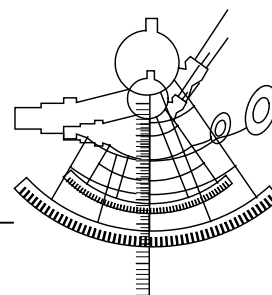


# European Trend Chart on Innovation

---



## 2003 European Innovation Scoreboard: Technical Paper No 3 Regional innovation performances

November 28, 2003



## The European Trend Chart on Innovation

Innovation is a priority of all Member States and of the European Commission. Throughout Europe, hundreds of policy measures and support schemes aimed at innovation have been implemented or are under preparation. The diversity of these measures and schemes reflects the diversity of the framework conditions, cultural preferences and political priorities in the Member States. The 'First Action Plan for Innovation in Europe', launched by the European Commission in 1996, provided for the first time a common analytical and political framework for innovation policy in Europe.

Building upon the Action Plan, the *Trend Chart on Innovation in Europe* is a practical tool for innovation policy makers and scheme managers in Europe. Run by the European Commission (Innovation Directorate of DG Enterprise), it pursues the collection, regular updating and analysis of information on innovation policies at national and Community level, with a focus on innovation finance; setting up and developing innovative businesses; the protection of intellectual property rights; and the transfer of technology between research and industry.

The Trend Chart serves the "open policy co-ordination approach" laid down by the Lisbon Council in March 2000. It delivers summarised and concise information and statistics on innovation policies, performances and trends in the European Union. It is also a European forum for benchmarking and the exchange of good practices in the area of innovation policy.

### The Trend Chart products

The Trend Chart on Innovation has been running since January 2000. It tracks innovation policy developments in all EU Member States, plus Bulgaria, Cyprus, Czech Republic, Estonia, Hungary, Iceland, Israel, Latvia, Lithuania, Norway, Poland, Romania, Slovak Republic, Slovenia and Switzerland. The Trend Chart website ([www.cordis.lu/trendchart](http://www.cordis.lu/trendchart)) provides access to the following services and publications:

- the European Innovation Scoreboard and other statistical reports;
- regular country reports for all countries covered;
- a database of policy measures across Europe;
- a "who is who?" of agencies and government departments involved in innovation;
- regular trend reports covering each of the four main themes;
- benchmarking reports from the Trend Chart workshops;
- a news service and thematic papers;
- the annual reports of the Trend Chart.

The present report was prepared by **Hugo Hollanders** of MERIT ([www.merit.unimaas.nl](http://www.merit.unimaas.nl)). The information contained in this report has not been validated in detail by either the Member States or the European Commission.

Contact: Peter Löwe: [peter.loewe@cec.eu.int](mailto:peter.loewe@cec.eu.int)

This document originates from the European Commission's "European Trend Chart on Innovation" (Enterprise Directorate-General). Copyright of the document belongs to the European Commission. Neither the European Commission, nor any person acting on its behalf, may be held responsible for the use to which information contained in this document may be put, or for any errors which, despite careful preparation and checking, may appear.

## European Innovation Scoreboard

The European Innovation Scoreboard (EIS) was developed at the request of the Lisbon European Council in 2000<sup>1</sup>. It focuses on high-tech innovation and provides indicators for tracking the EU's progress towards the Lisbon goal of becoming the most competitive and dynamic knowledge-based economy in the world within the next decade.

The 2003 EIS contains 19 main indicators, selected to summarize the main drivers and outputs of innovation. These indicators are divided into four groups: Human resources for innovation (5 indicators); the Creation of new knowledge (4 indicators); the Transmission and application of knowledge (3 indicators); and Innovation finance, output and markets (7 indicators).

The EIS complements the *Enterprise Policy Scoreboard*<sup>2</sup> and other benchmarking exercises of the European Commission. It mainly uses Eurostat data. Six indicators are drawn from the European Commission's Structural indicators. Eight indicators are also used by DG Research under the "Investing in Research" Action Plan for Europe<sup>3</sup>.

All indicators have been updated based on data availability as of September 15, 2003. The 2003 EIS offers a number of improvements compared to the 2002 EIS. Most importantly, it will use new and more detailed data from the 3<sup>rd</sup> Community Innovation Survey (CIS-3). It provides a substantially improved coverage of innovation in services. A supplementary technical report, the *Sectoral Innovation Scoreboard* (SIS), replicates the EIS, where possible, for four manufacturing classes: high medium-high, medium-low, and low technology. The background national context that influences innovation performances across the 15 EU member states is described in a second supplementary report on *National Innovation Systems* (NIS).

The EIS is complemented by six technical papers:

- Technical Paper No 1: Indicators and definitions  
Full definitions and graphs for all indicators.
- Technical Paper No 2: Analysis of national performances  
Detailed EIS results for current and trend data, innovation leaders, relative strengths and weaknesses per country, and country pages with both current and trend graphs.
- Technical Paper No 3: Regional innovation performances  
Detailed results for current data, innovation leaders, a revealed regional summary innovation index, and cluster analysis for 173 regions in 13 Member States using 13 regional innovation indicators.
- Technical Paper No 4: Sectoral Innovation Scoreboards  
Replicates the EIS for four classes of manufacturing sectors.
- Technical Paper No 5: National Innovation System Indicators  
Includes nine structural and 14 socio-cultural-institutional indicators that shape the background conditions for innovative activity in each EU Member State.
- Technical Paper No 6: Methodology report  
Describes the methodology underlying the EIS, including different methods for calculating a Summary Innovation Index.

All technical papers are available from the Trend Chart website ([www.cordis.lu/trendchart](http://www.cordis.lu/trendchart)).

---

<sup>1</sup> A first provisional EIS was published in September 2000: COM(2000) 567. The first full version of the EIS was published in October 2001: SEC(2001) 1414. The second full version was published in December 2002: SEC(2002) 1349.

<sup>2</sup> SEC(2002) 1213.

<sup>3</sup> SEC(2003) 489.

## Table of Contents

Changes compared to November 14 version .....	1
1. Introduction.....	2
2. 2003 Regional Innovation Scoreboard.....	3
2.1 Revealed Regional Summary Innovation Index (RRSII).....	3
2.2 European Regional Innovation Leaders .....	4
2.3 ‘Local’ EU innovation leaders .....	5
2.4 Innovative and Economic Performance .....	6
2.5 Regional Innovation Performance per Indicator.....	7
3. Correlations and Cluster Analysis.....	16
4 Summary .....	20
Annex Table A: Regional Innovation Scoreboard 2003: Indicators and Sources.....	21
Annex Table B: 2003 RIS: Data availability .....	21
Annex Table C: EU Regional Indicators .....	22
Annex Table D: Correlations between regional innovation indicators and per capita GDP.....	27
Annex Table E: Re-scaled indicator values per country and RNSII.....	28
Annex Table F: Re-scaled European indicator values, RSII, RRSII and clusters .....	32

### Changes compared to November 14 version

- Section 2.1 updated: regional composite indicators are calculated as a *weighted* average of the re-scaled indicator values with indicators 1-8 receiving a weight of 1 and the five CIS-indicators receiving a weight of 0.5;
- Figure 3 replaced (wrong labelling of Austrian regions);
- Figure 4 replaced (wrong labelling of Austrian regions);
- Figure 5 replaced (Nov. 14 Figure 5 was for Employment in medium-high and high-tech manufacturing);
- Annex Table C: data for indicators 2 (lifelong learning), 3 (med/hi-tech employment in manufacturing) and 4 (high-tech employment in services) for Austria updated.

## 1. Introduction

One of the expansions of the 2002 EIS was the development of a Regional Innovation Scoreboard (RIS). The 2002 RIS was limited to those indicators from the EIS for which regional data were available and to a static comparison only. The 2003 RIS will include more region-specific innovation indicators and will also include a dynamic comparison of the regions. This report gives the full results for the Member States' Regions for the Trend Chart's fourth annual European Innovation Scoreboard (EIS).

Regional level data are of value for two reasons. First, innovation policies are often developed and implemented at the regional and even municipal level, in addition to national and EU level policies. Several member states are currently giving more responsibilities to regions for innovation policy (e.g. Sweden, United Kingdom), while others (e.g. Germany, Belgium, Spain, Austria) have already a long tradition in this area. Regions with development problems can get additional funding through the European Regional Development Fund, and innovation promotion is more and more considered as a key dimension in programmes set up under this Fund. Regional indicators can help inform these policies. Second, and more importantly, many innovative activities are strongly localized into clusters of innovative firms, sometimes in close co-operation with public institutions such as research institutes and universities. More generally, the spatial dimension of innovative activities is recognised as important, even when this does not take the form of fully developed clusters. Policy needs to be directed at supporting these clusters and, where feasible, encouraging new clusters of innovation in other regions. This will often require different types of policy actions. The effective design and implementation of such policies therefore depend on identifying both highly innovative regions and less innovative regions that might have future potential. Other regions, due to an economic basis in tourism, agriculture, or resource extraction, may need diffusion-oriented policies that focus on the adoption rather than the creation of new technology, while others, with high-level knowledge creation activities, might be best served with policies focusing on spin-offs and high-tech clusters creation.

This year's RIS uses regional data for 13 innovation indicators<sup>4</sup> plus per capita GDP at the regional level for the EU member states. The regional innovation indicators listed in Annex Table R-A provide good coverage of the innovation categories *Human resources* (4 indicators), *Knowledge creation* (4 indicators) and *Transmission and application of knowledge* (4 indicators). The coverage of *Innovation finance, output and markets* is limited to only one indicator. Due to data limitations, the regional indicators are better at identifying strong innovative regions than regions with future potential, or regions that require diffusion-oriented policies.

The NUTS classification<sup>5</sup> has been used for determining the level of regional level analysis: NUTS2 for Austria, Finland, France, Germany, Greece, Ireland, Italy, the Netherlands, Portugal, Spain and

---

<sup>4</sup> These are the following indicators: (1) population with tertiary education, (2) lifelong learning, (3) employment in medium/high-tech manufacturing, (4) employment in high-tech services, (5) public R&D expenditures, (6) business R&D expenditures, (7) EPO high-tech patent applications, (8) all EPO patent applications, and five indicators using unpublished CIS-2 data: (9) and (10) the share of innovative enterprises in both manufacturing and services, (11) and (12) innovation expenditures as a percentage of turnover in both manufacturing and services, and (13) the share of sales of new-to-the-firm products in manufacturing.

<sup>5</sup> <http://europa.eu.int/comm/eurostat/ramon/nuts/>

Sweden, and NUTS1 for Belgium and the UK<sup>6</sup>. The use of the NUTS classification introduces several problems for analysing the innovative capabilities of regions. First, there are large discrepancies in the size (in terms of population and economic output) of regions, both within and between countries. This can create anomalies, such as a small region doing comparatively well on an indicator because a single innovative firm or public research institute is based there. Second, a few countries have very few regions. This places these countries at a serious disadvantage in analyses of leading regions. A country such as France with 22 regions has a higher probability of showing up with a leading region for one or more indicators than a country such as Belgium with only 3 regions.

## 2. 2003 Regional Innovation Scoreboard

### 2.1 Revealed Regional Summary Innovation Index (RRSII)

The Revealed Regional Summary Innovation Index (RRSII) is a composite indicator, which tries to locate *local* leaders by taking into account both the region's relative performance within the EU and the region's relative performance within the country<sup>7</sup>. Two indexes are calculated of which the mean value is taken for the RRSII:

- RNSII (regional national summary innovation index) - The average of the re-scaled indicator values using only regional data for each specific country (where indicators 1-8 receive a weight of 1 and the five CIS-indicators receive a weight of 0.5):

$$RNSII_{jk} = \sum_{j=1}^m x_{ijk}^n, \text{ where } x_{ijk}^n = \frac{X_{ijk} - \min(X_{jik})}{\max(X_{ijk}) - \min(X_{ijk})} \quad (1)$$

- RSII (regional summary innovation index)<sup>8</sup> - The average of the re-scaled indicator values using data for all regions for all countries (where indicators 1-8 receive a weight of 1 and the five CIS-indicators receive a weight of 0.5):

$$RSII_{jk} = \sum_{j=1}^m x_{ijk}^{eu}, \text{ where } x_{ijk}^{eu} = \frac{X_{ijk} - \min(X_{ij})}{\max(X_{ij}) - \min(X_{ij})} \quad (2)$$

where  $X_{ijk}$  is the value of indicator  $i$  for region  $j$  in country  $k$  and  $m$  is the number of indicators for which regional data are available. The RRSII is then calculated as the unweighted average of the re-scaled values for RNSII and RSII. Annex Table E gives detailed results for RNSII. Annex Table F gives detailed results for RSII and RRSII.

Identifying local leaders reduces the influence of those indicators for which a country has an above average performance. Peaks for indicators for which the country performs well above the EU mean are thus adjusted downwards, peaks for indicators for which the country performs well below the EU

<sup>6</sup> Denmark and Luxembourg do not distinguish either NUTS1 or NUTS2 regions.

<sup>7</sup> The RRSII is designed to pinpoint 'local leaders'. Regions in highly performing countries will always look more favourable when compared directly to regions from less performing countries.

<sup>8</sup> In the 2002 RIS the regional summary innovation index (RRSI) was presented as regional European summary innovation index (REUSII).

mean are thus adjusted upwards. The RRSII will thus increase the composite indicator value for leading regions in lagging countries: local leaders become more visible.

## 2.2 European Regional Innovation Leaders

The *Regional Summary Innovation Index* (RSII) can be used to rank the absolute innovative performance of regions with Europe. The RSII is calculated by first re-scaling the regional values per indicator using the 2<sup>nd</sup> formula as given in section 2.1, and by then taking the unweighted average of these re-scaled indicator values per region. Annex Table F gives the re-scaled values and the RSII-scores for all regions.

Table 1 shows that, in most countries, less than one third of the regions performs above the country mean. This confirms that national innovative capabilities tend to be concentrated in a few regions<sup>9</sup>. Table 1 also shows the three leading regions for each Member State. The leading innovative regions in the EU are Stockholm and Västsverige (SE), Uusimaa (FI), Oberbayern and Stuttgart (DE) and Noord-Brabant (NL). This conclusion is supported by a regional cluster analysis identifying six clusters of regions (cf section 3).

**Table 1. Leading innovation regions per country**

Country	No of regions	% regions > country mean	Leading regions (RSII)		
Austria	9	11%	Wien (.57)	Steiermark (0.43)	Tirol (0.40)
Belgium	3	67%	Brussels (.42)	Vlaams Gewest (.41)	Région Wallonne (.34)
Germany	40	33%	Oberbayern (.91)	Stuttgart (.79)	Karlsruhe (.73)
Greece	13	15%	Attiki (.21)	Kentriki Makedonia (.15)	Voreio Aigaio (.09)
Spain	18	28%	Comunidad De Madrid (.45)	País Vasco (.38)	Comunidad Foral De Navarra (.37)
France	23	13%	Île de France (.64)	Midi-Pyrénées (.49)	Rhône-Alpes (.45)
Finland	6	17%	Uusimaa (suuralue) (.95)	Etelä-Suomi (.63)	Pohjois-Suomi (.62)
Ireland	2	50%	Southern and Eastern (.48)	Border, Midland and Western (.31)	
Italy	20	25%	Lazio (.40)	Piemonte (.37)	Friuli-Venezia Giulia (.36)
Netherlands	12	33%	Noord-Brabant (.80)	Flevoland (.64)	Utecht (.57)
Portugal	7	14%	Lisboa e Vale do Tejo (.21)	Centro (.14)	Alentejo (.12)
Sweden	8	50%	Stockholm (1.00)	Västsverige (.77)	Sydsverige (.75)
United Kingdom	12	33%	South East (.73)	Eastern (.68)	South West (.59)

<sup>9</sup> The bias towards R&D-based innovation due to the availability of regional indicators could explain why regions with high diffusion-oriented innovation capabilities such as Emilia-Romagna (IT) or others are not among the leaders.

### 2.3 ‘Local’ EU innovation leaders

The *Revealed Regional Summary Innovation Index* (RRSII) can be used to rank the relative innovative performance of regions with Europe taking into account differences in national innovative performance. The RRSII is calculated as an unweighted average of the RRSI and the RNSII (cf. section 2.1). Identifying local leaders reduces the influence of those indicators for which a country has an above average performance. Peaks for indicators for which the country performs well above the EU mean are thus adjusted downwards, peaks for indicators for which the country performs well below the EU mean are thus adjusted upwards. The RRSII will thus increase the composite indicator value for leading regions in lagging countries: local leaders become more visible. Annex Table F gives RRSII-scores for all regions.

Table 2 shows the three leading regions within each country. The leading regions per country have not changes compared to those shown in Table 1 except for Italy. Was Lazio the leading Italian region based on its RSII-score, Lombardia is the leading ‘local’ region, with Lazio now coming in third place<sup>10</sup>.

**Table 2. ‘Local’ innovation leaders per country**

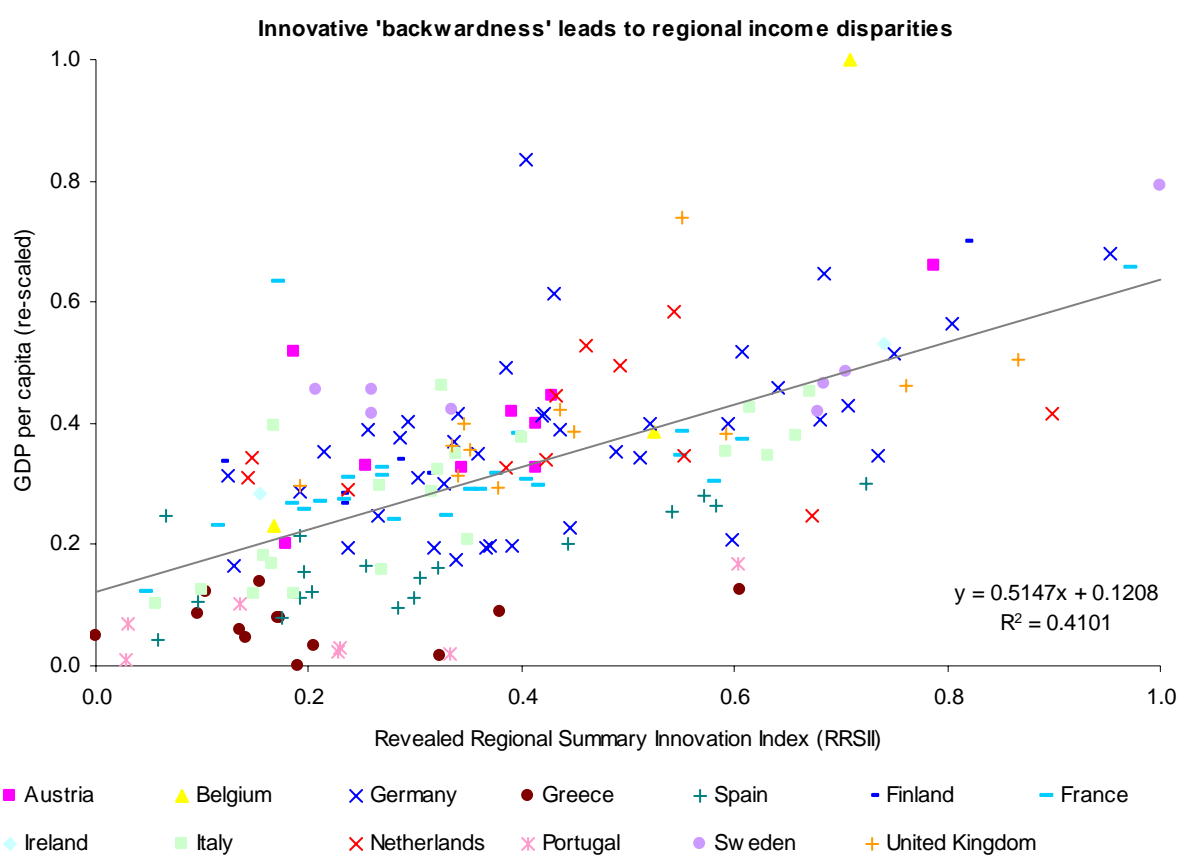
Country	Leading regions (RRSII)		
Austria	Wien (.79)	Vorarlberg (.43)	Steiermark (.41)
Belgium	Brussels (.71)	Vlaams Gewest (.52)	Région Wallonne (.17)
Germany	Oberbayern (.95)	Stuttgart (.80)	Karlsruhe (.75)
Greece	Attiki (.61)	Kentriki Makedonia (.38)	Dytiki Ellada (.32)
Spain	Comunidad De Madrid (.72)	País Vasco (.58)	Comunidad Foral De Navarra (.57)
France	Île De France (.82)	Midi-Pyrénées (.58)	Rhône-Alpes (.55)
Finland	Uusimaa (suuralue) (.97)	Etelä-Suomi (.61)	Pohjois-Suomi (.55)
Ireland	Southern and Eastern (.74)	Border, Midland and Western (.15)	
Italy	Lombardia (.67)	Piemonte (.66)	Lazio (.63)
Netherlands	Noord-Brabant (.90)	Flevoland (.67)	Limburg (.55)
Portugal	Lisboa e Vale do Tejo (.60)	Centro (.33)	Norte (.23)
Sweden	Stockholm (1.00)	Västsverige (.71)	Sydsverige (.69)
United Kingdom	South East (.87)	Eastern (.76)	South West (.59)

<sup>10</sup> Lombardia’s leading position is confirmed by the results of the “Innovation Scoreboard 2002 Lazio Region (RLIS2002)”. RLIS2002 is compiled by the Filas Observatory (<http://www.osservatoriofilas.it>), using 14 indicators for 20 Italian regions. These 14 indicators correspond with the indicators used in the 2002 EIS: New S&E graduates, Population with tertiary education, Lifelong learning, Employment in medium-high and high-tech manufacturing, Employment in high-tech services, Public R&D, Business R&D, EPO high-tech patent applications, EPO patent applications, High-tech venture capital, Home internet access, Internet access, ICT expenditures and Value-added from high-tech manufacturing (nine of these indicators are used in the 2003 RIS). The RLIS2002 composite indicator is comparable to the RNSII from the 2003 RIS. The ranking of the three most innovative Italian regions is the same in both RLIS2002 and 2003 RIS: 1) Lombardia, 2) Piemonte, and 3) Lazio.

## 2.4 Innovative and Economic Performance

About 40 percent of the variation in per capita regional income can be explained by differences in innovative performance, as shown in Figure 1. This suggests a positive relation between a region's innovative performance as measured by its RRSII and its economic performance. Innovative 'backwardness' may thus lead to regional income disparities. The high per capita income levels for e.g. Hamburg and other regions, however, do point out that other factors also generate high incomes. Conversely, as demonstrated by e.g. Noord-Brabant, a strong innovation performance does not automatically result in high(er) per capita income.

**Figure 1. Innovative and economic performance on a regional level**



## 2.5 Regional Innovation Performance per Indicator

Table 3 gives the five leading regions per indicator. Germany has 28 leading slots, Sweden 9, the UK 7, Finland 6, Austria, France and the Netherlands 4 each, and Belgium, Italy and Portugal 1 each. Innovation leaders per indicator are more diversely spread within Europe than overall leading regions are. Germany shows top regional performance in med/hi-tech manufacturing employment, in public and business R&D, in the shares of innovative enterprises and in the share of sales of new-to-firm products. The UK shows top regional performance in life-long learning, Sweden in business R&D and innovation expenditures in manufacturing and Finland in high-tech EPO patents.

**Table 3. Leading EU innovation regions per indicator**

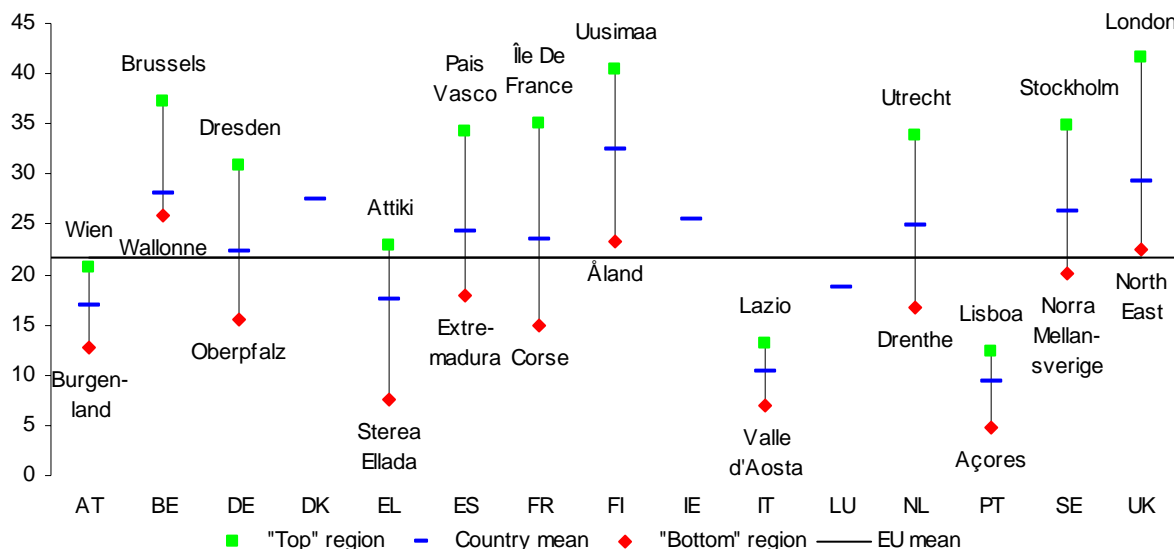
Indicator	Leading regions				
1 Tertiary education	London (UK)	Uusimaa (suuralue) (FI)	Brussels (BE)	Île De France (FR)	Stockholm (SE)
2 Life-long learning	London (UK)	South West (UK)	Eastern (UK)	South West (UK)	Uusimaa (suuralue) (FI)
3 Medium/high-tech empl in manuf	Stuttgart (DE)	Tübingen (DE)	Braunschweig (DE)	Franche-Comté (FR)	Karlsruhe (DE)
4 High-tech empl in services	Stockholm (SE)	Uusimaa (suuralue) (FI)	Île De France (FR)	Flevoland (NL)	Niederösterreich (AT)
5 Public R&D	Flevoland (NL)	Midi-Pyrénées (FR)	Berlin (DE)	Braunschweig (DE)	Dresden (DE)
6 Business R&D	Västssverige (SE)	Braunschweig (DE)	Stuttgart (DE)	Stockholm (SE)	Oberbayern (DE)
7 Hi-tech EPO patents	Noord-Brabant (NL)	Uusimaa (suuralue) (FI)	Oberbayern (DE)	Stockholm (SE)	Pohjois-Suomi (FI)
8 All EPO patents	Oberbayern (DE)	Noord-Brabant (NL)	Stuttgart (DE)	Stockholm (SE)	Uusimaa (suuralue) (FI)
9 Innovative manuf enterprises	Koblenz (DE)	Karlsruhe (DE)	Tirol (AT)	Mittelfranken (DE)	Schwaben (DE)
10 Innovative services enterprises	Saarland (DE)	Gießen (DE)	Wales (UK)	Burgenland (AT)	Arnsberg (DE)
11 Innovation expend manuf	Bremen (DE)	Östra Mellansverige (SE)	Saarland (DE)	Västssverige (SE)	Stockholm (SE)
12 Innovation expend services	Burgenland (AT)	Gießen (DE)	Região Autónoma Da Madeira (PT)	Saarland (DE)	North East (UK)
13 Sales of new-to-firm products	Braunschweig (DE)	Hannover (DE)	Lazio (IT)	Köln (DE)	Saarland (DE)

Regional performance can vary significantly within countries. In the following of this section, for each country for which regional data are available for at least three regions, the *top* and *bottom* innovative region and the spread per country will be displayed. Note that being the *bottom* innovative region does not necessarily imply a normative judgement.

Figure 2 shows the regional spread for population with **tertiary education**. The leading positions in the 2003 EIS by Finland, the UK and Belgium are reflected by the fact that the three leading EU regions can also be found in these countries: London, Uusimaa and Brussels. Due to discrepancies in

educational systems, definitions of tertiary degrees might differ among countries. This is reflected by the fact that for Austria, Italy and Portugal all regions score below the EU mean, whereas for Belgium, Finland and the UK all regions score above the EU mean.

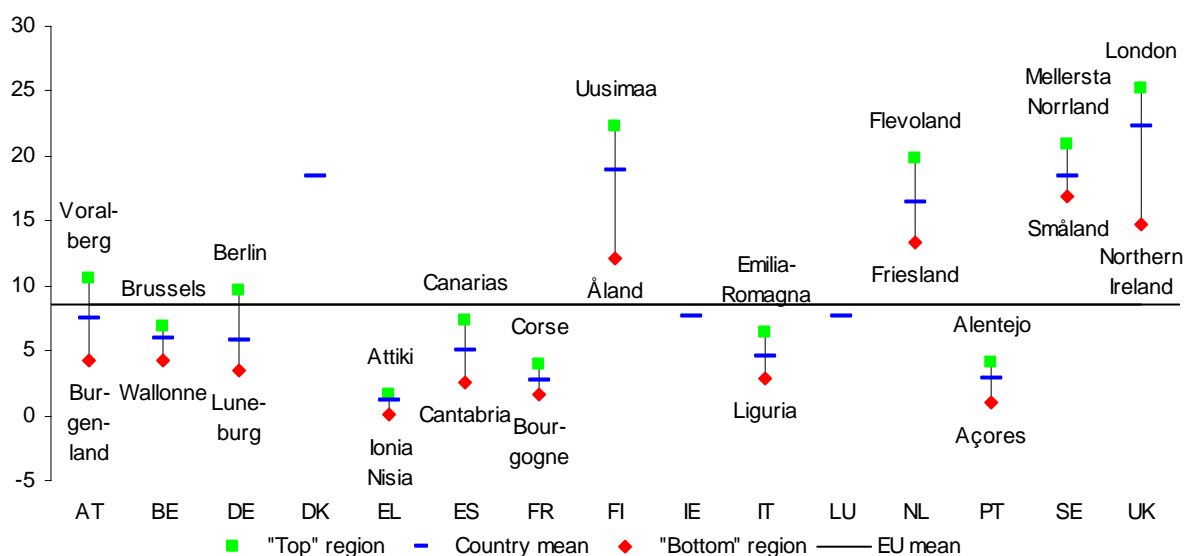
**Figure 2. Population with tertiary education (% of 25 – 64 years age class)**



All data at NUTS 2 level, except for BE and UK at NUTS 1. All data are for 2002. No regional data for DK and LU. For IE no regional data are displayed, as there are only 2 regions.

For participation in **life-long learning** (Figure 3), the UK ‘stars’ among the EU top-5 with four and among the top-10 with nine regions. Finland takes up the remaining lead position with Uusimaa on rank 5. Differences in adult education systems favour the UK: Northern Ireland is the only UK-region that is not in the EU top-20. The relatively homogenous situation within countries, for this indicator, should be noted, reflecting the importance of the national context for life-long learning practices.

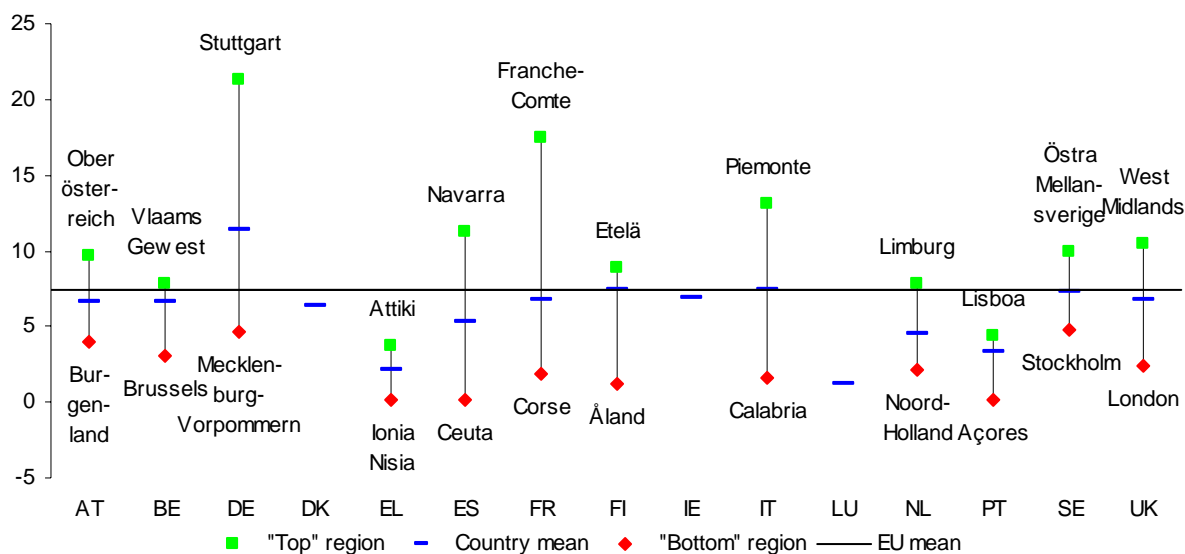
**Figure 3. Participation in life-long learning (% of 25 – 64 years age class)**



All data at NUTS 2 level, except for BE and UK at NUTS 1. All data are for 2002. No regional data for DK and LU. For IE no regional data are displayed, as there are only 2 regions.

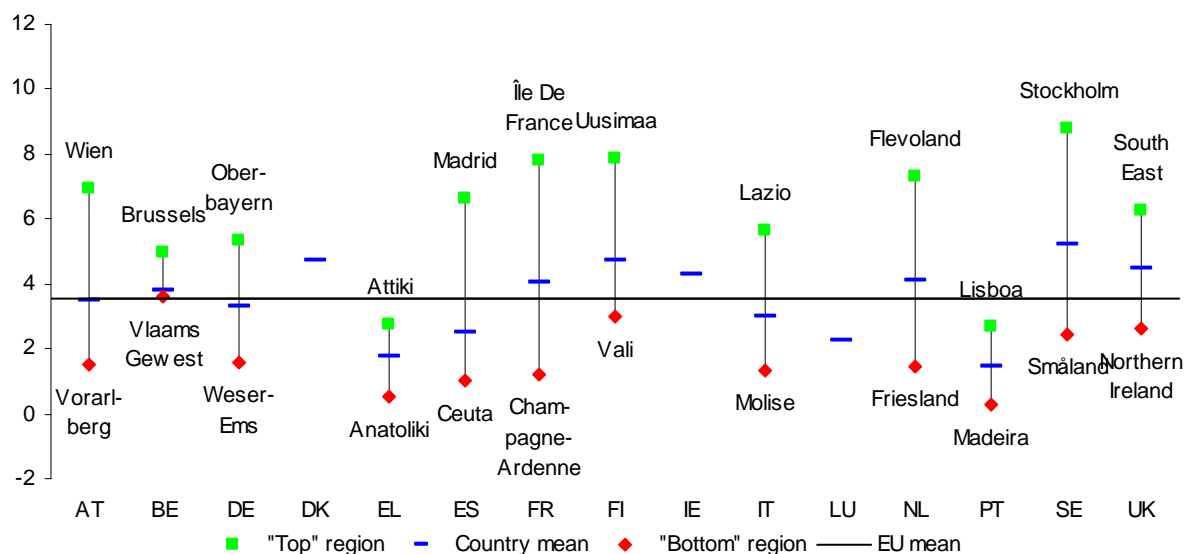
**Employment in medium/high-tech manufacturing** (Figure 4) is highest in 15 German regions, 3 French and one Italian and Spanish region. The automobile industry explains to a large extent the ranking of the top EU-regions: Stuttgart (rank 1: Mercedes), Franche-Comté (rank 4: Peugeot), Niederbayern (rank 6: BMW), Oberbayern (rank 12: BMW), Piemonte (rank 15: Fiat), and Comunidad Foral De Navarra (rank 20: Volkswagen). Discrepancies within countries are generally large within countries, reflecting imbalances between heavily industrialised regions and rural or services-oriented areas.

**Figure 4. Employment in medium-high and high-tech manufacturing (% of total workforce)**



All data at NUTS 2 level, except for BE and UK at NUTS 1. All data are for 2002. No regional data for DK and LU. For IE no regional data are displayed, as there are only 2 regions.

**Figure 5. Employment in high-tech services (% of total workforce)**

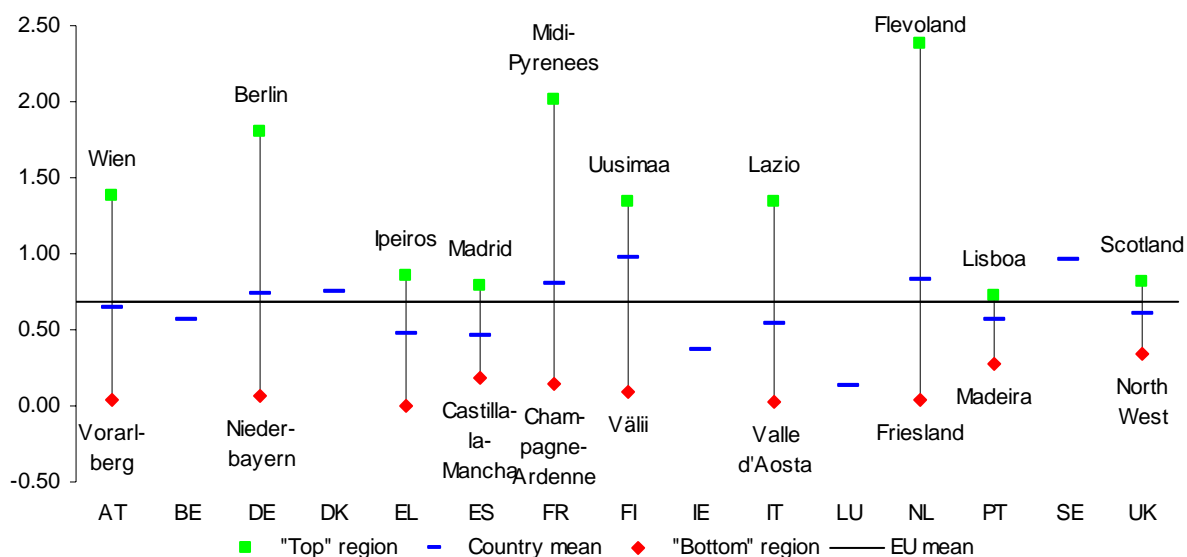


All data at NUTS 2 level, except for BE and UK at NUTS 1. All data are for 2002. No regional data for DK and LU. For IE no regional data are displayed, as there are only 2 regions.

**Employment in high-tech services** is highest in Stockholm and Uusimaa (Figure 5). In both regions we see a strong ICT services sector (Ericsson and Nokia). Most of the strongest regions are capital city regions. For most countries this indicator shows large regional disparities. Statistically, there is no relation between employment in high-tech services and that in medium/high-tech manufacturing, reflecting the relative specialisation of regions within countries.

**Public R&D expenditures** is a good indicator of the presence of voluntary policies directed to specific regions. However, it should be noted that funds can be of regional or national origin, thus this should not be taken as an indicator of the intensity of regional R&D policies. Public R&D expenditures are highest in Flevoland, Midi-Pyrenees and Berlin (Figure 6). A region's public R&D intensity will depend heavily on the presence of both universities and public and non-profit research institutes. Universities e.g. are mostly located in more densely populated and urbanized regions. In more rural regions public R&D expenditures are thus expected to be small. Here again, national disparities are large.

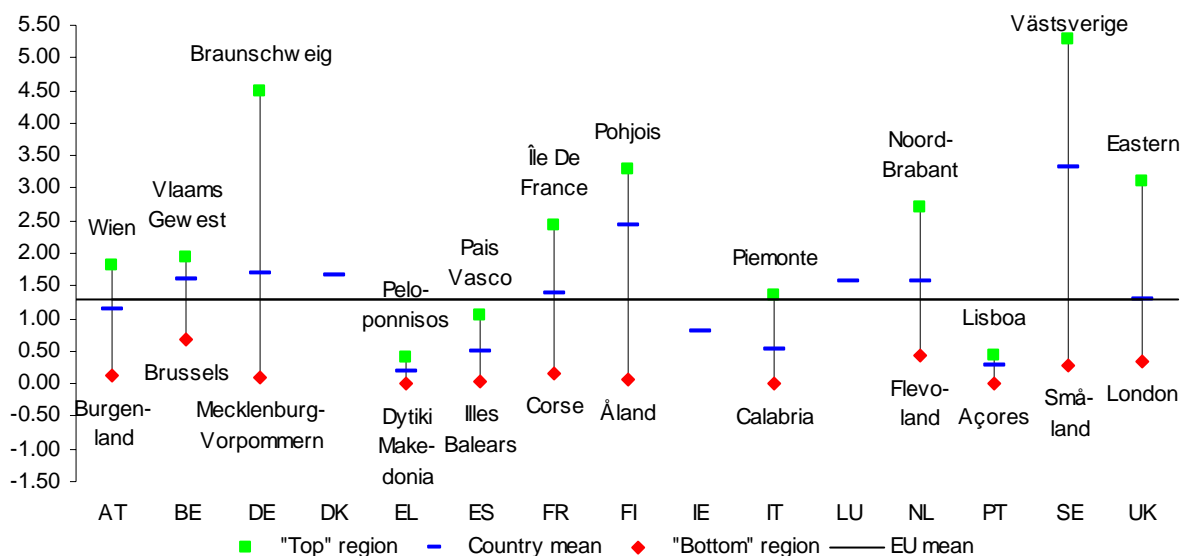
**Figure 6. Public R&D expenditures (GERD – BERD) (% of GDP)**



All data at NUTS 2 level, except for BE and UK at NUTS 1. Data are for 2001 for BE, DK, ES, PT, FI and SE, 2000 for IT, LU and NL, 1999 for DE, EL, FR and UK, and 1998 for AT. No regional data for BE, DK, IE, LU and SE.

**Business R&D expenditures** are highest in Västsverige, Braunschweig, Stuttgart and Stockholm (Figure 7). Business R&D expenditures are highly concentrated in several countries. Of the top-10 EU regions four are German, three Swedish and two Finnish. This reflects the leading positions of these countries in this indicator. The overall lagging position for Greece, Spain, Italy and Portugal is also witnessed at the regional level. Only for Piemonte the R&D intensity is above the EU mean. Interestingly, all countries include at least one region with performance far below the EU average for this indicator. The lagging situation of Flevoland contrasts with the leading position this region has for public R&D as shown in Figure 5.

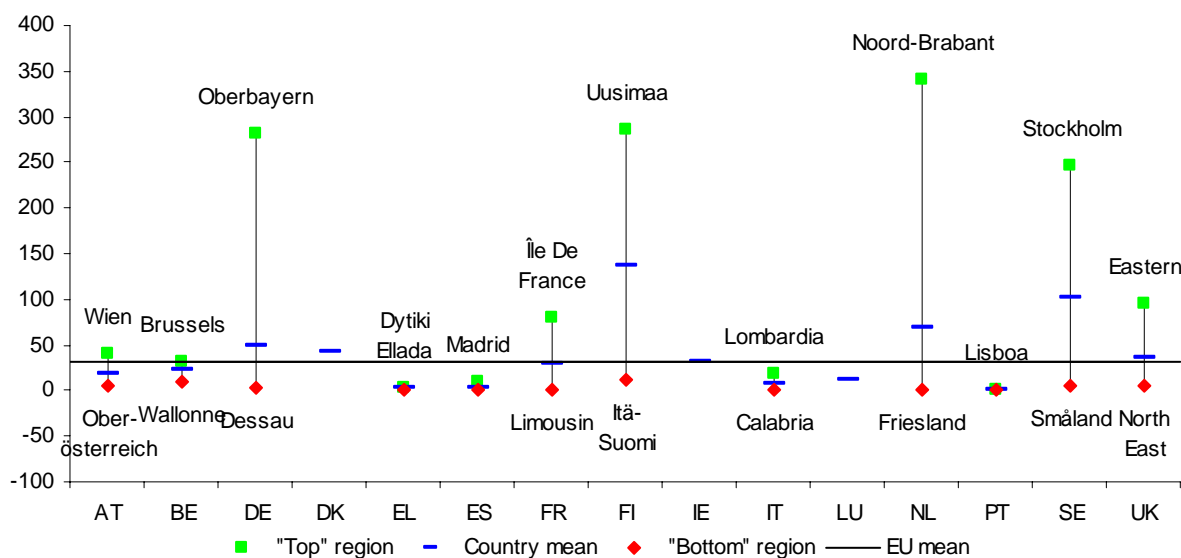
**Figure 7. Business expenditures on R&D (BERD) (% of GDP)**



All data at NUTS 2 level, except for BE and UK at NUTS 1. Data are for 2001 for BE, DK, ES, PT, FI, SE and UK, 2000 for IT, LU and NL, 1999 for DE, EL and FR, and 1998 for AT. No regional data for DK, IE and LU.

Noord-Brabant, Uusimaa, Oberbayern and Stockholm are the three leading regions for **high-tech patent applications** (Figure 8). Finland and Sweden, the EU leaders in high-tech patent activity, have two respectively four regions in the EU top-20 ranking. Germany, Finland, the Netherlands and Sweden show large regional disparities. For Finland and the Netherlands this can be explained by the location of the multinationals Nokia in the Helsinki area and Philips in the Eindhoven area.

**Figure 8. EPO high-tech patent applications (per million population)**

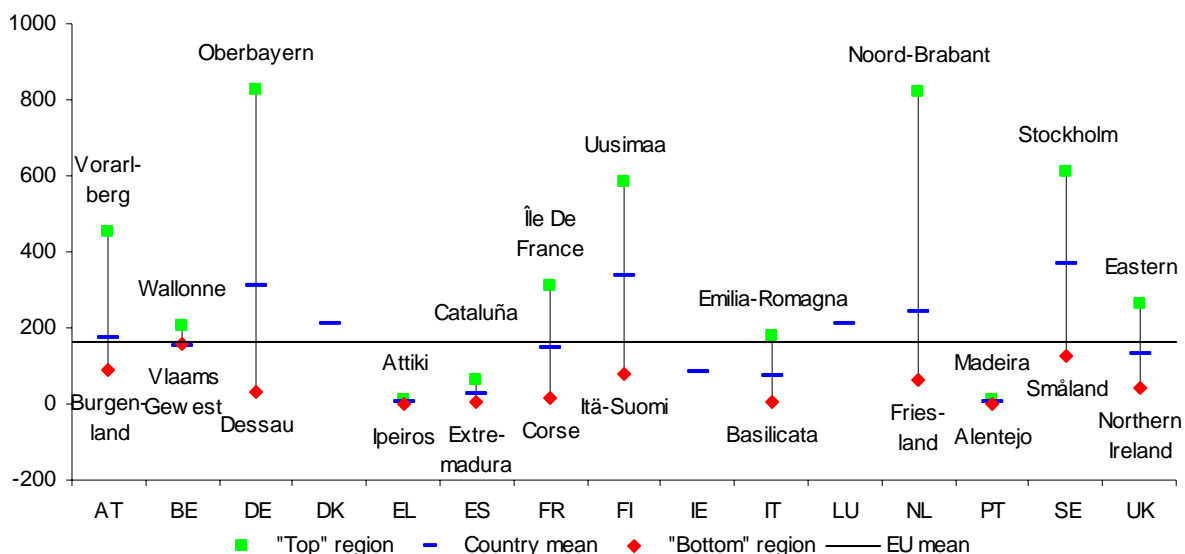


All data at NUTS 2 level, except for BE and UK at NUTS 1. All data are for 2001. No regional data for DK and LU. For IE no regional data are displayed, as there are only 2 regions.

**For patent applications** (Figure 9) the leading regions are found in Germany and the Netherlands: Oberbayern, Noord-Brabant and Stuttgart. Regional disparities are once again large in Finland, Germany, the Netherlands and Sweden. Most of the regions in Greece, Spain, Italy and Portugal score

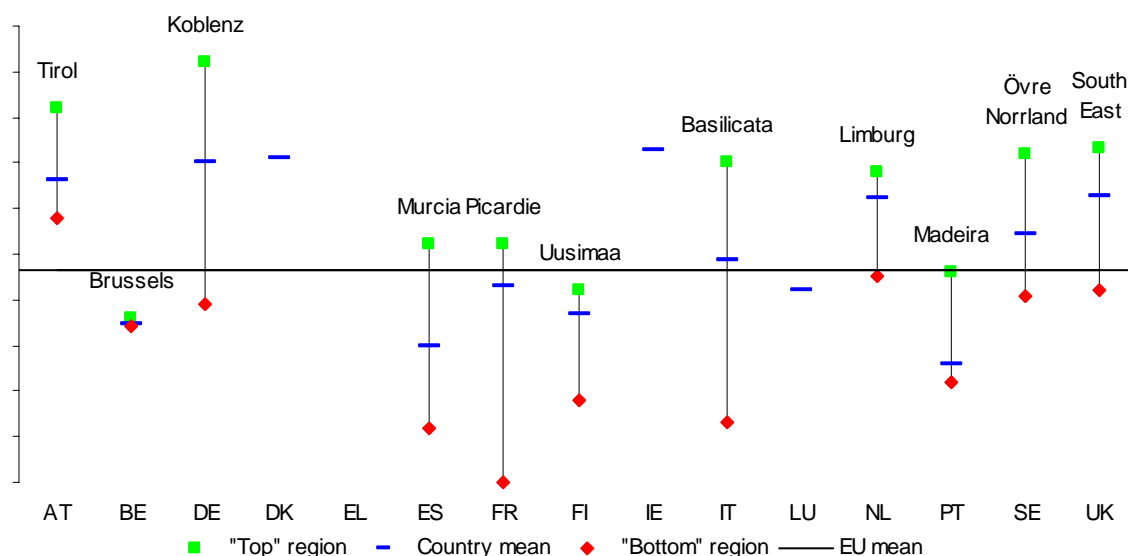
below the EU mean. Only Emilia-Romagna and Lombardia show an above average patent performance.

**Figure 9. EPO patent applications (per million population)**



All data at NUTS 2 level, except for BE and UK at NUTS 1. All data are for 2001. No regional data for DK and LU. For IE no regional data are displayed, as there are only 2 regions.

**Figure 10. Share of innovative enterprises (% of all manufacturing enterprises)**



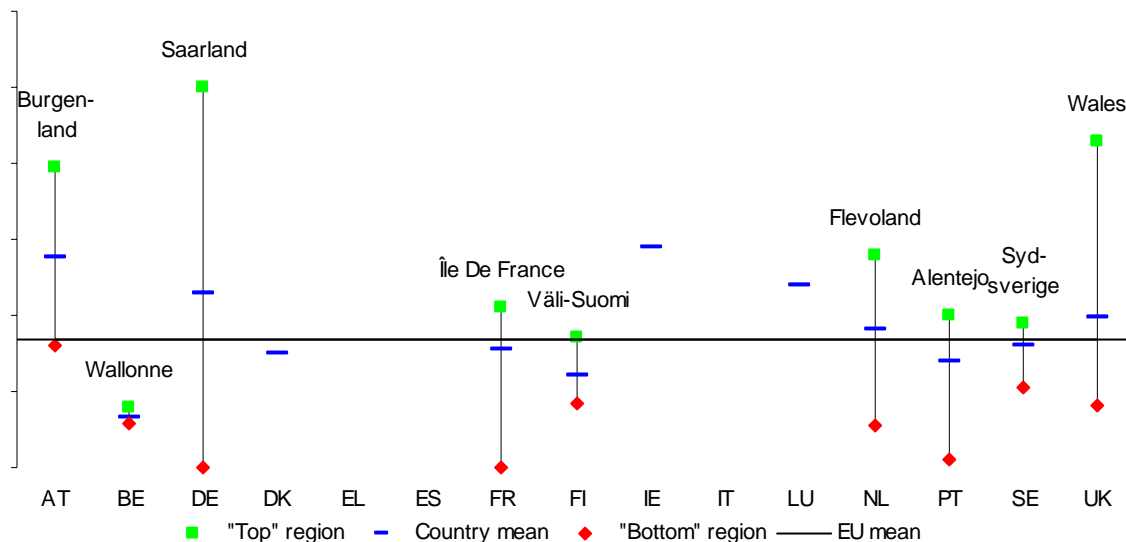
All data at NUTS 2 level, except for BE and UK at NUTS 1. All data are from CIS-2. No regional data for DK, IE and LU. No data for EL. The vertical axis is not numbered due to the unpublished status of the regional CIS-2 data.

Figure 10 shows the regional spread for the **share of manufacturing enterprises involved in innovation**. Due to the experimental status of the regional CIS-2 data<sup>11</sup>, all results should be

<sup>11</sup> The same warning applies for the other CIS-2 based indicators as shown in Figures 10 to 13. Also, in Figures 9 to 13 the actual values on the vertical axis have been suppressed due to the experimental status of the regional CIS-2 data.

interpreted with extreme care. The top-20 leading regions are located in only three countries: Germany (15), Austria (3) and the UK (2). Regional disparities are particularly large in Germany, Spain, France and Italy.

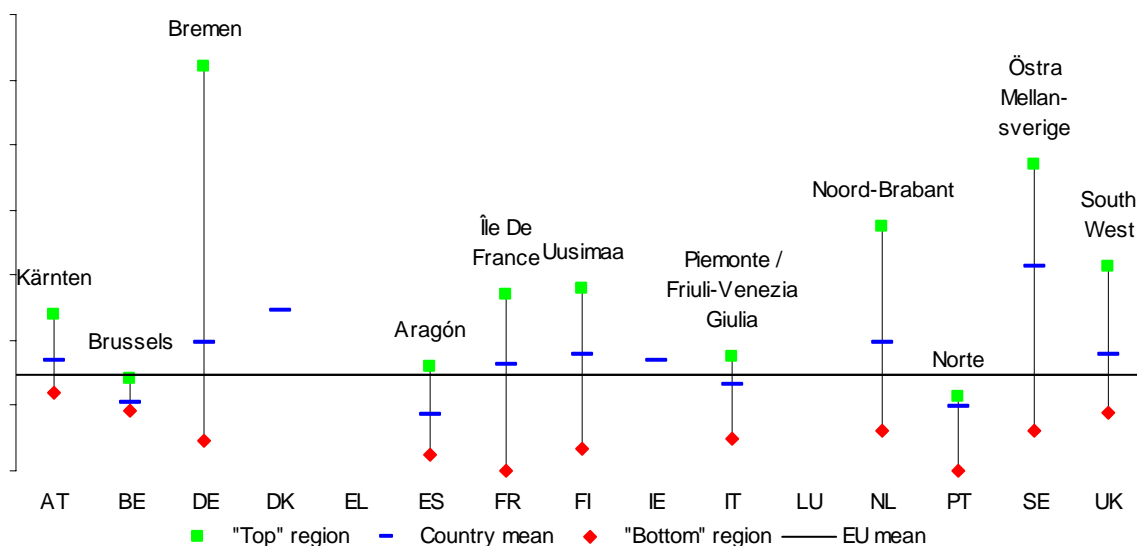
**Figure 11. Share of innovative enterprises (% of all services enterprises)**



All data at NUTS 2 level, except for BE and UK at NUTS 1. All data are from CIS-2. No regional data for DK, IE and LU. No data for EL, ES and IT. The vertical axis is not numbered due to the unpublished status of the regional CIS-2 data.

Figure 11 shows the regional spread for the **share of services enterprises involved in innovation**. The top-20 leading regions are located in four countries: Germany (11), Austria (6), the UK (2) and the Netherlands (1). Regional disparities are particularly large in Austria, Germany and the UK.

**Figure 12. Innovation expenditures (% of all turnover in manufacturing)**

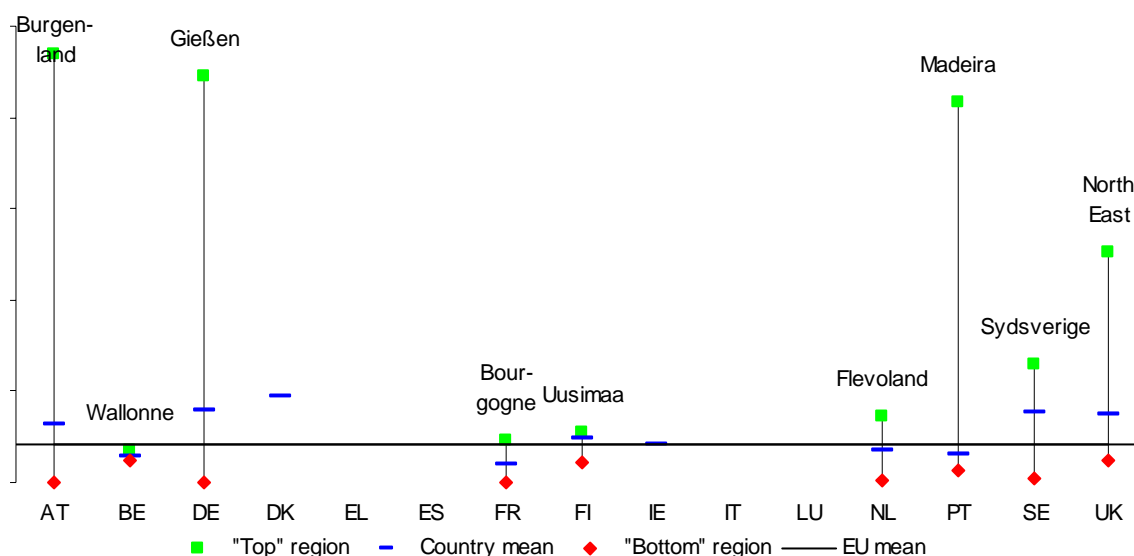


All data at NUTS 2 level, except for BE and UK at NUTS 1. All data are from CIS-2. No regional data for DK and IE. No data for EL and LU. The vertical axis is not numbered due to the unpublished status of the regional CIS-2 data.

Figure 12 shows the regional spread for **innovation expenditures in manufacturing**. Of the top-20 leading regions, twelve regions also appear in the top-20 leading regions for business R&D expenditures. Although R&D expenditures are part of innovation expenditures, the correlation between these two is not very strong<sup>12</sup>. Regional disparities are large in Germany, the Netherlands and Sweden.

Figure 13 shows the regional spread for **innovation expenditures in services**. Of the top-20 leading regions, only four regions also appear in the top-20 leading regions for business R&D expenditures. Regional disparities are large in Austria, Germany, Portugal and the UK.

**Figure 13. Innovation expenditures (% of all turnover in services)**

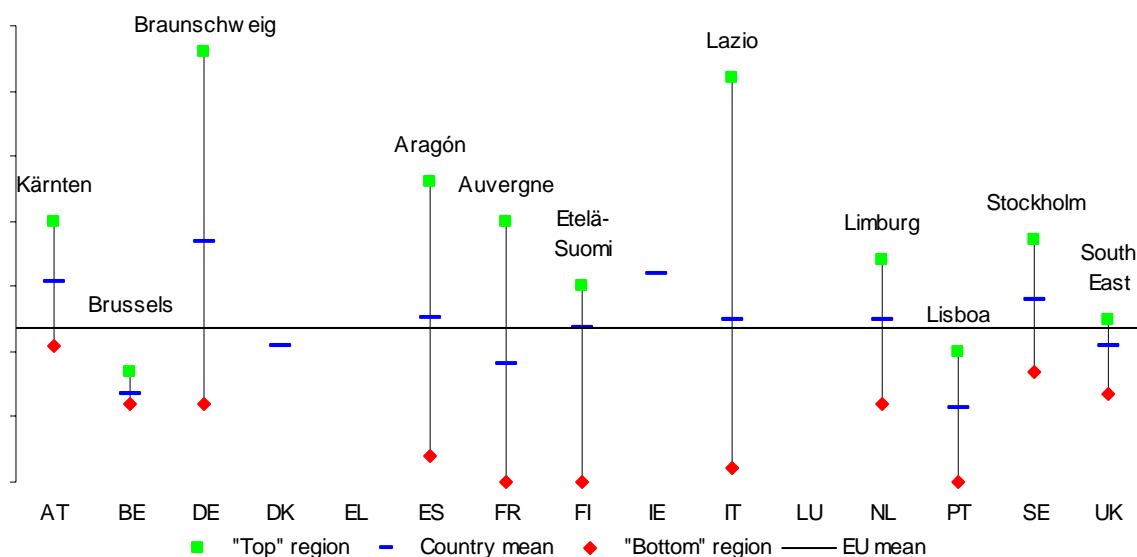


All data at NUTS 2 level, except for BE and UK at NUTS 1. All data are from CIS-2. No regional data for DK and IE. No data for EL, ES, IT and LU. The vertical axis is not numbered due to the unpublished status of the regional CIS-2 data.

Figure 14 shows the regional spread for the **share of sales of new to the firm products in manufacturing**. The top-20 leading regions are located in four countries: Germany (15), Spain and Italy (2 each) and Austria (1). The strong regional performance for Spain and Italy corresponds to their leading national performance in the 2002 EIS. Regional disparities are large in almost all countries.

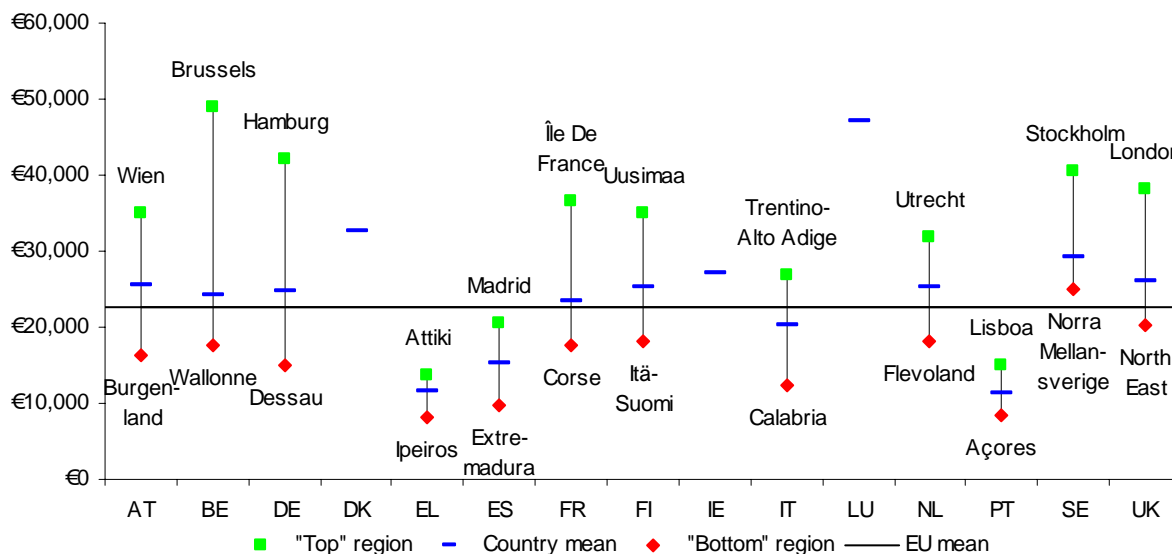
<sup>12</sup> One should keep in mind that 1) both data series are taken from two surveys (R&D survey versus CIS) and that 2) the innovation data relate to 1994-1996 and the R&D data to 1999-2001.

**Figure 14. Sales of ‘new to the firm but not new to the market’ products (% of all turnover in manufacturing)**



All data at NUTS 2 level, except for BE and UK at NUTS 1. All data are from CIS-2. No regional data for DK and IE. No data for EL and LU. The vertical axis is not numbered due to the unpublished status of the regional CIS-2 data.

**Figure 15. Regional per capita GDP**



All data at NUTS 2 level, except for BE and UK at NUTS 1. All data are for 2000. No regional data for DK and LU. For IE no regional data are displayed, as there are only 2 regions.

Although there seems to be a positive relation between a region’s innovative performance and its per capita income (see section 2.4), only four of the ten regions with the highest per capita income also appear in the innovative EU top-10 ranking (as measured by the RRSII): Stockholm, Île De France, Oberbayern and Uusimaa. The other six regions are: Brussels, Hamburg, London, Wien, Darmstadt and Åland. On the one hand, this could suggest that regions with high per capita income levels also have high rates of urbanisation and population density, which both are assumed to foster the diffusion of knowledge within regions. On the other hand, it could also be that regions scoring high on the GDP index derive their prosperity from service and commercial activities, which rank poorly with

innovation measures<sup>13</sup>. Figure 15 shows the regional spread of **per capita GDP**. Greece, Spain and Portugal have overall the lowest levels of per capita GDP in the EU. Only Madrid has an income level close to the EU average.

### 3. Correlations and Cluster Analysis

Annex Table R\_D shows the correlations between the regional innovation indicators and per capita GDP. The correlation between almost all *human resources* and *knowledge creation* indicators is significant at either a 1% or 5% confidence level. Only life-long learning and public R&D are both not correlated with medium-high and high-tech manufacturing employment. All indicators show a significant correlation with per capita GDP, with the highest correlation coefficient for high-tech services employment. The *human resources* and *knowledge creation* indicators are significantly correlated with the CIS-2 indicators for the manufacturing sector, but not for those for the services sector. The CIS-2 manufacturing indicators are correlated with per capita GDP, the CIS-2 services indicators are not. The CIS-2 indicators are all correlated except for manufacturing innovation expenditures and services innovation expenditures.

**Table 4. Cluster characteristics**

	Cluster 6	Cluster 5	Cluster 4	Cluster 3	High- tech cluster 1	High- tech cluster 2
Number of regions	56	65	28	16	3	3
<i>EU15=100</i>						
1 Tertiary education	66	91	127	116	156	112
2 Life-long learning	39	67	212	108	228	108
3 Employment med/hi-tech manufacturing	46	113	85	149	81	192
4 Employment hi-tech services	47	85	106	124	202	117
5 Public R&D	58	75	103	179	160	90
6 Business R&D	19	64	82	195	265	268
7 High-tech patents	8	55	90	194	712	759
8 Patents	16	90	85	217	337	489
9 Innovative enterprises in manufacturing	73	124	114	130	111	150
10 Innovative enterprises in services	69	116	108	121	92	140
11 Innovation expenditures in manufacturing	53	108	100	178	211	180
12 Innovation expenditures in services	95	185	123	194	236	147
13 Sales of new-to-firm products in manufacturing	61	124	96	163	125	172
Per capita GDP	66	98	112	113	151	136

All regional indicators have been used in a cluster analysis identifying 6 regional clusters. Table 4 gives the cluster characteristics per indicator for each of these clusters. Table 5 gives the cluster

<sup>13</sup> For those regions with large flows of commuters, the concept of per capita GDP is also not as similar to that of per capita income. The most noteworthy example is Luxembourg, where large flows of workers living in France and Belgium and working in Luxembourg result in artificially high rates of per capita GDP. Using regional GNP (Gross National Product) data would solve this problem, but unfortunately these data are not available at the regional level.

distribution per country. Table 6 gives the income distribution per cluster and Table 7 gives the regional income distribution per country. Annex Table F gives the cluster identification for all regions.

**Cluster 6** regions (56) have the lowest share of people working in high-tech sectors, lowest business R&D-intensity, almost no patent activity, lowest educational performances and lowest per capita GDP. Most of the cluster 6 regions, as shown in Table 5, are found in the Southern EU countries and France. Most cluster 6 regions have either low- or medium-low-income levels. Notable exceptions are Trentino-Alto Adige (IT) having medium-high-income and Salzburg (AT) having high-income.

**Table 5. Cluster distribution per country**

	Cluster 6	Cluster 5	Cluster 4	Cluster 3	High-tech cluster 1	High-tech cluster 2	Total Number of regions
# Regions	56	65	28	16	3	3	171 <sup>1</sup>
Austria	1	8					9
Belgium		2	1				3
Germany		28		10		2	40
Greece	13						13
Spain	12	3	2				17 <sup>1</sup>
Finland		1	3	1	1		6
France	9	11		2			22 <sup>1</sup>
Ireland		2					2
Italy	14	6					20
Netherlands		4	6	1		1	12
Portugal	7						7
Sweden			4	2	2		8
United Kingdom			12				12

**Cluster 5** regions (65) have a per capita GDP close to the EU average, but below EU average R&D and patent performance. These regions are also weak in education, especially in life-long learning. Most of the cluster 5 regions are located in Germany, France and Austria. Most regions have medium-low- or medium-income levels. Five regions have a high-income level: Bremen, Hamburg and Darmstadt (all DE), Åland (FI) and Southern and Eastern (UK).

**Cluster 4** regions (28) have an above EU average per capita GDP, have a strong educational performance, but a less than average R&D and patent performance. Most cluster 4 regions are located in the UK and the Netherlands. All regions have medium-low- or above income levels. Six regions have a high-income level: Brussels (BE), Groningen, Utrecht and Noord-Holland (all NL), and London and South East (both UK).

**Cluster 3** regions (16) have an above EU average per capita GDP, strong R&D and patent performance, strong educational performance and a high employment share in medium-high and high-tech manufacturing. Ten cluster 5 regions are located in Germany, the other regions in Finland (1), France (2), the Netherlands (1) and Sweden (2). Most regions have medium- or above income levels.

Only Dresden (DE) – low-income – and Flevoland (NL) – medium-low-income – have not (yet) been able to convert their above average innovative performance into above average per capita GDP<sup>14</sup>.

**High-tech cluster 1** regions (3) have highest per capita GDP, the best-educated workforce and seem more service oriented with a relative employment share in high-tech services more than twice than in medium-high and high-tech manufacturing. High-tech cluster 1 regions are only found in Finland (1) and Sweden (2). Of these, Uusimaa (FI) and Stockholm (SE) have high-income levels, Sydsverige (SE) has medium-high-income.

**High-tech cluster 2** regions (3) have a high per capita GDP, the best patent performance, a strong focus on manufacturing and a strong educational performance. High-tech cluster 2 regions are found in Germany (2) and the Netherlands (1). Of these Oberbayern and Stuttgart (both DE) have high-income levels, Noord-Brabant (NL) has medium-high-income.

**Table 6. Income distribution per Cluster**

	Cluster 6	Cluster 5	Cluster 4	Cluster 3	High-tech cluster 1	High-tech cluster 2	Total number of regions
# Regions	56	65	28	16	3	3	171 <sup>1</sup>
Low-income	39	9		1			49
Medium-low-income	10	11	5	1			27
Medium-income	5	32	10	6			53
Medium-high-income	1	8	7	4	1	1	22
High-income	1	5	6	4	2	2	20

Low-income is defined as being below 75% of the EU15 mean; Medium-low-income is defined as being below 90% but above 75% of the EU15 mean; Medium-income is defined as being above 90% but below 110% of the EU15 mean; Medium-high-income is defined as being above 110% but below 125% of the EU15 mean; High-income is defined as being above 125% of the EU15 mean.

<sup>1</sup> For the regions of Ceuta y Melilla (ES) and Departements D'outre-Mer (FR) insufficient data were available to include these regions in the cluster analysis.

Table 6 shows the income distribution per cluster. High-income is defined as being more than 25% above the EU-15 mean, medium-high-income is more than 10% above but not more than 25% above the EU-15 mean, medium-income is between 10% above and 10% below the EU-15 mean, medium-low-income is more than 10% below but not more than 25% below the EU-15 mean, and low-income is more than 25% below the EU-15 mean.

Table 6 shows that 20 regions have high-income levels. Only four of these belong to either high-tech cluster 1 or high-tech cluster 2. For the other high-income regions other factors must be responsible for explaining their high-income levels. Population density is likely to have a positive impact on per capita GDP as for ten high-income regions population density is far above average: Wien (AT), Brussels (BE), Bremen and Hamburg and Darmstadt (all DE), Île De France (FR), Utrecht and Noord-Holland (both NL) and London and South-East (both UK).

<sup>14</sup> For Flevoland this may be caused by large flows of commuters to the neighbouring regions (e.g. Amsterdam in Noord-Holland).

Medium-high-income and medium-income regions are mostly found among cluster 5 and cluster 4 regions. Medium-low-income regions are mostly found among cluster 6 and cluster 5 regions. Cluster 6 regions dominate low-income regions.

**Table 7. Income distribution per country**

	<b>Low-income</b>	<b>Medium-low-income</b>	<b>Medium-income</b>	<b>Medium-high-income</b>	<b>High-income</b>	<b>Total number of regions</b>
Number of regions	51	27	53	22	20	173
Austria	1		4	2	2	9
Belgium		1	1		1	3
Germany	8	3	16	6	7	40
Greece	13					13
Spain	13	4	1			18
Finland			1	3	2	6
France	1	11	10		1	23
Ireland		1			1	2
Italy	8	2	7	3		20
Netherlands		2	5	2	3	12
Portugal	7					7
Sweden				7	1	8
United Kingdom		2	6	2	2	12

## 4 Summary

---

As for the 2002 EIS, only a reduced number of indicators are available at the regional level. Compared to the 2002 EIS the regional analysis includes more indicators for diffusion-based innovation, although the analysis is still biased towards R&D-based innovation. The calculation of a “*Regional Summary Innovation Index*” (RSII) shows that, in most countries, less than one third of the regions performs above the country mean. This confirms that national innovative capabilities tend to be concentrated in a few regions. Correlation analyses demonstrate a positive relationship between a region’s innovative performance, measured by its RRSII, and per capita income.

The leading innovative regions in the EU are Stockholm and Västsverige in Sweden, Uusimaa in Finland, Oberbayern and Stuttgart in Germany, and Noord-Brabant in the Netherlands. The analysis of statistical similarities between regions identified two different types of leading regions. The first includes three regions with the best-educated workforce and a relative orientation towards services: Uusimaa, Stockholm and Sydsverige. This group has the highest per capita income of all innovation leaders. The second group includes three regions with the best patent performance and a relative orientation towards manufacturing: Stuttgart, Oberbayern and Noord-Brabant. The per capita income of this group is above average but below that of the first group.

Although the leading innovative regions are leading on average, other regions do outperform these leading innovative regions by showing top performance in one indicator only. London (UK) is leading both tertiary education and lifelong learning, Flevoland (NL) in public R&D, Koblenz (DE) in the share of innovative enterprises in manufacturing, Saarland (DE) in the share of innovative enterprises in services, Bremen (DE) in innovation expenditures in manufacturing, Burgenland (AT) in innovation expenditures in services and Braunschweig (DE) in sales of new-to-market products.

**Annex Table A: Regional Innovation Scoreboard 2003: Indicators and Sources**

<b>RIS No</b>	<b>EIS No</b>	<b>Indicator</b>	<b>Source (EUROSTAT)</b>
	<b>1.</b>	<b>Human resources</b>	
1	1.2	Population with tertiary education (% of 25 – 64 years age class)	Labour Force Survey
2	1.3	Participation in life-long learning (% of 25 – 64 years age class)	Labour Force Survey
3	1.4	Employment in medium-high and high-tech manufacturing (% of total workforce)	Labour Force Survey
4	1.5	Employment in high-tech services (% of total workforce)	Labour Force Survey
	<b>2.</b>	<b>Knowledge creation</b>	
5	2.1	Public R&D expenditures (GERD – BERD) (% of GDP)	R&D statistics
6	2.2	Business expenditures on R&D (BERD) (% of GDP)	R&D statistics
7	2.3.1	EPO high-tech patent applications (per million population)	Patent statistics
8	2.4.1	EPO patent applications (per million population)	Patent statistics
	<b>3.</b>	<b>Transmission and diffusion of knowledge</b>	
9		Share of innovative enterprises (% of all manufacturing enterprises)	CIS-2 data
10		Share of innovative enterprises (% of all services enterprises)	CIS-2 data
11	3.3	Innovation expenditures (% of all turnover in manufacturing)	CIS-2 data
12	3.3	Innovation expenditures (% of all turnover in services)	CIS-2 data
	<b>4.</b>	<b>Innovation finance, output and markets</b>	
13	4.3.2	Sales of ‘new to the firm but not new to the market’ products (% of all turnover in manufacturing)	CIS-2 data

**Annex Table B: 2003 RIS: Data availability**

	<b>NUTS</b>	<b>Tertiary education</b>	<b>Life-long learning</b>	<b>Med/hi-tech manufacturing employment</b>	<b>Hi-tech services employment</b>	<b>Public R&amp;D</b>	<b>Business R&amp;D</b>	<b>Hi-tech EPO patents</b>	<b>EPO patents</b>	<b>Innovative manufacturing enterprises</b>	<b>Innovative services enterprises</b>	<b>Innovation exp in manufacturing</b>	<b>Innovation exp in services</b>	<b>Sales of new-to-firm products</b>
	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>	<b>11</b>	<b>12</b>	<b>13</b>	
Belgium	1	3	3	3	3	--	3	3	3	3	3	3	3	3
Denmark	0													
Germany	2	40	40	40	40	40	40	40	40	36	36	36	36	36
Greece	2	13	13	13	13	13	13	7	11	--	--	--	--	--
Spain	2	18	18	18	18	17	17	15	17	17	--	17	--	17
France	2	22	22	22	22	23	23	21	23	22	22	22	22	22
Ireland	2	2	2	2	2	--	--	2	2	--	--	--	--	--
Italy	2	20	20	20	20	20	20	20	20	20	--	20	--	20
Luxembourg	0													
Netherlands	2	12	12	12	12	11	12	12	12	12	12	12	12	12
Austria	2	9	9	9	9	9	9	9	9	9	9	9	9	9
Portugal	2	7	7	7	7	7	7	5	7	7	7	7	7	7
Finland	2	7	7	7	7	7	7	6	7	7	7	7	7	7
Sweden	2	8	8	8	8	--	8	8	8	8	8	8	8	8
United Kingdom	1	12	12	12	12	12	12	12	12	12	12	12	12	12
Total number of regions		173	173	173	173	159	171	160	171	153	116	153	116	153

Annex Table C: EU Regional Indicators <sup>15</sup>

NUTS	REGION	1 Tertiary education	2 Lifelong learning	3 Med/hi-tech employment in manufacturing	4 High-tech employment in services	5 Public R&D	6 Business R&D	7 High-tech patent applications	8 Patent applications	GDP per capita
EU15	European Union	21.78 a	8.52 a	7.41 a	3.57 a	0.68 b	1.30 b	31.6 b	161.1 b	22603 c
AT	Österreich	16.89 a	7.46 a	6.59 a	3.47 a	0.65 e	1.13 e	18.8 b	174.2 b	25529 c
AT11	Burgenland	12.66 a	4.33 a	4.00 a	3.14 a	0.05 e	0.14 e	7.1 b	89.6 b	16362 c
AT12	Niederösterreich	15.36 a	7.17 a	6.75 a	3.13 a	0.05 e	0.59 e	20.4 b	135.6 b	21616 c
AT13	Wien	20.81 a	8.68 a	5.41 a	6.95 a	1.38 e	1.82 e	41.0 b	156.2 b	35068 c
AT21	Kärnten	16.13 a	5.46 a	6.48 a	2.63 a	0.22 e	0.87 e	24.9 b	118.0 b	21440 c
AT22	Steiermark	15.75 a	5.59 a	6.81 a	2.60 a	1.01 e	1.53 e	11.8 b	183.9 b	21418 c
AT31	Oberösterreich	16.03 a	8.26 a	9.67 a	2.56 a	0.20 e	1.07 e	6.1 b	205.5 b	24446 c
AT32	Salzburg	16.43 a	6.98 a	4.70 a	2.72 a	0.36 e	0.30 e	15.0 b	158.4 b	29221 c
AT33	Tirol	17.30 a	8.43 a	5.14 a	1.71 a	0.85 e	0.79 e	8.5 b	145.6 b	25203 c
AT34	Vorarlberg	16.14 a	10.53 a	6.40 a	1.50 a	0.04 e	0.88 e	8.8 b	453.3 b	26347 c
BE	Belgium	28.11 a	5.95 a	6.59 a	3.77 a	0.57 b	1.60 b	23.4 b	151.8 b	24153 c
BE1	Bruxelles/Brussels	37.29 a	6.89 a	3.03 a	4.98 a		0.67 b	31.6 b	170.4 b	48920 c
BE2	Vlaams Gewest	27.86 a	6.73 a	7.86 a	3.64 a		1.94 b	30.1 b	160.3 b	23839 c
BE3	Région Wallonne	25.83 a	4.23 a	4.98 a	3.67 a		1.53 b	8.9 b	203.4 b	17585 c
DE	Deutschland	22.31 a	5.80 a	11.36 a	3.33 a	0.74 d	1.70 d	48.8 b	309.9 b	24700 c
DE11	Stuttgart	23.79 a	6.42 a	21.24 a	3.55 a	0.46 d	4.36 d	94.7 b	719.2 b	31135 c
DE12	Karlsruhe	24.02 a	6.36 a	16.39 a	4.74 a	1.46 d	1.89 d	56.3 b	492.9 b	29113 c
DE13	Freiburg	22.36 a	7.03 a	14.92 a	3.05 a	0.70 d	1.26 d	46.1 b	474.1 b	24408 c
DE14	Tübingen	25.20 a	5.83 a	18.72 a	2.85 a	0.75 d	3.47 d	54.5 b	480.7 b	25554 c
DE21	Oberbayern	26.16 a	5.51 a	13.87 a	5.32 a	1.00 d	3.72 d	282.1 b	824.2 b	35828 c
DE22	Niederbayern	16.95 a	3.79 a	15.61 a	1.93 a	0.08 d	0.38 d	27.3 b	187.9 b	22574 c
DE23	Oberpfalz	15.46 a	4.54 a	13.24 a	2.59 a	0.37 d	1.38 d	77.7 b	375.4 b	25030 c
DE24	Oberfranken	17.42 a	4.31 a	11.81 a	2.28 a	0.32 d	0.81 d	25.4 b	252.1 b	24045 c
DE25	Mittelfranken	22.04 a	5.23 a	14.11 a	3.56 a	0.52 d	2.08 d	103.9 b	517.8 b	29318 c
DE26	Unterfranken	19.07 a	4.91 a	15.59 a	2.63 a	0.56 d	1.14 d	21.8 b	359.6 b	24069 c
DE27	Schwaben	19.02 a	6.17 a	14.47 a	2.84 a	0.09 d	0.93 d	41.2 b	326.3 b	24963 c
DE30	Berlin	30.40 a	9.59 a	5.85 a	5.17 a	1.80 d	1.88 d	59.1 b	217.3 b	22198 c
DE40	Brandenburg	28.04 a	5.44 a	4.87 a	3.35 a	1.04 d	0.56 d	24.7 b	80.5 b	16118 c
DE50	Bremen	18.14 a	7.13 a	9.46 a	2.99 a	1.05 d	1.07 d	15.6 b	99.0 b	33166 c
DE60	Hamburg	23.21 a	6.81 a	6.33 a	4.27 a	0.72 d	1.08 d	30.9 b	216.8 b	42128 c
DE71	Darmstadt	25.10 a	6.69 a	13.49 a	5.11 a	0.38 d	2.70 d	49.2 b	490.7 b	34526 c
DE72	Gießen	20.60 a	7.97 a	9.70 a	2.89 a	0.97 d	0.77 d	30.1 b	258.0 b	22058 c
DE73	Kassel	19.27 a	6.22 a	12.42 a	2.26 a	0.24 d	0.47 d	7.9 b	104.8 b	23518 c
DE80	Mecklenburg-Vorpommern	27.05 a	4.94 a	4.65 a	2.37 a	0.90 d	0.11 d	6.8 b	46.6 b	16102 c
DE91	Braunschweig	18.74 a	6.75 a	17.54 a	3.00 a	1.71 d	4.50 d	42.1 b	263.2 b	24617 c
DE92	Hannover	19.19 a	3.98 a	9.51 a	3.31 a	0.60 d	1.37 d	48.7 b	236.9 b	25124 c
DE93	Lüneburg	21.05 a	3.54 a	8.45 a	2.09 a	0.19 d	0.35 d	22.1 b	160.3 b	18220 c
DE94	Weser-Ems	17.20 a	4.74 a	9.20 a	1.58 a	0.20 d	0.34 d	5.4 b	104.2 b	20910 c

<sup>15</sup> Only regional data made available by EUROSTAT are presented in Annex Table C. The regional CIS-2 data are thus not included.

NUTS	REGION	1 Tertiary education	2 Lifelong learning	3 Med/hi-tech employment in manufacturing	4 High-tech employment in services	5 Public R&D	6 Business R&D	7 High-tech patent applications	8 Patent applications	GDP per capita
EU15	European Union	21.78 a	8.52 a	7.41 a	3.57 a	0.68 b	1.30 b	31.6 b	161.1 b	22603 c
DEA1	Düsseldorf	18.02 a	5.18 a	9.50 a	3.70 a	0.34 d	1.13 d	25.3 b	339.7 b	28126 c
DEA2	Köln	22.13 a	5.96 a	10.73 a	4.00 a	1.33 d	1.96 d	54.6 b	394.9 b	26800 c
DEA3	Münster	19.41 a	6.47 a	9.86 a	2.48 a	0.43 d	0.43 d	23.7 b	210.2 b	20363 c
DEA4	Detmold	17.42 a	6.02 a	9.13 a	2.42 a	0.27 d	0.76 d	51.8 b	240.3 b	24484 c
DEA5	Arnsberg	15.96 a	5.27 a	10.44 a	2.31 a	0.50 d	0.70 d	18.9 b	218.8 b	23143 c
DEB1	Koblenz	19.32 a	4.19 a	9.73 a	3.12 a	0.07 d	0.75 d	10.8 b	176.7 b	20778 c
DEB2	Trier	20.21 a	6.20 a	5.19 a	2.77 a	0.49 d	0.32 d	13.3 b	98.4 b	19817 c
DEB3	Rheinhesen-Pfalz	21.14 a	6.26 a	15.42 a	3.78 a	0.69 d	2.73 d	26.2 b	494.5 b	24366 c
DEC0	Saarland	16.48 a	5.03 a	9.45 a	3.66 a	0.60 d	0.36 d	6.9 b	144.7 b	22476 c
DED1	Chemnitz	27.09 a	4.49 a	9.21 a	1.95 a	0.65 d	0.89 d	7.1 b	55.3 b	15303 c
DED2	Dresden	30.92 a	6.73 a	7.58 a	2.76 a	1.69 d	1.78 d	76.3 b	215.1 b	16628 c
DED3	Leipzig	28.41 a	6.65 a	5.78 a	3.30 a	1.33 d	0.61 d	9.6 b	54.0 b	17415 c
DEE1	Dessau	24.61 a	3.59 a	8.02 a	1.61 a	0.08 d	0.57 d	2.8 b	30.4 b	14892 c
DEE2	Halle	27.60 a	4.07 a	7.74 a	2.36 a	1.21 d	0.50 d	9.6 b	62.8 b	16246 c
DEE3	Magdeburg	23.99 a	3.98 a	6.50 a	2.08 a	0.84 d	0.31 d	10.6 b	52.1 b	16043 c
DEF0	Schleswig-Holstein	19.91 a	5.63 a	7.60 a	3.11 a	0.64 d	0.45 d	16.8 b	156.5 b	22323 c
DEG0	Thüringen	28.58 a	5.56 a	8.94 a	2.18 a	0.82 d	0.79 d	14.9 b	105.0 b	16148 c
DK	Danmark	27.42 a	18.42 a	6.33 a	4.74 a	0.75 b	1.65 b	42.1 b	211.0 b	32576 c
EL	Ellada	17.62 a	1.16 a	2.20 a	1.76 a	0.48 d	0.19 d	2.1 b	7.7 b	11661 c
EL11	Anatoliki Makedonia, Thraki	12.47 a	1.09 a	0.98 a	0.52 a	0.43 d	0.11 d	3.3 b	1.8 d	9408 c
EL12	Kentriki Makedonia	18.65 a	1.42 a	1.68 a	1.56 a	0.52 d	0.10 d		9.8 b	11701 c
EL13	Dytiki Makedonia	13.19 a	0.63 a	0.52 a	1.11 a	0.06 d	0.01 d		3.3 d	11551 c
EL14	Thessalia	14.27 a	0.50 a	1.34 a	0.80 a	0.24 d	0.05 d		2.7 c	10574 c
EL21	Ipeiros	14.33 a	0.73 a	0.55 a	1.11 a	0.86 d	0.03 d	0.7 c	0.7 c	8112 c
EL22	Ionia Nisia	10.29 a	0.13 a	0.14 a	0.57 a	0.12 d	0.00 e			10193 c
EL23	Dytiki Ellada	11.31 a	1.16 a	1.18 a	1.23 a	0.80 d	0.11 d	3.6 b	7.3 b	8799 c
EL24	Stereia Ellada	7.48 a	0.46 a	2.98 a	0.75 a	0.00 d	0.17 d		1.5 b	13159 c
EL25	Peloponnisos	12.81 a	0.36 a	0.95 a	0.85 a	0.02 d	0.41 d	0.1 b	4.8 b	9934 c
EL30	Attiki	22.87 a	1.56 a	3.69 a	2.75 a	0.63 d	0.33 d	3.2 b	12.6 b	13287 c
EL41	Voreio Aigaio	10.88 a	0.38 a	0.46 a	1.56 a	0.57 d	0.01 d			11297 c
EL42	Notio Aigaio	9.71 a	0.53 a	0.94 a	1.23 a	0.22 d	0.02 d	2.4 b	7.3 b	13742 c
EL43	Kriti	16.11 a	0.78 a	0.24 a	0.96 a	0.04 d	0.04 d	1.3 b	11.7 b	11390 c
ES	España	24.36 a	4.97 a	5.35 a	2.50 a	0.46 b	0.50 b	3.6 b	24.1 b	15261 c
ES11	Galicia	21.53 a	5.96 a	5.71 a	1.48 a	0.50 b	0.19 b	0.4 b	4.1 b	12011 c
ES12	Principado de Asturias	23.50 a	3.30 a	3.11 a	1.80 a	0.39 b	0.28 b	1.0 b	7.8 b	13156 c
ES13	Cantabria	24.61 a	2.56 a	6.40 a	1.70 a	0.34 b	0.21 b	0.2 e	4.2 b	14901 c
ES21	País Vasco	34.18 a	7.33 a	9.42 a	1.83 a	0.31 b	1.04 b	1.1 b	35.0 b	18836 c
ES22	Comunidad Foral de Navarra	32.83 a	7.08 a	11.24 a	1.40 a	0.30 b	0.71 b	3.0 b	43.1 b	19546 c
ES23	La Rioja	26.62 a	2.70 a	4.46 a	1.31 a	0.19 b	0.29 b		7.5 b	16930 c
ES24	Aragón	25.43 a	4.12 a	9.64 a	1.75 a	0.32 b	0.37 b	1.5 b	33.4 b	16316 c
ES30	Comunidad De Madrid	33.92 a	3.75 a	5.92 a	6.62 a	0.79 b	0.97 b	9.1 b	36.1 b	20412 c
ES41	Castilla y León	24.48 a	6.95 a	4.29 a	1.85 a	0.38 b	0.42 b	0.6 b	10.2 b	14089 c
ES42	Castilla-la Mancha	17.91 a	5.27 a	2.72 a	1.23 a	0.20 b	0.12 b	0.1	4.1 b	12391 c

NUTS	REGION	1 Tertiary education	2 Lifelong learning	3 Med/hi-tech employment in manufacturing	4 High-tech employment in services	5 Public R&D	6 Business R&D	7 High-tech patent applications	8 Patent applications	GDP per capita
EU15	European Union	21.78 a	8.52 a	7.41 a	3.57 a	0.68 b	1.30 b	31.6 b	161.1 b	22603 c
ES43	Extremadura	17.86 a	3.00 a	0.77 a	1.10 a	0.53 b	0.05 b		3.5 b	9838 c
ES51	Cataluña	24.96 a	3.03 a	10.36 a	2.77 a	0.36 b	0.73 b	8.2 b	61.6 b	18468 c
ES52	Comunidad Valenciana	20.73 a	7.00 a	3.37 a	1.62 a	0.51 b	0.19 b	4.3 b	25.5 b	14705 c
ES53	Illes Balears	18.94 a	4.57 a	0.93 a	1.59 a	0.22 b	0.03 b	0.7 b	13.8 b	18249 c
ES61	Andalucía	19.77 a	4.76 a	2.14 a	1.65 a	0.44 b	0.17 b	1.8 b	7.1 b	11353 c
ES62	Región de Murcia	22.92 a	5.33 a	3.59 a	1.34 a	0.35 b	0.31 b	2.8 b	12.3 b	12750 c
ES63	Ceuta y Melilla	20.43 a	5.42 a	0.10 b	1.02 a					12650 c
ES70	Canarias	22.25 a	7.36 a	0.86 a	1.26 a	0.41 b	0.12 b	0.9 b	10.8 b	14393 c
FR	France	23.52 a	2.71 a	6.82 a	4.06 a	0.80 d	1.38 d	30.3 b	145.3 b	23385 c
FR10	Île De France	35.00 a	3.29 a	5.69 a	7.81 a	1.06 d	2.44 d	80.7 b	311.8 b	36616 c
FR21	Champagne-Ardenne	15.54 a	2.09 a	3.82 a	1.23 a	0.14 d	0.35 d	7.8 b	78.6 b	21873 c
FR22	Picardie	16.26 a	2.57 a	7.81 a	1.98 a	0.15 d	0.93 d	0.9 b	89.8 b	19040 c
FR23	Haute-Normandie	20.60 a	2.47 a	11.38 a	2.21 a	0.19 d	1.42 d	2.7 b	102.6 b	22023 c
FR24	Centre	16.63 a	3.01 a	9.06 a	2.99 a	0.34 d	1.22 d	3.3 b	121.3 b	20997 c
FR25	Basse-Normandie	19.71 a	2.98 a	7.28 a	1.93 a	0.29 d	0.62 d	13.6 b	66.1 b	19735 c
FR26	Bourgogne	18.35 a	1.67 a	7.28 a	2.24 a	0.25 d	0.70 d	16.0 b	92.1 b	21442 c
FR30	Nord - Pas-De-Calais	17.54 a	2.27 a	6.31 a	2.81 a	0.32 d	0.36 d	8.5 b	48.0 b	18652 c
FR41	Lorraine	18.24 a	2.07 a	7.33 a	3.07 a	0.49 d	0.53 d	5.2 b	77.1 b	19312 c
FR42	Alsace	22.43 a	2.46 a	13.04 a	2.63 a	0.60 d	0.67 d	16.8 b	175.7 b	23791 c
FR43	Franche-Comté	19.33 a	2.91 a	17.44 a	2.77 a	0.23 d	1.98 d	11.9 b	148.9 b	20265 c
FR51	Pays de la Loire	20.41 a	2.34 a	6.98 a	2.65 a	0.31 d	0.71 d	5.3 b	61.7 b	20826 c
FR52	Bretagne	23.25 a	3.02 a	6.36 a	3.36 a	0.53 d	0.99 d	54.1 b	108.1 b	19933 c
FR53	Poitou-Charentes	18.14 a	2.33 a	6.46 a	2.64 a	0.31 d	0.43 d	4.2 b	70.7 b	19180 c
FR61	Aquitaine	20.44 a	2.32 a	5.15 a	3.46 a	0.41 d	1.03 d	3.4 b	48.1 b	20899 c
FR62	Midi-Pyrénées	26.45 a	3.14 a	6.78 a	4.65 a	2.01 d	1.69 d	32.9 b	106.9 b	20478 c
FR63	Limousin	16.67 a	3.28 a	3.71 a	3.33 a	0.23 d	0.46 d	0.1 b	50.7 b	18960 c
FR71	Rhône-Alpes	26.98 a	2.87 a	8.63 a	3.89 a	0.73 d	1.55 d	42.3 b	243.6 b	23852 c
FR72	Auvergne	19.28 a	2.71 a	4.10 a	2.11 a	0.44 d	1.61 d	7.5 b	129.4 b	20006 c
FR81	Languedoc-Roussillon	19.89 a	2.37 a	2.15 a	3.63 a	1.55 d	0.52 d	9.3 b	57.4 b	17969 c
FR82	Provence-Alpes-Côte d'Azur	20.55 a	2.45 a	3.99 a	3.38 a	0.81 d	0.92 d	43.9 b	113.7 b	21001 c
FR83	Corse	14.94 a	4.01 a	1.86 a	4.21 a	0.27 d	0.15 d		14.4 b	17589 c
FR9	Departements D'outre-Mer					0.90 f	0.01 f	0.4 c	3.0 b	13045 c
FI	Suomi / Finland	32.42 a	18.90 a	7.39 a	4.74 a	0.98 b	2.42 b	136.1 b	337.8 b	25337 c
FI13	Itä-Suomi	26.78 a	17.10 a	4.36 a	3.30 a	0.84 b	0.64 b	12.0 b	79.5 b	18168 c
FI14	Väli-Suomi	29.32 a	15.66 a	7.98 a	3.00 a	0.51 b	1.46 b	17.7 b	156.6 b	20574 c
FI15	Pohjois-Suomi	28.34 a	16.63 a	7.59 a	3.71 a	1.07 b	3.29 b	151.1 b	323.4 b	22297 c
FI16	Uusimaa (suuralue)	40.49 a	22.32 a	6.64 a	7.86 a	1.34 b	2.87 b	286.3 b	582.4 b	34898 c
FI17	Etelä-Suomi	30.31 a	18.69 a	8.88 a	3.30 a	0.76 b	2.49 b	112.3 b	327.9 b	23395 c
FI20	Åland	23.30 a	12.16 a	1.23 a	5.86 a	0.09 b	0.08 b		155.6 b	33927 c
IE	Ireland	25.40 a	7.66 a	6.89 a	4.30 a	0.37 b	0.80 b	30.7 b	85.6 b	27089 c
IE01	Border, Midland and Western	19.64 a	6.14 a	7.08 a	2.61 a			16.1 b	65.6 b	19711 c
IE02	Southern and Eastern	27.36 a	8.17 a	6.83 a	4.87 a			36.5 b	94.2 b	29734 c

<b>NUTS</b>	<b>REGION</b>	<b>1 Tertiary education</b>	<b>2 Lifelong learning</b>	<b>3 Med/hi-tech employment in manufacturing</b>	<b>4 High-tech employment in services</b>	<b>5 Public R&amp;D</b>	<b>6 Business R&amp;D</b>	<b>7 High-tech patent applications</b>	<b>8 Patent applications</b>	<b>GDP per capita</b>
EU15	European Union	21.78 a	8.52 a	7.41 a	3.57 a	0.68 b	1.30 b	31.6 b	161.1 b	22603 c
IT	Italia	10.36 a	4.61 a	7.37 a	3.02 a	0.54 c	0.53 c	6.5 b	74.7 b	20165 c
IT11	Piemonte	9.60 a	4.43 a	13.17 a	4.06 a	0.29 c	1.35 c	10.1 b	110.1 b	23635 c
IT12	Valle d'Aosta	6.98 a	5.93 a	3.76 a	1.82 a	0.02 c	0.72 c	8.2 b	66.3 b	24341 c
IT13	Liguria	11.54 a	2.80 a	5.93 a	3.16 a	0.61 c	0.50 c	6.7 b	62.8 b	21360 c
IT20	Lombardia	11.04 a	4.51 a	10.74 a	3.58 a	0.30 c	0.85 c	19.2 b	168.6 b	26589 c
IT31	Trentino-Alto Adige	9.49 a	6.26 a	3.84 a	1.82 a	0.25 c	0.22 c	4.0 b	68.3 b	26941 c
IT32	Veneto	9.54 a	5.51 a	10.01 a	2.19 a	0.28 c	0.25 c	4.8 b	109.9 b	23526 c
IT33	Friuli-Venezia Giulia	9.41 a	6.18 a	9.89 a	3.28 a	0.63 c	0.55 c	4.7 b	92.5 b	22560 c
IT40	Emilia-Romagna	11.77 a	6.37 a	10.41 a	2.85 a	0.46 c	0.50 c	5.6 b	176.7 b	25523 c
IT51	Toscana	9.84 a	4.97 a	5.45 a	2.38 a	0.71 c	0.30 c	4.7 b	67.7 b	22442 c
IT52	Umbria	11.46 a	6.19 a	5.66 a	1.71 a	0.76 c	0.16 c	0.8 b	32.8 b	19883 c
IT53	Marche	11.41 a	4.57 a	7.45 a	1.68 a	0.38 c	0.14 c	1.0 b	55.5 b	20173 c
IT60	Lazio	13.05 a	4.58 a	3.85 a	5.67 a	1.34 c	0.61 c	5.9 b	41.5 b	22312 c
IT71	Abruzzo	11.46 a	4.68 a	5.90 a	2.29 a	0.52 c	0.45 c	1.8 b	55.0 b	16543 c
IT72	Molise	10.59 a	4.54 a	6.61 a	1.33 a	0.30 c	0.11 c	1.5 g	7.7 b	15574 c
IT80	Campania	8.96 a	3.36 a	4.54 a	2.76 a	0.66 c	0.35 c	1.0 b	10.4 b	12908 c
IT91	Puglia	9.45 a	3.98 a	3.15 a	1.64 a	0.49 c	0.13 c	0.7 b	8.1 b	13270 c
IT92	Basilicata	8.07 a	4.81 a	8.92 a	1.86 a	0.64 c	0.17 c	1.7 b	4.2 b	14511 c
IT93	Calabria	8.81 a	4.39 a	1.61 a	2.67 a	0.28 c	0.01 c	0.2 b	5.6 b	12286 c
ITA0	Sicilia	9.97 a	3.49 a	2.48 a	1.96 a	0.66 c	0.21 c	4.9 b	13.2 b	12935 c
ITB0	Sardegna	7.87 a	5.73 a	3.28 a	2.15 a	0.64 c	0.06 c	2.5 b	12.9 b	14926 c
LU	Luxembourg (Grand-Duché)	18.64 a	7.71 a	1.22 a	2.24 a	0.13 c	1.58 c	10.9 b	211.3 b	47200 c
NL	Nederland	24.88 a	16.42 a	4.49 a	4.11 a	0.83 c	1.58 c	68.8 b	242.7 b	25286 c
NL11	Groningen	24.51 a	18.21 a	4.83 a	3.52 a	1.40 e	0.51 e	26.1 b	94.2 b	28264 c
NL12	Friesland	19.14 a	13.38 a	5.75 a	1.44 a	0.04 c	1.26 c	1.8 b	62.0 b	20794 c
NL13	Drenthe	16.68 a	13.97 a	4.88 a	2.86 a		0.68 g	8.3 b	92.8 b	19986 c
NL21	Overijssel	19.88 a	14.42 a	5.12 a	2.92 a	0.60 c	0.91 c	27.1 b	135.2 b	21472 c
NL22	Gelderland	23.87 a	15.44 a	4.30 a	4.11 a	0.99 c	1.05 c	14.3 b	146.5 b	21969 c
NL23	Flevoland	23.08 a	19.81 a	2.70 a	7.33 a	2.38 c	0.89 c	20.1 b	109.2 b	18170 c
NL31	Utrecht	33.81 a	16.71 a	2.43 a	6.43 a	1.41 c	0.43 c	35.4 b	178.2 b	31900 c
NL32	Noord-Holland	30.67 a	18.09 a	2.08 a	4.21 a	0.93 c	0.76 c	24.0 b	140.4 b	29609 c
NL33	Zuid-Holland	25.50 a	17.62 a	3.30 a	5.06 a	1.01 c	0.50 c	22.3 b	149.7 b	26310 c
NL34	Zeeland	18.12 a	14.97 a	7.63 a	1.68 a	0.10 d	1.03 d	4.9 b	106.9 b	22173 c
NL41	Noord-Brabant	23.24 a	15.67 a	7.49 a	3.70 a	0.38 c	2.39 c	341.9 b	822.0 b	25018 c
NL42	Limburg	19.95 a	15.07 a	7.83 a	2.49 a	0.43 c	2.72 c	30.4 b	213.0 b	22198 c
PT	Portugal	9.36 a	2.85 a	3.33 a	1.45 a	0.57 b	0.27 b	0.7 b	5.5 b	11244 c
PT11	Norte	7.10 a	2.04 a	3.15 a	0.93 a	0.43 b	0.16 b	0.6 b	5.9 b	9260 c
PT12	Centro	9.11 a	3.40 a	3.38 a	0.88 a	0.62 b	0.20 b	0.1 b	6.3 b	8959 c
PT13	Lisboa e Vale do Tejo	12.43 a	3.52 a	4.35 a	2.66 a	0.72 b	0.42 b	1.4 b	6.5 b	15024 c
PT14	Alentejo	10.57 a	4.14 a	2.41 a	0.67 a	0.44 b	0.06 b	0.3 f	0.6 b	9006 c
PT15	Algarve	6.85 a	2.01 a	0.46 a	0.68 a	0.31 b	0.02 b	0.6 c	2.6 b	10908 c
PT20	Região Autónoma Dos Açores	4.84 a	0.96 a	0.10 a	0.90 a	0.56 b	0.00 b		2.0 d	8547 c
PT30	Região Autónoma Da Madeira	5.07 a	1.80 a	0.18 a	0.29 a	0.27 b	0.05 b		8.2 b	12309 c

<b>NUTS</b>	<b>REGION</b>	<b>1 Tertiary education</b>	<b>2 Lifelong learning</b>	<b>3 Med/hi-tech employment in manufacturing</b>	<b>4 High-tech employment in services</b>	<b>5 Public R&amp;D</b>	<b>6 Business R&amp;D</b>	<b>7 High-tech patent applications</b>	<b>8 Patent applications</b>	<b>GDP per capita</b>
EU15	European Union	21.78 a	8.52 a	7.41 a	3.57 a	0.68 b	1.30 b	31.6 b	161.1 b	22603 c
SE	Sverige	26.35 a	18.39 a	7.28 a	5.23 a	0.96 b	3.31 b	100.9 b	366.6 b	29323 c
SE01	Stockholm	34.76 a	17.96 a	4.78 a	8.78 a		4.33 b	246.0 b	610.3 b	40454 c
SE02	Östra Mellansverige	24.27 a	18.41 a	9.89 a	4.97 a		2.79 b	80.0 b	362.5 b	25165 c
SE04	Sydsverige	26.39 a	18.08 a	6.67 a	4.97 a		3.12 b	141.7 b	435.5 b	27096 c
SE06	Norra Mellansverige	20.07 a	19.06 a	5.89 a	2.84 a		1.35 b	24.5 b	210.6 b	25038 c
SE07	Mellersta Norrland	20.92 a	20.83 a	5.38 a	4.59 a		0.29 b	5.9 b	132.2 b	26716 c
SE08	Övre Norrland	24.38 a	18.45 a	5.62 a	3.58 a		0.95 b	78.1 b	223.8 b	25309 c
SE09	Småland med öarna	20.29 a	16.82 a	8.31 a	2.41 a		0.65 b	5.0 b	128.1 b	26725 c
SE0A	Västsverige	26.33 a	18.96 a	9.35 a	4.57 a		5.27 b	48.0 b	343.4 b	27871 c
UK	United Kingdom	29.36 a	22.29 a	6.72 a	4.47 a	0.60 d	1.28 b	35.6 b	133.5 b	26096 c
UKC	North East	22.41 a	20.43 a	8.82 a	3.14 a	0.38 d	0.35 b	6.0 b	64.6 b	20136 c
UKD	North West	24.80 a	21.22 a	7.22 a	3.59 a	0.34 d	1.52 b	12.2 b	103.4 b	22670 c
UKE	Yorkshire & The Humber	25.09 a	21.76 a	5.59 a	3.16 a	0.46 d	0.40 b	15.3 b	86.9 b	22927 c
UKF	East Midlands	24.29 a	21.12 a	7.93 a	3.96 a	0.38 d	1.45 b	13.5 b	108.9 b	24411 c
UKG	West Midlands	25.45 a	21.41 a	10.49 a	4.28 a	0.46 d	0.78 b	11.8 b	97.3 b	23919 c
UKH	Eastern	26.96 a	23.04 a	7.60 a	5.35 a	0.55 d	3.11 b	94.2 b	261.3 b	27031 c
UKI	London	41.66 a	25.20 a	2.45 a	6.23 a	0.64 d	0.41 b	41.0 b	112.5 b	38230 c
UKJ	South East	33.78 a	24.11 a	7.28 a	6.25 a	0.78 d	2.49 b	74.6 b	233.2 b	28754 c
UKK	South West	29.34 a	22.98 a	6.98 a	4.10 a	0.60 d	1.37 b	49.6 b	145.4 b	23675 c
UKL	Wales	26.13 a	19.94 a	6.58 a	2.69 a	0.49 d	0.34 b	10.4 b	69.9 b	20959 c
UKM	Scotland	32.83 a	21.88 a	5.75 a	3.28 a	0.82 d	0.62 b	18.0 b	91.2 b	25290 c
UKN	Northern Ireland	25.23 a	14.69 a	5.75 a	2.60 a	0.38 d	0.69 b	7.7 b	42.5 b	20224 c

Year of reference: a: 2002; b: 2001; c: 2000; d: 1999; e: 1998; f: 1997; g: 1996; h: 1995.

**Annex Table D: Correlations between regional innovation indicators and per capita GDP**

	1	2	3	4	5	6	7	8	9	10	11	12	13	GDP
<b>RIS #1</b>	1.000	.527 **	.196 *	.583 **	.384 **	.446 **	.411 **	.352 **	.129	.060	.257 **	-.078	.164 *	.494 **
<b>RIS #2</b>	--	1.000	.063	.525 **	.241 **	.363 **	.341 **	.287 **	.225 **	.126	.267 **	.014	.003	.466 **
<b>RIS #3</b>	--	--	1.000	.202 **	.049	.554 **	.228 **	.600 **	.462 **	.143	.374 **	.094	.579 **	.431 **
<b>RIS #4</b>	--	--	--	1.000	.482 **	.530 **	.525 **	.519 **	.248 **	.128	.387 **	-.030	.211 **	.700 **
<b>RIS #5</b>	--	--	--	--	1.000	.335 **	.251 **	.194 *	.196 *	.182	.199 *	.053	.210 **	.215 **
<b>RIS #6</b>	--	--	--	--	--	1.000	.658 **	.774 **	.268 **	.022	.571 **	-.061	.394 **	.547 **
<b>RIS #7</b>	--	--	--	--	--	--	1.000	.804 **	.221 **	.031	.412 **	.034	.235 **	.483 **
<b>RIS #8</b>	--	--	--	--	--	--	--	1.000	.462 **	.208 *	.528 **	.073	.463 **	.641 **
<b>RIS #9</b>	--	--	--	--	--	--	--	--	1.000	.428 **	.447 **	.234 *	.553 **	.414 **
<b>RIS #10</b>	--	--	--	--	--	--	--	--	--	1.000	.240 **	.487 **	.376 **	.133
<b>RIS #11</b>	--	--	--	--	--	--	--	--	--	--	1.000	.142	.440 **	.443 **
<b>RIS #12</b>	--	--	--	--	--	--	--	--	--	--	--	1.000	.215 *	-.061
<b>RIS #13</b>	--	--	--	--	--	--	--	--	--	--	--	--	1.000	.300 **
<b>GDP</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	1.000

\*\* Correlation is significant at the 0.01 level (2-tailed).

\* Correlation is significant at the 0.05 level (2-tailed).

RIS #1 = Population with tertiary education; RIS #2 = Participation in life-long learning; RIS #3 = Employment in medium-high and high-tech manufacturing; RIS #4 = Employment in high-tech services; RIS #5 = Public R&D expenditures; RIS #6 = Business R&D expenditures; RIS #7 = EPO high-tech patent applications; RIS #8 = EPO patent applications; RIS #9 = Share of manufacturing innovative enterprises; RIS #10 = Share of services innovative enterprises; RIS #11 = Innovation expenditures in manufacturing; RIS #12 = Innovation expenditures in services; RIS #13 = Sales of 'new to the firm' products in manufacturing.

**Annex Table E: Re-scaled indicator values per country and RNSII**

	1.2	1.3	1.4	1.5	2.1	2.2	2.3.1	2.4.1	CIS 1	CIS 2	CIS 3	CIS 4	CIS 5	RNSII	RNSII re-scaled
AT11	0.00	0.00	0.00	0.30	0.01	0.00	0.03	0.00	0.17	1.00	0.67	1.00	0.58	0.19	0.00
AT12	0.33	0.46	0.48	0.30	0.01	0.27	0.41	0.13	0.29	0.43	0.42	0.07	0.00	0.28	0.18
AT13	1.00	0.70	0.25	1.00	1.00	1.00	1.00	0.18	0.21	0.49	0.67	0.07	0.74	0.69	1.00
AT21	0.43	0.18	0.44	0.21	0.13	0.43	0.54	0.08	0.75	0.00	1.00	0.00	1.00	0.36	0.34
AT22	0.38	0.20	0.49	0.20	0.72	0.83	0.16	0.26	0.00	0.70	0.21	0.32	0.42	0.39	0.39
AT31	0.41	0.64	1.00	0.19	0.12	0.55	0.00	0.32	0.38	0.51	0.25	0.10	0.79	0.40	0.43
AT32	0.46	0.43	0.12	0.22	0.24	0.10	0.26	0.19	0.17	0.38	0.00	0.00	0.16	0.23	0.06
AT33	0.57	0.66	0.20	0.04	0.60	0.39	0.07	0.15	1.00	0.57	0.46	0.26	0.37	0.38	0.38
AT34	0.43	1.00	0.42	0.00	0.00	0.44	0.08	1.00	0.58	0.32	0.58	0.09	0.53	0.42	0.46
BE1	1.00	1.00	0.00	1.00		0.00	1.00	1.00	1.00	0.77	1.00	0.00	1.00	0.72	1.00
BE2	0.18	0.94	1.00	0.00		1.00	0.93	0.74	0.25	0.00	0.00	0.49	0.29	0.56	0.64
BE3	0.00	0.00	0.40	0.02		0.68	0.00	0.00	0.00	1.00	0.79	1.00	0.00	0.26	0.00
DE11	0.34	0.48	1.00	0.53	0.23	0.97	0.33	0.87	0.53	0.54	0.40	0.22	0.44	0.55	0.81
DE12	0.34	0.47	0.71	0.85	0.80	0.41	0.19	0.58	0.91	0.50	0.13	0.35	0.56	0.53	0.77
DE13	0.28	0.58	0.62	0.39	0.36	0.26	0.15	0.56	0.36	0.25	0.37	0.19	0.31	0.38	0.49
DE14	0.39	0.38	0.85	0.34	0.39	0.77	0.19	0.57	0.74	0.54	0.37	0.29	0.59	0.49	0.70
DE21	0.43	0.33	0.56	1.00	0.54	0.82	1.00	1.00	0.72	0.54	0.18	0.08	0.85	0.65	1.00
DE22	0.06	0.04	0.67	0.09	0.01	0.06	0.09	0.20	0.55	0.09	0.20	0.00	0.19	0.16	0.10
DE23	0.00	0.17	0.52	0.27	0.17	0.29	0.27	0.43	0.00	0.43	0.10	0.10	0.26	0.24	0.25
DE24	0.08	0.13	0.44	0.19	0.14	0.16	0.08	0.28	0.13	0.20	0.12	0.09	0.48	0.19	0.15
DE25	0.26	0.28	0.58	0.53	0.26	0.45	0.36	0.61	0.79	0.49	0.18	0.33	0.46	0.43	0.58
DE26	0.15	0.23	0.66	0.28	0.28	0.23	0.07	0.41	0.26	0.51	0.23	0.22	0.63	0.31	0.37
DE27	0.14	0.43	0.60	0.34	0.01	0.19	0.14	0.37	0.79	0.36	0.16	0.06	0.67	0.31	0.37
DE30	0.60	1.00	0.09	0.96	1.00	0.40	0.20	0.24						0.56	0.83
DE40	0.51	0.31	0.03	0.47	0.56	0.10	0.08	0.06	0.62	0.42	0.19	0.01	0.37	0.28	0.31
DE50	0.11	0.59	0.30	0.38	0.57	0.22	0.05	0.09	0.55	0.30	1.00	0.13	0.19	0.32	0.39
DE60	0.31	0.54	0.11	0.72	0.38	0.22	0.10	0.23	0.68	0.39	0.22	0.01	0.00	0.31	0.37
DE71	0.39	0.52	0.54	0.94	0.18	0.59	0.17	0.58	0.75	0.45	0.42	0.03	0.81	0.49	0.70
DE72	0.21	0.73	0.31	0.35	0.52	0.15	0.10	0.29	0.34	0.90	0.09	1.00	0.15	0.37	0.48
DE73	0.15	0.44	0.48	0.18	0.10	0.08	0.02	0.09	0.62	0.06	0.13	0.35	0.44	0.22	0.21
DE80	0.47	0.23	0.01	0.21	0.48	0.00	0.01	0.02	0.64	0.34	0.00	0.12	0.04	0.19	0.15
DE91	0.13	0.53	0.78	0.38	0.95	1.00	0.14	0.29	0.25	0.15	0.27	0.00	1.00	0.48	0.68
DE92	0.15	0.07	0.30	0.46	0.31	0.29	0.16	0.26	0.36	0.29	0.19	0.48	0.96	0.30	0.35
DE93	0.22	0.00	0.24	0.14	0.07	0.05	0.07	0.16	0.28	0.70	0.37	0.23	0.54	0.19	0.15
DE94	0.07	0.20	0.29	0.00	0.08	0.05	0.01	0.09	0.45	0.10	0.03	0.01	0.17	0.11	0.00
DEA1	0.10	0.27	0.30	0.57	0.16	0.23	0.08	0.39	0.60	0.64	0.18	0.13	0.20	0.28	0.32
DEA2	0.27	0.40	0.38	0.65	0.73	0.42	0.19	0.46	0.32	0.51	0.52	0.24	0.91	0.45	0.63
DEA3	0.16	0.49	0.32	0.24	0.21	0.07	0.07	0.23	0.72	0.47	0.03	0.04	0.43	0.25	0.26
DEA4	0.08	0.41	0.28	0.23	0.12	0.15	0.18	0.26	0.74	0.18	0.08	0.00	0.39	0.23	0.22
DEA5	0.02	0.29	0.36	0.20	0.25	0.13	0.06	0.24	0.66	0.74	0.12	0.30	0.30	0.25	0.25
DEB1	0.16	0.11	0.32	0.41	0.00	0.15	0.03	0.18	1.00	0.27	0.15	0.17	0.54	0.23	0.22
DEB2	0.19	0.44	0.05	0.32	0.24	0.05	0.04	0.09	0.28	0.00	0.02	0.00	0.39	0.17	0.11
DEB3	0.23	0.45	0.65	0.59	0.36	0.60	0.08	0.58	0.43	0.23	0.57	0.00	0.54	0.42	0.57
DEC0	0.04	0.25	0.30	0.56	0.31	0.06	0.01	0.14	0.60	1.00	0.70	0.74	0.89	0.35	0.44
DED1	0.47	0.16	0.29	0.10	0.34	0.18	0.02	0.03	0.60	0.47	0.51	0.11	0.39	0.25	0.26
DED2	0.62	0.53	0.19	0.32	0.94	0.38	0.26	0.23	0.60	0.47	0.51	0.11	0.39	0.43	0.59
DED3	0.52	0.52	0.08	0.46	0.73	0.11	0.02	0.03	0.60	0.47	0.51	0.11	0.39	0.33	0.41

	1.2	1.3	1.4	1.5	2.1	2.2	2.3.1	2.4.1	CIS 1	CIS 2	CIS 3	CIS 4	CIS 5	RNSII	RNSII re-scaled
DEE1	0.37	0.01	0.21	0.01	0.01	0.10	0.00	0.00	0.15	0.14	0.26	0.00	0.31	0.11	0.00
DEE2	0.49	0.09	0.20	0.21	0.66	0.09	0.02	0.04	0.58	0.52	0.05	0.22	0.72	0.27	0.30
DEE3	0.34	0.07	0.12	0.13	0.45	0.05	0.03	0.03	0.72	0.56	0.57	0.22	0.39	0.23	0.23
DEF0	0.18	0.35	0.19	0.41	0.33	0.08	0.05	0.16	0.77	0.45	0.13	0.13	0.74	0.27	0.30
DEG0	0.53	0.33	0.27	0.16	0.43	0.15	0.04	0.09	0.66	0.35	0.14	0.54	0.33	0.29	0.33
EL11	0.32	0.67	0.24	0.00	0.50	0.27	0.92	0.09						0.38	0.37
EL12	0.73	0.91	0.43	0.47	0.60	0.24		0.76						0.59	0.62
EL13	0.37	0.35	0.11	0.26	0.07	0.02		0.22						0.20	0.16
EL14	0.44	0.26	0.34	0.12	0.28	0.12		0.17						0.25	0.22
EL21	0.45	0.42	0.12	0.26	1.00	0.07	0.15	0.00						0.31	0.29
EL22	0.18	0.00	0.00	0.02	0.14	0.00								0.06	0.00
EL23	0.25	0.72	0.29	0.32	0.93	0.27	1.00	0.55						0.54	0.56
EL24	0.00	0.23	0.80	0.10	0.00	0.41		0.07						0.23	0.20
EL25	0.35	0.16	0.23	0.15	0.02	1.00	0.00	0.34						0.28	0.26
EL30	1.00	1.00	1.00	1.00	0.73	0.80	0.87	1.00						0.93	1.00
EL41	0.22	0.18	0.09	0.47	0.66	0.02								0.27	0.25
EL42	0.14	0.28	0.22	0.32	0.26	0.05	0.66	0.55						0.31	0.29
EL43	0.56	0.45	0.03	0.20	0.05	0.10	0.34	0.92						0.33	0.31
ES11	0.22	0.71	0.50	0.08	0.52	0.16	0.03	0.01	0.30		0.89		0.24	0.31	0.34
ES12	0.35	0.15	0.27	0.14	0.33	0.25	0.09	0.07	0.50		0.22		0.26	0.23	0.21
ES13	0.41	0.00	0.57	0.12	0.25	0.18	0.01	0.01	0.38		0.78		0.71	0.26	0.27
ES21	1.00	0.99	0.84	0.14	0.20	1.00	0.11	0.54	0.53		0.59		0.64	0.60	0.79
ES22	0.92	0.94	1.00	0.07	0.18	0.67	0.32	0.68	0.45		0.26		0.93	0.59	0.77
ES23	0.54	0.03	0.39	0.05	0.00	0.26		0.07	0.50		0.22		0.05	0.20	0.17
ES24	0.46	0.33	0.86	0.13	0.22	0.34	0.16	0.52	0.63		1.00		1.00	0.45	0.56
ES30	0.98	0.25	0.52	1.00	1.00	0.93	1.00	0.56	0.43		0.56		0.60	0.74	1.00
ES41	0.41	0.92	0.38	0.15	0.32	0.39	0.05	0.11	0.28		0.30		0.31	0.33	0.37
ES42	0.00	0.56	0.23	0.04	0.02	0.09	0.00	0.01	0.15		0.19		0.19	0.13	0.06
ES43	0.00	0.09	0.06	0.01	0.57	0.02		0.00	0.00		0.00		0.00	0.09	0.00
ES51	0.44	0.10	0.92	0.31	0.28	0.69	0.90	1.00	0.58		0.48		0.62	0.58	0.75
ES52	0.18	0.92	0.29	0.11	0.53	0.16	0.47	0.38	0.33		0.30		0.29	0.37	0.43
ES53	0.07	0.42	0.08	0.10	0.05	0.00	0.07	0.18	0.03		0.00		0.02	0.10	0.02
ES61	0.12	0.46	0.18	0.11	0.42	0.14	0.19	0.06	0.20		0.07		0.31	0.21	0.18
ES62	0.31	0.58	0.31	0.06	0.27	0.28	0.30	0.15	1.00		0.44		0.31	0.33	0.37
ES63	0.16	0.60	0.00	0.00										0.19	0.15
ES70	0.27	1.00	0.07	0.04	0.37	0.09	0.08	0.13	0.05		0.26		0.12	0.24	0.23
FR10	1.00	0.69	0.25	1.00	0.49	1.00	1.00	1.00	0.90	1.00	1.00	0.65	0.63	0.81	1.00
FR21	0.03	0.18	0.13	0.00	0.00	0.14	0.10	0.24	0.62	0.74	0.26	0.04	0.23	0.17	0.09
FR22	0.07	0.38	0.38	0.11	0.01	0.38	0.01	0.28	1.00	0.24	0.35	0.13	0.60	0.26	0.23
FR23	0.28	0.34	0.61	0.15	0.03	0.58	0.03	0.32	0.62	0.40	0.46	0.04	0.28	0.31	0.29
FR24	0.08	0.57	0.46	0.27	0.11	0.50	0.04	0.38	0.77	0.71	0.33	0.09	0.40	0.34	0.33
FR25	0.24	0.56	0.35	0.11	0.08	0.25	0.17	0.20	0.73	0.55	0.17	0.09	0.28	0.27	0.24
FR26	0.17	0.00	0.35	0.15	0.06	0.28	0.20	0.29	0.77	0.79	0.35	1.00	0.48	0.30	0.28
FR30	0.13	0.26	0.29	0.24	0.10	0.14	0.10	0.15	0.67	0.50	0.31	0.09	0.40	0.23	0.18
FR41	0.16	0.17	0.35	0.28	0.19	0.21	0.06	0.24	0.88	0.40	0.31	0.00	0.38	0.25	0.21
FR42	0.37	0.34	0.72	0.21	0.25	0.27	0.21	0.56	0.96	0.52	0.46	0.30	0.48	0.41	0.43
FR43	0.22	0.53	1.00	0.23	0.05	0.81	0.15	0.47	0.75	0.19	0.70	0.04	0.35	0.43	0.46
FR51	0.27	0.29	0.33	0.22	0.09	0.29	0.06	0.19	0.71	0.57	0.31	0.09	0.43	0.27	0.23

	1.2	1.3	1.4	1.5	2.1	2.2	2.3.1	2.4.1	CIS 1	CIS 2	CIS 3	CIS 4	CIS 5	RNSII	RNSII re-scaled
FR52	0.41	0.57	0.29	0.32	0.21	0.40	0.67	0.34	0.92	0.24	0.31	0.04	0.28	0.39	0.41
FR53	0.16	0.28	0.30	0.21	0.09	0.17	0.05	0.22	0.75	0.69	0.30	0.17	0.25	0.24	0.20
FR61	0.27	0.28	0.21	0.34	0.14	0.42	0.04	0.15	0.79	0.76	0.46	0.30	0.20	0.30	0.27
FR62	0.57	0.63	0.32	0.52	1.00	0.69	0.41	0.34	0.87	0.48	0.63	0.96	0.33	0.58	0.67
FR63	0.09	0.69	0.12	0.32	0.05	0.19	0.00	0.15	0.67	0.00	0.39	0.13	0.45	0.23	0.18
FR71	0.60	0.51	0.43	0.40	0.32	0.63	0.52	0.78	0.88	0.76	0.87	0.43	0.50	0.56	0.65
FR72	0.22	0.45	0.14	0.13	0.16	0.66	0.09	0.41	0.92	0.52	0.78	0.22	1.00	0.38	0.39
FR81	0.25	0.30	0.02	0.36	0.75	0.21	0.11	0.18	0.77	0.48	0.30	0.04	0.23	0.29	0.27
FR82	0.28	0.33	0.14	0.33	0.36	0.37	0.54	0.36	0.87	0.67	0.76	0.30	0.43	0.40	0.42
FR83	0.00	1.00	0.00	0.45	0.07	0.06		0.04	0.00	0.05	0.00	0.00	0.00	0.17	0.10
FR9					0.41	0.00	0.00	0.00						0.10	0.00
FI13	0.20	0.49	0.41	0.06	0.60	0.17	0.00	0.00	0.46	0.71	0.12	0.94	0.40	0.31	0.27
FI14	0.35	0.34	0.88	0.00	0.34	0.43	0.02	0.15	0.83	1.00	0.08	0.75	0.47	0.39	0.36
FI15	0.29	0.44	0.83	0.15	0.78	1.00	0.51	0.49	0.17	0.18	0.18	0.06	0.63	0.49	0.48
FI16	1.00	1.00	0.71	1.00	1.00	0.87	1.00	1.00	1.00	0.35	1.00	1.00	0.83	0.92	1.00
FI17	0.41	0.64	1.00	0.06	0.54	0.75	0.37	0.49	0.79	0.41	0.61	0.75	1.00	0.58	0.59
FI20	0.00	0.00	0.00	0.59		0.00		0.15	0.00	0.00	0.00	0.00	0.00	0.09	0.00
IE01	0.00	0.00	1.00	0.00			0.00	0.00						0.17	0.00
IE02	1.00	1.00	0.00	1.00			1.00	1.00						0.83	1.00
IT11	0.43	0.46	1.00	0.63	0.20	1.00	0.52	0.61	0.67		1.00		0.43	0.62	0.95
IT12	0.00	0.88	0.19	0.11	0.00	0.53	0.42	0.36	0.00		0.20		0.05	0.27	0.22
IT13	0.75	0.00	0.37	0.42	0.45	0.37	0.34	0.34	0.53		0.24		0.13	0.37	0.41
IT20	0.67	0.48	0.79	0.52	0.21	0.63	1.00	0.95	0.63		0.76		0.40	0.65	1.00
IT31	0.41	0.97	0.19	0.11	0.17	0.16	0.20	0.37	0.86		0.88		0.33	0.38	0.44
IT32	0.42	0.76	0.73	0.20	0.20	0.18	0.24	0.61	0.61		0.56		0.33	0.43	0.54
IT33	0.40	0.95	0.72	0.45	0.46	0.40	0.24	0.51	0.75		1.00		0.73	0.56	0.83
IT40	0.79	1.00	0.76	0.35	0.33	0.37	0.28	1.00	0.70		0.60		0.33	0.60	0.90
IT51	0.47	0.61	0.33	0.24	0.52	0.22	0.23	0.37	0.54		0.52		0.23	0.38	0.45
IT52	0.74	0.95	0.35	0.09	0.56	0.11	0.03	0.17	0.79		0.04		0.13	0.37	0.41
IT53	0.73	0.50	0.51	0.08	0.27	0.10	0.04	0.30	0.47		0.40		0.32	0.33	0.33
IT60	1.00	0.50	0.19	1.00	1.00	0.45	0.30	0.22	0.53		0.20		1.00	0.58	0.86
IT71	0.74	0.53	0.37	0.22	0.38	0.33	0.08	0.29	0.35		0.56		0.58	0.39	0.46
IT72	0.60	0.49	0.43	0.00	0.21	0.07	0.07	0.02	0.28		0.36		0.27	0.25	0.16
IT80	0.33	0.16	0.25	0.33	0.48	0.25	0.04	0.04	0.53		0.36		0.22	0.26	0.18
IT91	0.41	0.33	0.13	0.07	0.36	0.09	0.03	0.02	0.44		0.04		0.37	0.20	0.05
IT92	0.18	0.56	0.63	0.12	0.47	0.12	0.07	0.00	1.00		0.00		0.52	0.31	0.28
IT93	0.30	0.45	0.00	0.31	0.20	0.00	0.00	0.01	0.32		0.44		0.00	0.17	0.00
ITA0	0.49	0.19	0.07	0.15	0.48	0.15	0.25	0.05	0.30		0.44		0.17	0.24	0.14
ITB0	0.15	0.82	0.14	0.19	0.47	0.04	0.12	0.05	0.46		0.16		0.18	0.25	0.16
NL11	0.46	0.75	0.48	0.35	0.58	0.03	0.07	0.04	0.87	0.53	0.32	0.51	0.73	0.40	0.49
NL12	0.14	0.00	0.64	0.00	0.00	0.36	0.00	0.00	0.35	0.18	0.06	0.17	0.32	0.16	0.00
NL13	0.00	0.09	0.49	0.24		0.11	0.02	0.04	0.83	0.31	0.40	0.29	0.36	0.22	0.12
NL21	0.19	0.16	0.53	0.25	0.24	0.21	0.07	0.10	0.87	0.78	0.38	0.77	0.68	0.33	0.34
NL22	0.42	0.32	0.39	0.45	0.41	0.27	0.04	0.11	0.70	0.53	0.19	0.57	0.55	0.35	0.38
NL23	0.37	1.00	0.11	1.00	1.00	0.20	0.05	0.06	0.83	1.00	0.16	1.00	0.27	0.52	0.71
NL31	1.00	0.52	0.06	0.85	0.59	0.00	0.10	0.15	0.61	0.60	0.37	0.40	0.32	0.42	0.52
NL32	0.82	0.73	0.00	0.47	0.38	0.14	0.07	0.10	0.65	0.67	0.14	0.51	0.50	0.38	0.43

	1.2	1.3	1.4	1.5	2.1	2.2	2.3.1	2.4.1	CIS 1	CIS 2	CIS 3	CIS 4	CIS 5	RNSII	RNSII re-scaled
NL33	0.52	0.66	0.21	0.62	0.41	0.03	0.06	0.12	0.61	0.56	0.16	0.34	0.50	0.35	0.38
NL34	0.08	0.25	0.96	0.04	0.03	0.26	0.01	0.06	0.00	0.00	0.00	0.00	0.00	0.16	0.00
NL41	0.38	0.36	0.94	0.38	0.15	0.86	1.00	1.00	0.91	0.51	1.00	0.69	0.68	0.66	1.00
NL42	0.19	0.26	1.00	0.18	0.17	1.00	0.08	0.20	1.00	0.44	0.76	0.26	1.00	0.46	0.59
PT11	0.30	0.34	0.72	0.27	0.36	0.38	0.37	0.70	0.00	0.71	1.00	0.05	0.30	0.42	0.37
PT12	0.56	0.77	0.77	0.25	0.78	0.48	0.00	0.75	0.21	0.74	0.78	0.03	0.75	0.53	0.53
PT13	1.00	0.80	1.00	1.00	1.00	1.00	1.00	0.78	0.42	0.66	0.65	0.02	1.00	0.85	1.00
PT14	0.76	1.00	0.54	0.16	0.38	0.14	0.19	0.00	0.33	1.00	0.52	0.06	0.25	0.41	0.34
PT15	0.26	0.33	0.08	0.17	0.09	0.05	0.37	0.26	0.50	0.37	0.04	0.00	0.00	0.20	0.03
PT20	0.00	0.00	0.00	0.26	0.64	0.00		0.19	0.46	0.68	0.00	0.03	0.00	0.18	0.00
PT30	0.03	0.26	0.02	0.00	0.00	0.12		1.00	1.00	0.00	0.65	1.00	0.00	0.29	0.17
SE01	1.00	0.28	0.00	1.00		0.81	1.00	1.00	0.48	0.65	0.87	0.83	1.00	0.74	1.00
SE02	0.29	0.40	1.00	0.40		0.50	0.31	0.49	0.81	0.59	1.00	0.17	0.75	0.53	0.63
SE04	0.43	0.31	0.37	0.40		0.57	0.57	0.64	0.55	1.00	0.45	1.00	0.45	0.53	0.62
SE06	0.00	0.56	0.22	0.07		0.21	0.08	0.17	0.19	0.24	0.22	0.37	0.40	0.21	0.06
SE07	0.06	1.00	0.12	0.34		0.00	0.00	0.01	0.00	0.82	0.00	0.10	0.35	0.23	0.09
SE08	0.29	0.41	0.16	0.18		0.13	0.30	0.20	1.00	0.00	0.35	0.00	0.25	0.26	0.15
SE09	0.01	0.00	0.69	0.00		0.07	0.00	0.00	0.45	0.82	0.21	0.37	0.00	0.18	0.00
SE0A	0.43	0.53	0.89	0.34		1.00	0.18	0.45	0.13	0.59	0.93	0.25	0.70	0.54	0.64
UKC	0.00	0.55	0.79	0.15	0.08	0.00	0.00	0.10	0.49	0.44	0.50	1.00	0.91	0.32	0.27
UKD	0.12	0.62	0.59	0.27	0.00	0.43	0.07	0.28	0.32	0.07	0.40	0.06	0.55	0.29	0.23
UKE	0.14	0.67	0.39	0.15	0.25	0.02	0.11	0.20	0.79	0.00	0.42	0.22	0.78	0.29	0.23
UKF	0.10	0.61	0.68	0.37	0.08	0.40	0.08	0.30	0.05	0.42	0.19	0.02	0.00	0.28	0.22
UKG	0.16	0.64	1.00	0.46	0.25	0.16	0.07	0.25	0.97	0.23	0.29	0.01	0.64	0.39	0.38
UKH	0.24	0.79	0.64	0.75	0.44	1.00	1.00	1.00	0.91	0.27	0.51	0.03	0.60	0.67	0.85
UKI	1.00	1.00	0.00	0.99	0.63	0.03	0.40	0.32	0.00	0.41	0.04	0.50	0.12	0.47	0.52
UKJ	0.59	0.90	0.60	1.00	0.92	0.78	0.78	0.87	1.00	0.45	0.47	0.25	1.00	0.76	1.00
UKK	0.36	0.79	0.56	0.41	0.54	0.37	0.49	0.47	0.58	0.37	1.00	0.17	0.73	0.52	0.60
UKL	0.19	0.50	0.51	0.02	0.31	0.00	0.05	0.13	0.41	1.00	0.00	0.13	1.00	0.28	0.22
UKM	0.54	0.68	0.41	0.19	1.00	0.10	0.14	0.22	0.54	0.20	0.27	0.03	0.35	0.38	0.37
UKN	0.15	0.00	0.41	0.00	0.08	0.13	0.02	0.00	0.16	0.64	0.13	0.00	0.65	0.15	0.00

**Annex Table F: Re-scaled European indicator values, RSII, RRSII and clusters**

	1.2	1.3	1.4	1.5	2.1	2.2	2.3.1	2.4.1	CIS 1	CIS 2	CIS 3	CIS 4	CIS 5	RSII	RSII re-scaled	RRSII	GDP per capita	Cluster
AT11	0.21	0.17	0.18	0.34	0.02	0.03	0.02	0.11	0.67	0.79	0.32	1.00	0.48	0.26	0.36	0.18	0.20	5
AT12	0.29	0.28	0.31	0.33	0.02	0.11	0.06	0.16	0.71	0.52	0.27	0.07	0.32	0.24	0.33	0.25	0.33	5
AT13	0.43	0.34	0.25	0.78	0.58	0.35	0.12	0.19	0.68	0.55	0.32	0.07	0.53	0.39	0.57	0.79	0.66	5
AT21	0.31	0.21	0.30	0.28	0.09	0.17	0.07	0.14	0.83	0.32	0.39	0.00	0.61	0.25	0.34	0.34	0.33	5
AT22	0.30	0.22	0.32	0.27	0.42	0.29	0.03	0.22	0.63	0.65	0.23	0.32	0.44	0.31	0.43	0.41	0.33	5
AT31	0.30	0.32	0.45	0.27	0.08	0.20	0.02	0.25	0.73	0.56	0.24	0.10	0.55	0.28	0.40	0.41	0.40	5
AT32	0.31	0.27	0.22	0.29	0.15	0.06	0.04	0.19	0.67	0.50	0.19	0.00	0.36	0.23	0.31	0.19	0.52	6
AT33	0.34	0.33	0.24	0.17	0.36	0.15	0.02	0.18	0.89	0.59	0.28	0.26	0.42	0.29	0.40	0.39	0.42	5
AT34	0.31	0.41	0.30	0.14	0.02	0.17	0.03	0.55	0.78	0.47	0.31	0.09	0.47	0.28	0.40	0.43	0.45	5
BE1	0.88	0.27	0.14	0.55		0.13	0.09	0.21	0.39	0.15	0.23	0.05	0.26	0.30	0.42	0.71	1.00	4
BE2	0.63	0.26	0.37	0.39		0.37	0.09	0.19	0.37	0.12	0.15	0.06	0.20	0.29	0.41	0.52	0.39	5
BE3	0.57	0.16	0.23	0.40		0.29	0.03	0.16	0.37	0.16	0.21	0.07	0.18	0.25	0.34	0.17	0.23	5
DE11	0.51	0.25	1.00	0.38	0.19	0.83	0.28	0.87	0.73	0.54	0.44	0.20	0.55	0.53	0.79	0.80	0.56	HT2
DE12	0.52	0.25	0.77	0.52	0.61	0.36	0.16	0.60	0.95	0.50	0.19	0.33	0.64	0.49	0.73	0.75	0.51	3
DE13	0.48	0.28	0.70	0.33	0.29	0.24	0.13	0.57	0.63	0.25	0.41	0.18	0.44	0.38	0.55	0.52	0.40	3
DE14	0.55	0.23	0.88	0.30	0.32	0.66	0.16	0.58	0.85	0.54	0.41	0.28	0.67	0.48	0.72	0.71	0.43	3
DE21	0.58	0.21	0.65	0.59	0.42	0.71	0.83	1.00	0.84	0.54	0.24	0.08	0.88	0.60	0.91	0.95	0.68	HT2
DE22	0.33	0.15	0.73	0.19	0.03	0.07	0.08	0.23	0.74	0.09	0.26	0.00	0.33	0.24	0.33	0.21	0.35	5
DE23	0.29	0.18	0.62	0.27	0.16	0.26	0.23	0.46	0.42	0.43	0.16	0.10	0.39	0.31	0.43	0.34	0.41	5
DE24	0.34	0.17	0.55	0.23	0.13	0.15	0.07	0.31	0.50	0.20	0.19	0.09	0.58	0.26	0.36	0.26	0.39	5
DE25	0.47	0.20	0.66	0.39	0.22	0.39	0.30	0.63	0.88	0.49	0.24	0.31	0.56	0.43	0.63	0.61	0.52	3
DE26	0.39	0.19	0.73	0.28	0.24	0.22	0.06	0.44	0.58	0.51	0.28	0.21	0.70	0.35	0.51	0.44	0.39	5
DE27	0.39	0.24	0.68	0.30	0.04	0.18	0.12	0.40	0.88	0.36	0.22	0.06	0.73	0.33	0.47	0.42	0.41	5
DE30	0.69	0.38	0.27	0.58	0.76	0.36	0.17	0.26						0.43	0.64	0.74	0.35	3
DE40	0.63	0.21	0.23	0.36	0.44	0.11	0.07	0.10	0.78	0.42	0.25	0.01	0.48	0.30	0.42	0.37	0.20	5
DE50	0.36	0.28	0.44	0.32	0.44	0.20	0.05	0.12	0.74	0.30	1.00	0.12	0.33	0.33	0.47	0.43	0.61	5
DE60	0.50	0.27	0.29	0.47	0.30	0.20	0.09	0.26	0.82	0.39	0.27	0.01	0.18	0.31	0.44	0.40	0.83	5
DE71	0.55	0.26	0.63	0.57	0.16	0.51	0.14	0.60	0.86	0.45	0.46	0.03	0.85	0.45	0.67	0.68	0.65	3
DE72	0.43	0.31	0.45	0.31	0.41	0.15	0.09	0.31	0.62	0.90	0.15	0.95	0.30	0.37	0.54	0.51	0.34	5
DE73	0.39	0.24	0.58	0.23	0.10	0.09	0.02	0.13	0.78	0.06	0.19	0.34	0.55	0.26	0.36	0.29	0.38	5
DE80	0.60	0.19	0.22	0.25	0.38	0.02	0.02	0.06	0.79	0.34	0.07	0.11	0.21	0.24	0.32	0.24	0.20	5
DE91	0.38	0.26	0.83	0.32	0.72	0.85	0.12	0.32	0.57	0.15	0.32	0.00	1.00	0.46	0.68	0.68	0.40	3
DE92	0.39	0.15	0.45	0.36	0.25	0.26	0.14	0.29	0.63	0.29	0.25	0.46	0.97	0.34	0.49	0.42	0.42	5
DE93	0.44	0.14	0.40	0.21	0.08	0.07	0.06	0.19	0.59	0.70	0.41	0.22	0.62	0.27	0.38	0.27	0.25	5
DE94	0.34	0.18	0.43	0.15	0.08	0.06	0.02	0.13	0.68	0.10	0.10	0.01	0.32	0.19	0.25	0.12	0.31	5
DEA1	0.36	0.20	0.44	0.40	0.14	0.21	0.07	0.41	0.77	0.64	0.24	0.12	0.35	0.32	0.45	0.38	0.49	5
DEA2	0.47	0.23	0.50	0.44	0.56	0.37	0.16	0.48	0.61	0.51	0.56	0.23	0.92	0.44	0.65	0.64	0.46	3
DEA3	0.40	0.25	0.46	0.26	0.18	0.08	0.07	0.25	0.84	0.47	0.10	0.04	0.53	0.28	0.39	0.33	0.30	5
DEA4	0.34	0.24	0.43	0.25	0.11	0.14	0.15	0.29	0.85	0.18	0.15	0.00	0.50	0.27	0.37	0.29	0.40	5
DEA5	0.30	0.21	0.49	0.24	0.21	0.13	0.06	0.26	0.80	0.74	0.19	0.29	0.42	0.30	0.42	0.34	0.37	5
DEB1	0.39	0.16	0.46	0.33	0.03	0.14	0.03	0.21	1.00	0.27	0.21	0.16	0.62	0.28	0.38	0.30	0.31	5
DEB2	0.42	0.24	0.24	0.29	0.21	0.06	0.04	0.12	0.59	0.00	0.09	0.00	0.50	0.21	0.28	0.19	0.29	5
DEB3	0.44	0.24	0.72	0.41	0.29	0.52	0.08	0.60	0.67	0.23	0.60	0.00	0.62	0.42	0.61	0.59	0.40	3
DEC0	0.32	0.20	0.44	0.40	0.25	0.07	0.02	0.17	0.77	1.00	0.73	0.71	0.91	0.37	0.54	0.49	0.35	5
DED1	0.60	0.17	0.43	0.20	0.27	0.17	0.02	0.07	0.77	0.47	0.55	0.10	0.50	0.30	0.42	0.34	0.18	5
DED2	0.71	0.26	0.35	0.29	0.71	0.34	0.22	0.26	0.77	0.47	0.55	0.10	0.50	0.41	0.61	0.60	0.21	3

	1.2	1.3	1.4	1.5	2.1	2.2	2.3.1	2.4.1	CIS 1	CIS 2	CIS 3	CIS 4	CIS 5	RSII	RSII re-scaled	RRSII	GDP per capita	Cluster
DED3	0.64	0.26	0.27	0.35	0.56	0.12	0.03	0.06	0.77	0.47	0.55	0.10	0.50	0.33	0.48	0.45	0.23	5
DEE1	0.54	0.14	0.37	0.16	0.03	0.11	0.01	0.04	0.51	0.14	0.31	0.00	0.44	0.20	0.26	0.13	0.17	5
DEE2	0.62	0.16	0.36	0.24	0.51	0.09	0.03	0.08	0.76	0.52	0.12	0.21	0.77	0.31	0.44	0.37	0.20	5
DEE3	0.52	0.15	0.30	0.21	0.35	0.06	0.03	0.06	0.84	0.56	0.60	0.21	0.50	0.29	0.41	0.32	0.19	5
DEF0	0.41	0.22	0.35	0.33	0.27	0.09	0.05	0.19	0.87	0.45	0.19	0.12	0.79	0.30	0.42	0.36	0.35	5
DEG0	0.64	0.22	0.42	0.22	0.34	0.15	0.04	0.13	0.80	0.35	0.20	0.51	0.45	0.32	0.45	0.39	0.20	5
EL11	0.21	0.04	0.04	0.03	0.18	0.02	0.01	0.00						0.07	0.04	0.21	0.03	6
EL12	0.38	0.05	0.08	0.15	0.22	0.02		0.01						0.13	0.15	0.38	0.09	6
EL13	0.23	0.02	0.02	0.10	0.03	0.00		0.00						0.06	0.03	0.10	0.08	6
EL14	0.26	0.02	0.06	0.06	0.10	0.01		0.00						0.07	0.05	0.14	0.06	6
EL21	0.26	0.02	0.02	0.10	0.36	0.01	0.00	0.00						0.10	0.09	0.19	0.00	6
EL22	0.15	0.00	0.00	0.03	0.05	0.00								0.04	0.00	0.00	0.05	6
EL23	0.18	0.04	0.05	0.11	0.34	0.02	0.01	0.01						0.09	0.09	0.32	0.02	6
EL24	0.07	0.01	0.14	0.05	0.00	0.03		0.00						0.04	0.01	0.10	0.12	6
EL25	0.22	0.01	0.04	0.07	0.01	0.08	0.00	0.01						0.05	0.02	0.14	0.04	6
EL30	0.49	0.06	0.17	0.29	0.26	0.06	0.01	0.01						0.17	0.21	0.61	0.13	6
EL41	0.16	0.01	0.02	0.15	0.24	0.00								0.10	0.09	0.17	0.08	6
EL42	0.13	0.02	0.04	0.11	0.09	0.00	0.01	0.01						0.05	0.02	0.15	0.14	6
EL43	0.31	0.03	0.01	0.08	0.02	0.01	0.00	0.01						0.06	0.03	0.17	0.08	6
ES11	0.45	0.23	0.27	0.14	0.21	0.04	0.00	0.00	0.26		0.23		0.21	0.18	0.23	0.28	0.10	6
ES12	0.51	0.13	0.14	0.18	0.16	0.05	0.00	0.01	0.35		0.09		0.23	0.16	0.20	0.20	0.12	6
ES13	0.54	0.10	0.30	0.17	0.14	0.04	0.00	0.00	0.29		0.21		0.52	0.19	0.24	0.25	0.17	6
ES21	0.80	0.29	0.44	0.18	0.13	0.20	0.00	0.04	0.36		0.17		0.47	0.27	0.38	0.58	0.26	4
ES22	0.76	0.28	0.53	0.13	0.13	0.13	0.01	0.05	0.33		0.10		0.65	0.27	0.37	0.57	0.28	4
ES23	0.59	0.10	0.21	0.12	0.08	0.06		0.01	0.35		0.09		0.09	0.17	0.21	0.19	0.22	6
ES24	0.56	0.16	0.45	0.17	0.13	0.07	0.00	0.04	0.40		0.26		0.70	0.24	0.32	0.44	0.20	5
ES30	0.79	0.14	0.28	0.75	0.33	0.18	0.03	0.04	0.32		0.16		0.44	0.32	0.45	0.72	0.30	5
ES41	0.53	0.27	0.20	0.18	0.16	0.08	0.00	0.01	0.25		0.10		0.26	0.18	0.24	0.30	0.15	6
ES42	0.36	0.21	0.12	0.11	0.08	0.02	0.00	0.00	0.20		0.08		0.18	0.12	0.13	0.10	0.10	6
ES43	0.35	0.11	0.03	0.10	0.22	0.01		0.00	0.13		0.04		0.06	0.11	0.12	0.06	0.04	6
ES51	0.55	0.12	0.49	0.29	0.15	0.14	0.02	0.07	0.38		0.15		0.45	0.24	0.33	0.54	0.25	5
ES52	0.43	0.27	0.15	0.16	0.21	0.04	0.01	0.03	0.27		0.10		0.24	0.17	0.21	0.32	0.16	6
ES53	0.38	0.18	0.04	0.15	0.09	0.01	0.00	0.02	0.14		0.04		0.08	0.10	0.11	0.07	0.25	6
ES61	0.41	0.18	0.10	0.16	0.18	0.03	0.01	0.01	0.22		0.06		0.26	0.14	0.17	0.17	0.08	6
ES62	0.49	0.21	0.17	0.12	0.15	0.06	0.01	0.01	0.57		0.14		0.26	0.18	0.23	0.30	0.11	6
ES63	0.42	0.21	0.00	0.09										0.18	0.23	0.19	0.11	.
ES70	0.47	0.29	0.04	0.11	0.17	0.02	0.00	0.01	0.15		0.10		0.14	0.14	0.16	0.20	0.15	6
FR10	0.82	0.13	0.26	0.89	0.45	0.46	0.24	0.38	0.51	0.42	0.44	0.06	0.38	0.43	0.64	0.82	0.70	3
FR21	0.29	0.08	0.18	0.11	0.06	0.07	0.02	0.09	0.35	0.31	0.11	0.00	0.14	0.13	0.15	0.12	0.34	6
FR22	0.31	0.10	0.36	0.20	0.06	0.18	0.00	0.11	0.57	0.10	0.15	0.01	0.36	0.18	0.23	0.23	0.27	6
FR23	0.43	0.09	0.53	0.23	0.08	0.27	0.01	0.12	0.35	0.17	0.20	0.00	0.17	0.21	0.28	0.28	0.34	5
FR24	0.32	0.11	0.42	0.32	0.14	0.23	0.01	0.15	0.43	0.30	0.15	0.01	0.24	0.22	0.29	0.31	0.32	5
FR25	0.40	0.11	0.34	0.19	0.12	0.12	0.04	0.08	0.41	0.23	0.07	0.01	0.17	0.18	0.22	0.23	0.28	6
FR26	0.37	0.06	0.34	0.23	0.11	0.13	0.05	0.11	0.43	0.33	0.15	0.10	0.29	0.19	0.25	0.27	0.33	6
FR30	0.34	0.09	0.29	0.30	0.13	0.07	0.02	0.06	0.38	0.21	0.14	0.01	0.24	0.17	0.21	0.20	0.26	6
FR41	0.36	0.08	0.34	0.33	0.21	0.10	0.02	0.09	0.50	0.17	0.14	0.00	0.23	0.19	0.25	0.23	0.27	5
FR42	0.48	0.09	0.61	0.28	0.25	0.13	0.05	0.21	0.54	0.22	0.20	0.03	0.29	0.26	0.36	0.40	0.38	5
FR43	0.39	0.11	0.82	0.29	0.10	0.38	0.03	0.18	0.42	0.08	0.31	0.00	0.21	0.27	0.37	0.41	0.30	5

	1.2	1.3	1.4	1.5	2.1	2.2	2.3.1	2.4.1	CIS 1	CIS 2	CIS 3	CIS 4	CIS 5	RSII	RSII re-scaled	RRSII	GDP per capita	Cluster
FR51	0.42	0.09	0.33	0.28	0.13	0.13	0.02	0.07	0.40	0.24	0.14	0.01	0.26	0.19	0.24	0.24	0.31	5
FR52	0.50	0.12	0.30	0.36	0.22	0.19	0.16	0.13	0.52	0.10	0.14	0.00	0.17	0.23	0.31	0.36	0.29	5
FR53	0.36	0.09	0.30	0.28	0.13	0.08	0.01	0.09	0.42	0.29	0.13	0.02	0.15	0.18	0.22	0.21	0.27	6
FR61	0.42	0.09	0.24	0.37	0.17	0.20	0.01	0.06	0.45	0.32	0.20	0.03	0.12	0.20	0.26	0.27	0.31	5
FR62	0.59	0.12	0.32	0.51	0.84	0.32	0.10	0.13	0.49	0.20	0.27	0.09	0.20	0.34	0.49	0.58	0.30	3
FR63	0.32	0.13	0.17	0.36	0.10	0.09	0.00	0.06	0.38	0.00	0.17	0.01	0.27	0.16	0.19	0.19	0.27	6
FR71	0.60	0.11	0.40	0.42	0.31	0.29	0.12	0.30	0.50	0.32	0.38	0.04	0.30	0.32	0.45	0.55	0.39	5
FR72	0.39	0.10	0.19	0.21	0.18	0.31	0.02	0.16	0.52	0.22	0.34	0.02	0.61	0.23	0.31	0.35	0.29	6
FR81	0.41	0.09	0.10	0.39	0.65	0.10	0.03	0.07	0.43	0.20	0.13	0.00	0.14	0.22	0.29	0.28	0.24	5
FR82	0.43	0.09	0.18	0.36	0.34	0.17	0.13	0.14	0.49	0.28	0.33	0.03	0.26	0.24	0.33	0.38	0.32	5
FR83	0.27	0.15	0.08	0.46	0.11	0.03		0.02	0.00	0.02	0.00	0.00	0.00	0.12	0.13	0.12	0.23	6
FR9					0.38	0.00	0.00	0.00						0.10	0.09	0.05	0.12	.
FI13	0.60	0.68	0.20	0.35	0.35	0.12	0.03	0.10	0.32	0.29	0.10	0.11	0.18	0.28	0.39	0.33	0.25	4
FI14	0.66	0.62	0.37	0.32	0.21	0.28	0.05	0.19	0.41	0.34	0.09	0.10	0.21	0.31	0.44	0.40	0.31	4
FI15	0.64	0.66	0.35	0.40	0.45	0.62	0.44	0.39	0.24	0.20	0.13	0.05	0.29	0.42	0.62	0.55	0.35	3
FI16	0.97	0.89	0.31	0.89	0.56	0.54	0.84	0.71	0.46	0.23	0.45	0.11	0.38	0.62	0.95	0.97	0.66	HT1
FI17	0.69	0.74	0.42	0.35	0.32	0.47	0.33	0.40	0.40	0.24	0.30	0.10	0.45	0.43	0.63	0.61	0.37	4
FI20	0.50	0.48	0.05	0.66		0.02		0.19	0.20	0.17	0.06	0.05	0.00	0.25	0.34	0.17	0.63	5
IE01	0.40	0.24	0.33	0.27			0.05	0.08						0.23	0.31	0.15	0.28	5
IE02	0.61	0.32	0.32	0.54			0.11	0.11						0.34	0.48	0.74	0.53	5
IT11	0.13	0.17	0.62	0.44	0.12	0.26	0.03	0.13	0.55		0.28		0.42	0.27	0.37	0.66	0.38	5
IT12	0.06	0.23	0.17	0.18	0.01	0.14	0.02	0.08	0.14		0.12		0.08	0.11	0.12	0.17	0.40	6
IT13	0.18	0.11	0.28	0.34	0.26	0.09	0.02	0.08	0.47		0.13		0.15	0.18	0.23	0.32	0.32	6
IT20	0.17	0.17	0.50	0.39	0.13	0.16	0.06	0.20	0.53		0.23		0.39	0.25	0.34	0.67	0.45	5
IT31	0.13	0.24	0.18	0.18	0.11	0.04	0.01	0.08	0.67		0.26		0.33	0.17	0.21	0.33	0.46	6
IT32	0.13	0.21	0.47	0.22	0.12	0.05	0.01	0.13	0.52		0.19		0.33	0.20	0.26	0.40	0.38	5
IT33	0.12	0.24	0.46	0.35	0.26	0.10	0.01	0.11	0.61		0.28		0.70	0.26	0.36	0.59	0.35	5
IT40	0.19	0.25	0.49	0.30	0.19	0.09	0.02	0.21	0.58		0.20		0.33	0.24	0.33	0.62	0.43	5
IT51	0.14	0.19	0.25	0.25	0.30	0.06	0.01	0.08	0.48		0.19		0.24	0.18	0.23	0.34	0.35	6
IT52	0.18	0.24	0.26	0.17	0.32	0.03	0.00	0.04	0.63		0.09		0.15	0.18	0.22	0.32	0.29	6
IT53	0.18	0.18	0.35	0.16	0.16	0.03	0.00	0.07	0.43		0.16		0.32	0.17	0.21	0.27	0.30	6
IT60	0.22	0.18	0.18	0.63	0.56	0.12	0.02	0.05	0.47		0.12		0.94	0.29	0.40	0.63	0.35	5
IT71	0.18	0.18	0.27	0.24	0.22	0.09	0.00	0.07	0.36		0.19		0.56	0.19	0.24	0.35	0.21	6
IT72	0.16	0.18	0.31	0.12	0.13	0.02	0.00	0.01	0.32		0.15		0.27	0.14	0.16	0.16	0.18	6
IT80	0.11	0.13	0.21	0.29	0.28	0.07	0.00	0.01	0.47		0.15		0.23	0.16	0.20	0.19	0.12	6
IT91	0.13	0.15	0.14	0.16	0.21	0.02	0.00	0.01	0.41		0.09		0.36	0.13	0.15	0.10	0.13	6
IT92	0.09	0.19	0.42	0.19	0.27	0.03	0.00	0.00	0.76		0.08		0.50	0.20	0.25	0.27	0.16	6
IT93	0.11	0.17	0.07	0.28	0.12	0.00	0.00	0.01	0.34		0.17		0.03	0.11	0.11	0.06	0.10	6
ITA0	0.14	0.13	0.11	0.20	0.28	0.04	0.01	0.02	0.33		0.17		0.18	0.13	0.15	0.15	0.12	6
ITB0	0.08	0.22	0.15	0.22	0.27	0.01	0.01	0.01	0.42		0.11		0.20	0.14	0.17	0.17	0.17	6
NL11	0.53	0.72	0.22	0.38	0.59	0.10	0.08	0.11	0.71	0.35	0.26	0.08	0.42	0.35	0.50	0.49	0.49	4
NL12	0.39	0.53	0.27	0.14	0.02	0.24	0.00	0.07	0.58	0.19	0.13	0.03	0.29	0.22	0.29	0.14	0.31	5
NL13	0.32	0.55	0.23	0.30		0.13	0.02	0.11	0.70	0.25	0.30	0.05	0.30	0.26	0.36	0.24	0.29	5
NL21	0.41	0.57	0.24	0.31	0.25	0.17	0.08	0.16	0.71	0.46	0.29	0.12	0.41	0.30	0.43	0.39	0.33	5
NL22	0.52	0.61	0.20	0.45	0.42	0.20	0.04	0.18	0.66	0.35	0.19	0.09	0.36	0.33	0.47	0.42	0.34	4
NL23	0.50	0.79	0.12	0.83	1.00	0.17	0.06	0.13	0.70	0.56	0.18	0.15	0.27	0.43	0.64	0.67	0.25	3
NL31	0.79	0.66	0.11	0.72	0.59	0.08	0.10	0.22	0.64	0.38	0.28	0.06	0.29	0.39	0.57	0.54	0.58	4

	1.2	1.3	1.4	1.5	2.1	2.2	2.3.1	2.4.1	CIS 1	CIS 2	CIS 3	CIS 4	CIS 5	RSII	RSII re-scaled	RRSII	GDP per capita	Cluster
NL32	0.70	0.72	0.09	0.46	0.39	0.14	0.07	0.17	0.65	0.41	0.17	0.08	0.35	0.34	0.49	0.46	0.53	4
NL33	0.56	0.70	0.15	0.56	0.42	0.09	0.06	0.18	0.64	0.36	0.18	0.06	0.35	0.34	0.48	0.43	0.45	4
NL34	0.36	0.59	0.36	0.16	0.04	0.20	0.01	0.13	0.49	0.11	0.10	0.00	0.18	0.22	0.29	0.15	0.34	5
NL41	0.50	0.62	0.35	0.40	0.16	0.45	1.00	1.00	0.72	0.34	0.60	0.11	0.41	0.53	0.80	0.90	0.41	HT2
NL42	0.41	0.60	0.37	0.26	0.18	0.52	0.09	0.26	0.74	0.31	0.48	0.04	0.52	0.35	0.51	0.55	0.35	4
PT11	0.06	0.08	0.14	0.08	0.18	0.03	0.00	0.01	0.24	0.29	0.19	0.08	0.09	0.10	0.09	0.23	0.03	6
PT12	0.12	0.13	0.16	0.07	0.26	0.04	0.00	0.01	0.29	0.30	0.15	0.06	0.23	0.12	0.14	0.33	0.02	6
PT13	0.21	0.14	0.20	0.28	0.30	0.08	0.00	0.01	0.35	0.27	0.12	0.05	0.30	0.17	0.21	0.60	0.17	6
PT14	0.16	0.16	0.11	0.05	0.18	0.01	0.00	0.00	0.33	0.40	0.10	0.08	0.08	0.11	0.12	0.23	0.02	6
PT15	0.05	0.08	0.02	0.05	0.13	0.00	0.00	0.00	0.37	0.16	0.01	0.03	0.00	0.06	0.03	0.03	0.07	6
PT20	0.00	0.03	0.00	0.07	0.24	0.00		0.00	0.36	0.28	0.00	0.06	0.00	0.07	0.05	0.03	0.01	6
PT30	0.01	0.07	0.00	0.00	0.11	0.01		0.01	0.50	0.02	0.12	0.89	0.00	0.10	0.10	0.14	0.10	6
SE01	0.81	0.71	0.22	1.00		0.82	0.72	0.74	0.61	0.32	0.67	0.23	0.56	0.65	1.00	1.00	0.79	HT1
SE02	0.53	0.73	0.46	0.55		0.53	0.23	0.44	0.72	0.31	0.76	0.06	0.48	0.49	0.73	0.68	0.42	3
SE04	0.59	0.72	0.31	0.55		0.59	0.41	0.53	0.63	0.38	0.40	0.28	0.39	0.50	0.75	0.69	0.47	HT1
SE06	0.41	0.76	0.27	0.30		0.26	0.07	0.25	0.51	0.25	0.24	0.11	0.38	0.32	0.46	0.26	0.41	4
SE07	0.44	0.83	0.25	0.51		0.06	0.02	0.16	0.45	0.35	0.10	0.03	0.36	0.30	0.43	0.26	0.46	4
SE08	0.53	0.73	0.26	0.39		0.18	0.23	0.27	0.78	0.21	0.33	0.01	0.33	0.36	0.52	0.33	0.42	4
SE09	0.42	0.67	0.39	0.25		0.12	0.01	0.15	0.60	0.35	0.23	0.11	0.26	0.29	0.41	0.21	0.46	4
SE0A	0.58	0.75	0.44	0.50		1.00	0.14	0.42	0.49	0.31	0.71	0.08	0.47	0.51	0.77	0.71	0.48	3
UKC	0.48	0.81	0.41	0.34	0.16	0.07	0.02	0.08	0.62	0.47	0.32	0.54	0.36	0.33	0.48	0.38	0.29	4
UKD	0.54	0.84	0.34	0.39	0.14	0.29	0.04	0.12	0.56	0.21	0.29	0.08	0.30	0.33	0.47	0.35	0.36	4
UKE	0.55	0.86	0.26	0.34	0.19	0.08	0.04	0.10	0.72	0.16	0.30	0.16	0.34	0.31	0.44	0.33	0.36	4
UKF	0.53	0.84	0.37	0.43	0.16	0.28	0.04	0.13	0.47	0.46	0.22	0.06	0.21	0.33	0.48	0.35	0.40	4
UKG	0.56	0.85	0.49	0.47	0.19	0.15	0.03	0.12	0.78	0.32	0.25	0.05	0.32	0.36	0.51	0.45	0.39	4
UKH	0.60	0.91	0.35	0.60	0.23	0.59	0.28	0.32	0.76	0.35	0.33	0.07	0.31	0.46	0.68	0.76	0.46	4
UKI	1.00	1.00	0.11	0.70	0.27	0.08	0.12	0.14	0.46	0.45	0.16	0.29	0.23	0.40	0.59	0.55	0.74	4
UKJ	0.79	0.96	0.34	0.70	0.33	0.47	0.22	0.28	0.79	0.48	0.32	0.17	0.38	0.49	0.73	0.87	0.51	4
UKK	0.67	0.91	0.33	0.45	0.25	0.26	0.14	0.18	0.65	0.42	0.51	0.13	0.33	0.40	0.59	0.59	0.38	4
UKL	0.58	0.79	0.31	0.28	0.21	0.06	0.03	0.08	0.59	0.86	0.15	0.11	0.38	0.32	0.46	0.34	0.31	4
UKM	0.76	0.87	0.27	0.35	0.34	0.12	0.05	0.11	0.64	0.30	0.24	0.07	0.27	0.35	0.50	0.44	0.42	4
UKN	0.55	0.58	0.27	0.27	0.16	0.13	0.02	0.05	0.51	0.61	0.19	0.05	0.32	0.27	0.38	0.19	0.30	4

