

## D2.3 Regional Knowledge Scorecards – Summary

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The regional knowledge scorecards compare the regions across eight key indicators; GDP per capita, labour productivity, unemployment, economic activity, monthly earnings, R&D expenditure by businesses, R&D employment by businesses and the percentage of the population with tertiary education. These indicators offer a wide-ranging look at both the state of the region's economies and also the level of R&D undertaken. These indicators are also compared against the average for the EU-25 (where available) in order to understand their relative level of development.

### GDP Per Capita

- Only Yorkshire and Humber has GDP per capita above the EU-25 average, 21,832 Euros compared with 20,685 Euros.
- The Greek regions lag the EU-25 average, with Central Macedonia around 80% of the EU-25 average and East Macedonia-Thrace around 60%. The Turkish region of Thrace and the Bulgarian regions substantially lag the UK and Greek regions, as well as the EU-25.
- GDP per capita in Thrace (Turkey) is around 10% of the EU average and six times lower than the worst performing Greek region (East Macedonia and Thrace).
- The Bulgarian regions are performing slightly better than the Thrace (Turkey), however, the North Eastern, South Eastern and South Central regions all have GDP of less than 20% of the EU-25 average. The fourth region, South Western Bulgaria, fares slightly better with GDP per capita around 30% of the EU-25 average.

### Labour Productivity

- All the regions lag the EU-25.
- Labour productivity is highest in Yorkshire and Humber, with an index score of 95.1 (EU-25 = 100), and lowest in Bulgaria, with an index score of 31.9 (although this figure applies to the whole country as there is no regional data available).
- Within the other regions, labour productivity is less than 50% of the EU-25 average suggesting there is a need for policy measures to target increased productivity as a way of boosting these economies.

### Unemployment and Economic Activity

- Unemployment and economic activity in the regions compare more favourably to the EU-25 average.
- Unemployment in Yorkshire and Humber is around half of the EU-25 average at 4.6%, reflecting the prolonged period of economic growth in the UK from the mid 1990s.

- In Greece and Turkey the unemployment rates are within 2 percentage points of the EU-25 average of 9%.
- In Bulgaria the unemployment rates vary between 9.3% in the South Central region, which is similar to the EU-25 average, and 17.6% in the North Eastern region, which is almost double the EU-25.
- In terms of economic activity rates the regions perform more strongly than in terms of unemployment.
- The Bulgarian regions have the lowest levels of economic activity, ranging from 48.7% in the South Central region to 54% in the South West region, compared with 57.5% in the EU-25.
- The Greek regions also lag this figure (economic activity across Greece is 51.9%), as does Turkey (economic activity across Turkey is 51.5%).
- Again, Yorkshire and Humber has the highest level of economic activity of 61%, which is the only region higher than the EU-25 average.

### Monthly Earnings

- Yorkshire and Humber is the only region where earnings are above the EU-25 average, 2242 Euros compared with 1887 Euros.
- Monthly earnings in the Greek regions of Central Macedonia and East Macedonia and Thrace are substantially less, 1238 and 1103 Euros respectively.
- Earnings in Turkey and Bulgaria are very low when compared with the EU-25 average; earnings in Thrace are 580 Euros per month and 132 Euros per month across Bulgaria. These regions lag the Greek and UK regions substantially, highlighting the disparities evident across the MIRIAD project area.

### R&D

- Two indicators for R&D performance within the regions are used. The first, R&D expenditure by business per capita, measures the level of investment in R&D by the private sector in each region.
- In terms of this indicator Yorkshire and Humber is highest with R&D expenditure by business of 105.2 Euros per capita; however this is less than 50% of the EU-25 average of 268.57 Euros.
- The second highest region is South West Bulgaria where R&D expenditure by businesses per capita is 65.25 Euros; however this figure covers all R&D expenditure as separate figures are not available.
- For all other regions R&D expenditure is less than 10% of the EU-25 average, highlighting the fact that these regions seriously lag behind the EU as a whole. Thus, the firms in these regions can be regarded as static, they are not changing or developing their products and production processes; a serious problem which curbs economic development.
- The second R&D indicator, R&D employment by business per 1000 inhabitants, shows that, again, all regions seriously lag the EU-25 average of 2.2%.

- Yorkshire and Humber is the best performing MIRIAD region with 1.3% of the regional workforce employed in R&D.
- The 2 Greek regions, Central Macedonia and East Macedonia and Thrace, have R&D employment levels of 0.3% and 0.2% respectively and Thrace (Turkey) has a figure of just 0.15%.
- The figures for Bulgaria show total employment in R&D, therefore they do not offer a direct comparison. Therefore a very small proportion of the workforce in each region is involved in creating new knowledge, suggesting that all regions do not have the ability to become knowledge based economies.

### **Tertiary Education**

- Each has a significant proportion of the population who possess these skills.
- The region with the highest proportion is South West Bulgaria where 31.1% have tertiary education and the lowest is South Central Bulgaria with 16.5% of the population with tertiary education.
- In Yorkshire and Humber 22.3% of the population have tertiary education
- In the Greek regions of Central Macedonia and East Macedonia and Thrace the figure is 23.7% and 17.1% respectively.
- The figure for Thrace (Turkey) is 21.6%.
- Thus all regions have a significant proportion of the population with the highest level of education, suggesting there is a pool of skilled labour available for knowledge intensive sectors.

**Table 1 – Summary Indicators**

	<b>UK</b>	<b>Greece</b>		<b>Turkey</b>	<b>Bulgaria</b>			<b>EU</b>	
	<b>Yorkshire and Humber</b>	<b>Central Macedonia</b>	<b>East Macedonia and Trace</b>	<b>Thrace</b>	<b>North East</b>	<b>South East</b>	<b>South Central</b>	<b>South West</b>	<b>EU25 Average</b>
GDP per capita (2002, Euros ppp)	21,832.4	16,710	12,522	2522.31	3749	3983	3576	6214	20,685
Labour Productivity (2004)	95.1	48	35.7	43.9	31.9	31.9	31.9	31.9	100
Unemployment Rate (2004)	4.6	10.1	11.9	11.45	17.6	13.5	10.5	9.3	9.0
Economic Activity Rate (2004)	61.0	51.9	51.9	51.5	50.7	49.7	48.7	54.0	57.5
Mean Gross Monthly Earnings (2002, Euros)	2242	1238	1103	580	132	132	132	132	1887
R&D Expenditure by Business (2004, Euros per inhabitant)	105.2	24	14	5.09	8.62	4.38	6.44	65.25	268.57
R&D employment by Business (Employees per 1000 inhabitants, 2003)	1.3	0.3	0.2	0.15	1578	504	1718	12408	2.2
Percentage of Population with Tertiary Education (2003)	22.3	23.7	17.1	21.6	18.2	17.8	16.5	31.1	N/A

Sources

Office for National Statistics (UK)  
Huggins and Davies (2005)  
KOSGEB (Turkey)  
National Statistical Institute (Bulgaria)

Department of Trade and Industry (UK)  
Eurostat  
BDYK (Turkey)

