.2	3.3	1.9	41.2	101
fr83 Corse	22.2	3.3	0.21	0.13	0.08	0.0	0.0	0.0	32.0	28
ie01 Border, Midlands and Western	39.2	5.6	1.40	0.93	0.18	7.8	5.3	2.5	40.5	75
ie02 Southern and Eastern	44.3	7.1	1.47	0.94	0.10	9.0	4.9	4.2	43.8	55
itc1 Piemonte	16.1	6.2	1.90	1.47	0.08	12.6	10.2	2.4	37.6	137
itc2 Valle d'Aosta/Vallée d'Aoste	11.9	5.0	0.52	0.22	0.08	0.0	0.0	0.0	35.1	64
itc3 Liguria	20.8	6.8	1.22	0.77	0.12	5.9	3.7	2.2	41.7	71
itc4 Lombardia	17.9	6.2	1.26	0.87	0.05	12.0	9.0	3.0	40.5	150
itd1 Provincia Autonoma Bolzano-Bozen	12.5	7.4	0.57	0.40	0.01	3.7	2.2	1.5	38.8	64
itd2 Provincia Autonoma Trento	17.7	8.3	1.21	0.36	0.38	5.4	3.7	1.8	38.3	50
itd3 Veneto	15.3	5.9	0.87	0.53	0.09	9.6	8.2	1.4	36.4	126
itd4 Friuli-Venezia Giulia	15.2	8.2	1.45	0.69	0.26	9.3	7.8	1.5	35.9	144
itd5 Emilia-Romagna	17.3	6.8	1.54	0.86	0.27	11.2	9.2	1.9	38.9	187
ite1 Toscana	17.2	7.2	1.05	0.43	0.07	5.7	4.2	1.5	37.4	76
ite2 Umbria	18.4	7.3	0.92	0.19	0.06	5.6	4.3	1.3	34.9	44
ite3 Marche	17.2	4.6	0.69	0.36	0.03	8.9	7.5	1.4	33.6	69
ite4 Lazio	22.0	7.2	1.69	0.58	0.57	8.8	3.2	5.6	38.0	41

<i>itf1</i> Abruzzo	18.9	6.3	1.07	0.47	0.14	7.7	6.5	1.2	37.7	40
<i>itf2</i> Molise	17.4	6.5	0.47	0.07	0.06	5.0	5.0	0.0	34.3	0
<i>itf3</i> Campania	18.3	5.6	1.34	0.60	0.09	6.0	4.4	1.6	39.0	16
<i>itf4</i> Puglia	15.2	5.2	0.83	0.18	0.09	3.6	2.5	1.2	34.2	12
<i>itf5</i> Basilicata	15.7	5.8	0.70	0.17	0.27	7.1	5.5	1.6	36.3	8
<i>itf6</i> Calabria	17.8	5.6	0.49	0.04	0.05	2.1	0.9	1.3	37.1	5
<i>itg1</i> Sicilia	17.0	4.7	0.87	0.21	0.08	2.7	1.4	1.3	37.0	13
<i>itg2</i> Sardegna	15.4	7.2	0.63	0.08	0.04	2.8	0.8	2.0	33.3	9
<i>cy0</i> Cyprus	37.7	7.7	0.42	0.10	0.10	3.0	0.7	2.3	32.2	9
<i>lv0</i> Latvia	30.7	5.0	0.61	0.15	0.17	3.4	1.4	2.0	40.3	5
<i>lt0</i> Lithuania	39.9	4.0	0.80	0.19	0.18	3.8	2.1	1.7	42.5	3
<i>lu0</i> Luxembourg (Grand-Duché)	39.0	13.4	1.51	1.22	0.25	4.1	0.9	3.3	54.8	218
<i>hu1</i> Közép- Magyarország	33.2	3.4	1.34	0.72	0.39	9.8	5.4	4.4	45.5	35
<i>hu2</i> Dunántúl	18.4	2.6	0.50	0.27	0.07	13.1	12.0	1.1	28.7	6
<i>hu3</i> Alföld és Észak	21.5	2.4	0.78	0.42	0.10	7.6	6.6	1.1	31.5	8
<i>mt0</i> Malta	18.6	5.7	0.57	0.37	0.03	7.6	4.3	3.3	36.4	19
<i>nl1</i> Noord-Nederland	29.1	15.7	0.94	0.37	0.04	4.8	2.6	2.2	48.0	73
<i>nl2</i> Oost-Nederland	29.1	16.0	1.67	0.64	0.37	5.4	2.4	3.0	47.4	121
<i>nl3</i> West-Nederland	35.7	17.4	1.68	0.65	0.26	5.9	2.0	3.9	52.4	139
<i>nl4</i> Zuid-Nederland	28.6	15.2	2.47	1.94	0.04	7.1	4.4	2.8	45.5	559
<i>at1</i> Ostösterreich	22.8	14.5	2.77	1.78	0.14	7.6	3.6	4.0	41.4	187
<i>at2</i> Südösterreich	16.5	12.7	3.63	2.71	0.32	7.7	5.9	1.8	34.9	176
<i>at3</i> Westösterreich	17.5	13.3	2.09	1.60	0.06	7.5	5.9	1.6	35.8	237
<i>pl1</i> Centralny	33.3	6.5	1.06	0.33	0.50	7.6	4.0	3.6	39.9	5
<i>pl2</i> Poludniowy	27.6	5.3	0.57	0.18	0.16	7.7	5.9	1.8	37.5	5
<i>pl3</i> Wschodni	25.4	4.7	0.36	0.11	0.09	4.4	3.5	0.9	29.8	2
<i>pl4</i> Północno- Zachodni	25.2	4.7	0.38	0.09	0.11	5.9	4.7	1.2	32.9	3
<i>pl5</i> Południowo- Zachodni	26.2	5.4	0.37	0.13	0.05	9.7	7.6	2.1	34.9	4
<i>pl6</i> Północny	25.1	5.0	0.37	0.13	0.08	6.1	4.8	1.4	32.7	1
<i>pt17</i> Lisboa	25.9	6.0	2.26	1.16	0.23	6.9	3.0	4.0	38.4	10
<i>ptx</i> Rest van Portugal - vasteland	13.6	5.9	1.12	0.55	0.04	4.1	3.2	0.9	21.2	7
<i>si0</i> Slovenia	26.2	16.2	1.65	1.07	0.36	11.7	8.5	3.2	41.0	46
<i>sk0</i> Slovakia	20.1	2.8	0.47	0.20	0.15	10.6	8.6	2.0	37.4	7
<i>fi1</i> Manner-Suomi	39.0	23.0	3.74	2.78	0.32	9.6	5.6	4.1	46.1	248
<i>se0</i> Sverige	33.8	24.5	3.70	2.74	0.16	9.2	5.0	4.2	46.9	279
<i>ukc</i> North East	32.5	17.1	1.19	0.72	0.00	5.7	3.6	2.1	36.7	55
<i>ukd</i> North West (including Merseyside)	35.3	18.4	2.24	1.71	0.06	6.9	4.6	2.4	39.8	58
<i>uke</i> Yorkshire and The Humber	31.9	18.3	0.94	0.43	0.06	4.7	3.0	1.8	37.3	47
<i>ukf</i> East Midlands	33.4	19.4	1.59	1.13	0.10	6.9	5.1	1.8	41.9	78
<i>ukg</i> West Midlands	31.1	17.1	1.17	0.86	0.00	8.1	5.9	2.2	38.4	60

<i>ukh</i> Eastern	33.2	19.6	4.19	3.39	0.31	7.9	3.8	4.1	43.6	144
<i>uki</i> London	50.8	23.8	1.01	0.36	0.10	6.2	1.3	4.9	53.4	56
<i>ukj</i> South East	38.4	20.8	2.48	1.72	0.34	8.9	4.2	4.7	47.5	153
<i>ukk</i> South West	35.5	19.4	1.86	1.28	0.32	7.9	4.7	3.2	43.8	89
<i>ukl</i> Wales	37.4	18.5	1.07	0.48	0.04	5.6	3.8	1.8	38.8	31
<i>ukm</i> Scotland	39.9	19.8	1.46	0.48	0.25	4.9	2.8	2.2	39.3	69
<i>ukn</i> Northern Ireland	34.9	9.6	1.06	0.54	0.06	5.5	3.5	2.0	35.2	37
<i>bg3</i> Severna i iztochna Bulgaria	23.4	0.7	0.16	0.06	0.08	6.0	4.9	1.1	26.5	1
<i>bg4</i> Yugozapadna i yuzhna centralna Bulgaria	30.8	1.7	0.67	0.20	0.40	5.9	2.9	3.0	33.3	6
<i>ro1</i> Macroregiunea unu	15.5	1.5	0.29	0.07	0.06	5.2	4.3	1.0	22.2	1
<i>ro2</i> Macroregiunea doi	12.0	1.3	0.28	0.08	0.07	2.8	2.0	0.8	17.6	1
<i>ro3</i> Macroregiunea trei	21.5	1.3	1.06	0.34	0.51	7.8	5.3	2.5	27.3	1
<i>ro4</i> Macroregiunea patru	15.4	1.1	0.26	0.08	0.08	8.7	8.0	0.6	20.6	0

