

Eurostat regional yearbook 2009





Eurostat regional yearbook 2009



Europe Direct is a service to help you find answers to your questions about the European Union

Freephone number (*):

00 800 6 7 8 9 10 11

(*) Certain mobile telephone operators do not allow access to 00 800 numbers or these calls may be billed.

More information on the European Union is available on the Internet (http://europa.eu).

Luxembourg: Publications Office of the European Union, 2009

ISBN 978-92-79-11696-4 ISSN 1830-9674 doi: 10.2785/17776 Cat. No: KS-HA-09-001-EN-C

Theme: General and regional statistics Collection: Statistical books

© European Communities, 2009

© Copyright for the following photos: cover: © Annette Feldmann; the chapters Introduction, Population, Household accounts, Information society, Education and tourism: © Phovoir.com; the chapter European cities: © Teodóra Brandmüller; the chapters Labour market, Gross domestic product, Structural business statistics and Science, technology and innovation: © the Digital Photo Library of the Directorate-General for Regional Policy of the European Commission; the chapter Agriculture: © Jean-Jacques Patricola.

For reproduction or use of these photos, permission must be sought directly from the copyright holder.

Printed in Belgium

PRINTED ON WHITE CHLORINE-FREE PAPER



Preface

Dear Readers,

Five years ago, 2004, was a momentous year, with 10 new Member States joining the European Union on 1 May. This *Eurostat regional yearbook 2009* is eloquent testimony to the economic and social progress made by these regions since then and highlights those areas where redoubled efforts will be needed to reach our goal of greater cohesion.

The 11 chapters of this yearbook investigate interesting aspects of regional differences and similarities in the 27 Member States and in the candidate and EFTA countries. The aim is to encourage readers to track down the regional data available on the Eurostat website and make their own analyses of economic and social developments.

In addition to the fascinating standard chapters on regional population developments, the regional labour market, regional GDP, etc., this year's edition features a new contribution on the regional development of information society data. As in recent years, the description of regional development of the regi



opments is rounded off by a contribution on the latest findings of the Urban Audit, a data collection containing a multitude of statistical data on European towns and cities.

We are constantly updating the range of regional indicators available and hope to include them as topics in future editions, provided the availability and quality of these data are sufficient.

I wish you an enjoyable reading experience!

Walter Radermacher Director-General, Eurostat

Lademul



Acknowledgements

The editors of the *Eurostat regional yearbook 2009* would like to thank all those who were involved in its preparation. We are especially grateful to the following chapter authors at Eurostat for making the publication of this year's edition possible.

- Population: Veronica Corsini, Monica Marcu and Rosemarie Olsson (Unit F.1: Population)
- European cities: Teodóra Brandmüller (Unit E.4: Regional statistics and geographical information)
- Labour market: Pedro Ferreira (Unit E.4: Regional statistics and geographical information)
- Gross domestic product: Andreas Krüger (Unit C.2: National accounts production)
- Household accounts: Andreas Krüger (Unit C.2: National accounts production)
- Structural business statistics: Aleksandra Stawińska (Unit G.2: Structural business statistics)
- Information society: Albrecht Wirthmann (Unit F.6: Information society and tourism)
- Science, technology and innovation: Bernard Félix, Tomas Meri, Reni Petkova and Håkan Wilén (Unit F.4: Education, science and culture)
- Education: Sylvain Jouhette, Lene Mejer and Paolo Turchetti (Unit F.4: Education, science and culture)
- Tourism: Ulrich Spörel (Unit F.6: Information society and tourism)
- Agriculture: Céline Ollier (Unit E.2: Agriculture and fisheries)

This publication was edited and coordinated by Åsa Önnerfors (Unit E.4: Regional statistics and geographical information) with the help of Berthold Feldmann (Unit E.4: Regional statistics and geographical information) and Pavel Bořkovec (Unit D.4: Dissemination). Baudouin Quennery (Unit E.4: Regional statistics and geographical information) produced all the statistical maps.

We are also very grateful to:

- the **Directorate-General for Translation of the European Commission**, and in particular the German, English and French translation units;
- the Publications Office of the European Union, and in particular Bernard Jenkins in Unit B.1,
 Cross-media publishing, and the proofreaders in Unit B.2, Editorial services.



Contents

INTRODUCTION	9
Statistics on regions and cities	10
The NUTS classification	10
Coverage	11
More regional information	11
1 POPULATION	13
Unveiling the regional pattern of demography	14
Population density	
Population change	14
Conclusion	23
Methodological notes	23
2 EUROPEAN CITIES	25
Introduction	26
Enhanced list of indicators	26
Moving from five-year periodicity to annual data collection	
Extended geographical coverage	
Discovering the spatial dimension	
Core cities	
Larger urban zones	
Geography matters	33
3 LABOUR MARKET	35
Regional working time patterns	36
Brief overview for 2007	
Regional work patterns	
Part-time jobs: lowering the average working time	
Employees spend less time at work	
Conclusion	
Methodological notes	
Definitions	46
4 GROSS DOMESTIC PRODUCT	49
What is regional gross domestic product?	50
Regional GDP in 2006.	
Average GDP over the three-year period 2004–06	52
Major regional differences even within the countries themselves	
Dynamic catch-up process in the new Member States	
Different trends even within the countries themselves.	
Convergence makes progress	
Conclusion	
Methodological notes	
Purchasing power parities and international volume comparisons	59



5 HOUSEHOLD ACCOUNTS	. 61
Introduction: measuring wealth	. 62
Private household income	. 62
Results for 2006	. 62
Primary income	. 62
Disposable income	. 64
Dynamic development on the edges of the Union	. 68
Conclusion	. 70
Methodological notes	. 71
6 STRUCTURAL BUSINESS STATISTICS	. 73
Introduction	. 74
Regional specialisation and business concentration	. 74
Specialisation in business services	
Employment growth in business services	
Characteristics of the top 30 most specialised regions in business services.	
Conclusion	
Methodological notes	
	• 0.
7 INFORMATION SOCIETY	. 89
Introduction	. 90
Access to information and communication technologies	. 90
Use of the Internet and Internet activities	. 93
Non-users of the Internet	. 96
Conclusion	
Methodological notes	. 99
8 SCIENCE, TECHNOLOGY AND INNOVATION	101
Introduction	102
Research and development	102
Human resources in science and technology	
High-tech industries and knowledge-intensive services.	
Patents	
Conclusion	
Methodological notes	
9 EDUCATION	113
Introduction	114
Students' participation in education	114
Participation of 4-year-olds in education	114
Students in upper secondary education and post-secondary non-tertiary education	116
Students in tertiary education	
Tertiary educational attainment	119
Lifelong learning	
Conclusion	
Methodological notes	



Introduction 126 Accommodation capacity. 127 Overnight stays 127 Average length of stay 130 Tourism intensity 130 Tourism development 133 Inbound tourism 135 Conclusion 135 Methodological notes 137 11 AGRICULTURE 139 Introduction 140 Proportion of area under cereals to the utilised agricultural area 140 Proportion of permanent crops to the utilised agricultural area 140 Agricultural production 143 Wheat production 143 Grain maize production 143 Grain maize production 146 Conclusion 146 Methodological notes 148 ANNEX 149 European Union: NUTS 2 regions 149 Candidate countries: statistical regions at level 2 153 EFTA countries: statistical regions at level 2 152	10 TOURISM	125
Overnight stays 127 Average length of stay 130 Tourism intensity 130 Tourism development 133 Inbound tourism 135 Conclusion 135 Methodological notes 137 11 AGRICULTURE 139 Introduction 140 Utilised agricultural area 140 Proportion of area under cereals to the utilised agricultural area 140 Proportion of permanent crops to the utilised agricultural area 140 Agricultural production 143 Wheat production 143 Grain maize production 143 Rapeseed production 146 Conclusion 146 Methodological notes 148 ANNEX 149 European Union: NUTS 2 regions 149 Candidate countries: statistical regions at level 2 152	Introduction	126
Average length of stay 130 Tourism intensity 130 Tourism development 133 Inbound tourism 135 Conclusion 135 Methodological notes 137 11 AGRICULTURE 139 Introduction 140 Utilised agricultural area 140 Proportion of area under cereals to the utilised agricultural area 140 Proportion of permanent crops to the utilised agricultural area 140 Agricultural production 143 Wheat production 143 Grain maize production 143 Rapeseed production 146 Conclusion 146 Methodological notes 148 ANNEX 149 European Union: NUTS 2 regions 149 Candidate countries: statistical regions at level 2 152	Accommodation capacity	127
Tourism intensity 130 Tourism development 133 Inbound tourism 135 Conclusion 135 Methodological notes 137 11 AGRICULTURE 139 Introduction 140 Utilised agricultural area 140 Proportion of area under cereals to the utilised agricultural area 140 Proportion of permanent crops to the utilised agricultural area 140 Agricultural production 143 Wheat production 143 Grain maize production 143 Rapeseed production 146 Conclusion 146 Methodological notes 148 ANNEX 149 European Union: NUTS 2 regions 149 Candidate countries: statistical regions at level 2 152	Overnight stays	127
Tourism development 133 Inbound tourism 135 Conclusion 135 Methodological notes 137 11 AGRICULTURE 139 Introduction 140 Utilised agricultural area 140 Proportion of area under cereals to the utilised agricultural area 140 Proportion of permanent crops to the utilised agricultural area 140 Agricultural production 143 Wheat production 143 Grain maize production 143 Rapeseed production 146 Conclusion 146 Methodological notes 148 ANNEX 149 European Union: NUTS 2 regions 149 Candidate countries: statistical regions at level 2 152	Average length of stay	130
Inbound tourism 135 Conclusion 135 Methodological notes 137 11 AGRICULTURE 139 Introduction 140 Utilised agricultural area 140 Proportion of area under cereals to the utilised agricultural area 140 Proportion of permanent crops to the utilised agricultural area 140 Agricultural production 143 Wheat production 143 Grain maize production 143 Rapeseed production 146 Conclusion 146 Methodological notes 148 ANNEX 149 European Union: NUTS 2 regions 149 Candidate countries: statistical regions at level 2 152	Tourism intensity	130
Conclusion 135 Methodological notes 137 11 AGRICULTURE 139 Introduction 140 Utilised agricultural area 140 Proportion of area under cereals to the utilised agricultural area 140 Proportion of permanent crops to the utilised agricultural area 140 Agricultural production 143 Wheat production 143 Grain maize production 143 Rapeseed production 146 Conclusion 146 Methodological notes 148 ANNEX 149 European Union: NUTS 2 regions 149 Candidate countries: statistical regions at level 2 152	Tourism development	133
Methodological notes 137 11 AGRICULTURE 139 Introduction 140 Utilised agricultural area 140 Proportion of area under cereals to the utilised agricultural area 140 Proportion of permanent crops to the utilised agricultural area 140 Agricultural production 143 Wheat production 143 Grain maize production 143 Rapeseed production 146 Conclusion 146 Methodological notes 148 ANNEX 149 European Union: NUTS 2 regions 149 Candidate countries: statistical regions at level 2 152	Inbound tourism	135
11 AGRICULTURE 139 Introduction 140 Utilised agricultural area 140 Proportion of area under cereals to the utilised agricultural area 140 Proportion of permanent crops to the utilised agricultural area 140 Agricultural production 143 Wheat production 143 Grain maize production 143 Rapeseed production 146 Conclusion 146 Methodological notes 148 ANNEX 149 European Union: NUTS 2 regions 149 Candidate countries: statistical regions at level 2 152	Conclusion	135
Introduction140Utilised agricultural area140Proportion of area under cereals to the utilised agricultural area140Proportion of permanent crops to the utilised agricultural area140Agricultural production143Wheat production143Grain maize production143Rapeseed production146Conclusion146Methodological notes148ANNEX149European Union: NUTS 2 regions149Candidate countries: statistical regions at level 2152	Methodological notes	137
Utilised agricultural area140Proportion of area under cereals to the utilised agricultural area140Proportion of permanent crops to the utilised agricultural area140Agricultural production143Wheat production143Grain maize production143Rapeseed production146Conclusion146Methodological notes148ANNEX149European Union: NUTS 2 regions149Candidate countries: statistical regions at level 2152	11 AGRICULTURE	139
Proportion of area under cereals to the utilised agricultural area 140 Proportion of permanent crops to the utilised agricultural area 140 Agricultural production 143 Wheat production 143 Grain maize production 143 Rapeseed production 146 Conclusion 146 Methodological notes 148 ANNEX 149 European Union: NUTS 2 regions 149 Candidate countries: statistical regions at level 2 152	Introduction	140
Proportion of permanent crops to the utilised agricultural area 140 Agricultural production 143 Wheat production 143 Grain maize production 143 Rapeseed production 146 Conclusion 146 Methodological notes 148 ANNEX 149 European Union: NUTS 2 regions 149 Candidate countries: statistical regions at level 2 152	Utilised agricultural area	140
Agricultural production	Proportion of area under cereals to the utilised agricultural area	140
Wheat production 143 Grain maize production 143 Rapeseed production 146 Conclusion 146 Methodological notes 148 ANNEX 149 European Union: NUTS 2 regions 149 Candidate countries: statistical regions at level 2 152	Proportion of permanent crops to the utilised agricultural area	140
Grain maize production	Agricultural production.	143
Rapeseed production 146 Conclusion 146 Methodological notes 148 ANNEX 149 European Union: NUTS 2 regions 149 Candidate countries: statistical regions at level 2 152	Wheat production	143
Conclusion	Grain maize production	143
Methodological notes	Rapeseed production	146
ANNEX	Conclusion.	146
European Union: NUTS 2 regions	Methodological notes	148
European Union: NUTS 2 regions	ANNEX	149
Candidate countries: statistical regions at level 2		
	· ·	







Statistics on regions and cities

Statistical information is essential for understanding our complex and rapidly changing world. Eurostat, the Statistical Office of the European Communities, is responsible for collecting and disseminating data at European level, not only from the 27 Member States of the European Union, but also from the three candidate countries (Croatia, the former Yugoslav Republic of Macedonia and Turkey) and the four EFTA countries (Iceland, Liechtenstein, Norway and Switzerland).

The aim of this publication, the *Eurostat regional* yearbook 2009, is to give you a flavour of some of the statistics on regions and cities that we collect from these countries. Statistics on regions enable us to identify more detailed statistical patterns and trends than national data, but since we have 271 NUTS 2 regions in the EU-27, 30 statistical regions on level 2 in the candidate countries and 16 statistical regions on level 2 in the EFTA countries, the volume of data is so great that one clearly needs some sorting principles to make it understandable and meaningful.

Statistical maps are probably the easiest way for the human mind to sort and 'absorb' large amounts of statistical data at one time. Hence this year's *Eurostat regional yearbook*, as in previous editions, contains a lot of statistical maps where the data is sorted by different statistical classes represented by colour shades on the maps. Some chapters also make use of graphs and tables to present the statistical data, selected and sorted in some way (different top lists, graphs with regional extreme values within the countries or only giving representative examples) to make it easier to understand.

We are proud to present a great variety of subjects tackled in the 11 chapters in this years' edition of the *Eurostat regional yearbook*. The first chapter on **Population** gives us detailed knowledge of different demographic patterns, such as population density, population change and fertility rates in the countries examined. This chapter can be considered the key to all other chapters, since all other statistics depend on the composition of the population. The second chapter focuses on **European cities** and explains in detail the definitions of the various spatial levels used in the Urban Audit data collection, with some interesting examples on how people travel to work in nine European capitals.

The chapter on the **Labour market** mainly describes the differences in weekly working hours

throughout Europe and offers a couple of explanations for why they vary so much from region to region. The three economic chapters on **Gross domestic product**, **Household accounts** and **Structural business statistics** all give us detailed insight into the general economic situation in regions, private households and different sectors of the business economy.

We are particularly proud to present a new and very interesting chapter on the **Information society**, which describes the use of information and communication technologies (ICT) among private persons and households in European regions. This chapter tells us, for example, how many households use the Internet regularly and how many have broadband access. The next two chapters are on **Science**, **technology and innovation** and **Education**, three areas of statistics that are often seen as key to monitoring achievement of the goals set in the Lisbon strategy to make Europe the most competitive and dynamic knowledge-based economy in the world.

In the next chapter we learn more about regional statistics on **Tourism**, and which tourist destinations are the most popular. The last chapter focuses on **Agriculture**, this time mainly crop statistics, revealing which kind of crop is grown where in Europe.

The NUTS classification

The nomenclature of territorial units for statistics (NUTS) provides a single uniform breakdown of territorial units for the production of regional statistics for the European Union. The NUTS classification has been used for regional statistics for many decades, and has always formed the basis for regional funding policy. It was only in 2003, though, that NUTS acquired a legal basis, when the NUTS regulation was adopted by the Parliament and the Council (1).

Whenever new Member States join the EU, the NUTS regulation is amended to include the regional classification in those countries. This was the case in 2004, when the EU took in 10 new Member States, and in 2007 when Bulgaria and Romania also joined the European Union.

The NUTS regulation states that amendments of the regional classification, to take account of new administrative divisions or boundary changes in the Member States, may not be carried out more frequently than every three years. In 2006, this review took place for the first time, and the re-

⁽¹) More information on the NUTS classification can be found at http:// ec.europa.eu/eurostat/ ramon/nuts/splash_ regions.html



sults of these changes to the NUTS classification have been valid since 1 January 2008.

Since these NUTS changes were introduced quite recently, the statistical data are still missing in some cases or have been replaced with national values on some statistical maps, as indicated in the footnotes to each map concerned. This applies in particular to Sweden, which introduced NUTS level 1 regions, to Denmark and Slovenia, which introduced new NUTS level 2 regions, and to the two northernmost Scottish regions, North Eastern Scotland (UKM5) and Highlands and Islands (UKM6), where the border between the two regions has changed. The regional data availability for these countries will hopefully soon be improved.

Please also note that some Member States have a relatively small population and are therefore not divided into more than one NUTS 2 region. Thus, for these countries the NUTS 2 value is exactly the same as the national value. Following the latest revision of the NUTS classification, this now applies to six Member States (Estonia, Cyprus, Latvia, Lithuania, Luxembourg and Malta), one candidate country (the former Yugoslav Republic of Macedonia) and two EFTA countries (Iceland and Liechtenstein). In all cases the whole country consists of one single NUTS 2 region.

A folding map on the inside of the cover accompanies this publication and it shows all NUTS level 2 regions in the 27 Member States of the European Union (EU-27) and the corresponding level 2 statistical regions in the candidate and EFTA countries. In the annex you will find the full list of codes and names of these regions. This will help you locate a specific region on the map.

Coverage

The Eurostat regional yearbook 2009 mainly contains statistics on the 27 Member States of the European Union but, when available, data is also

given on the three candidate countries (Croatia, the former Yugoslav Republic of Macedonia and Turkey) and the four EFTA countries (Iceland, Liechtenstein, Norway and Switzerland).

Regions in the candidate countries and the EFTA countries are called statistical regions and they follow the same rules as the NUTS regions in the European Union, except that there is no legal base. Data from the candidate and EFTA countries are not yet available in the Eurostat database for some of the policy areas, but the availability of data is constantly improving, and we hope to have even more complete coverage from these countries in the near future.

More regional information

In the subject area 'Regions and cities' under the heading 'General and regional statistics' on the Eurostat website you will find tables with statistics on both 'Regions' and the 'Urban Audit', with more detailed time series (some of them going back as far as 1970) and with more detailed statistics than this yearbook contains. You will also find a number of indicators at NUTS level 3 (such as area, demography, gross domestic product and labour market data). This is important since some of the countries covered are not divided into NUTS 2 regions, as mentioned above.

For more detailed information on the content of the regional and urban databases, please consult the Eurostat publication European regional and urban statistics — Reference guide — 2009 edition, which you can download free of charge from the Eurostat website. You can also download Excel tables containing the specific data used to produce the maps and other illustrations for each chapter in this publication on the Eurostat website. We do hope you will find this publication both interesting and useful and we welcome your feedback at the following e-mail address: estat-regio@ec.europa.eu





Regional working time patterns

Flexible working hours are one of the most valuable ways for individuals to reconcile work with other aspects of life, particularly family duties. Working part time can be a positive thing, as long as the decision is voluntary and not due to underemployment. The different legal systems and the different collective agreements across EU countries governing working hours provide some flexibility, providing scope, to a greater or lesser extent, for more free time.

And how about the situation at regional level? Are there significant differences among regions of the same country in how much time people spend at work? It is clear that the national legal system has a big influence in all regions of a country. But on top of this, do any regional factors influence the differences in weekly hours spent at work?

In this chapter we will look at how much time people spend at work in European regions and we will offer some possible explanations for the different time patterns. First we will give you a snapshot of the regional labour market in 2007.

Brief overview for 2007

The EU-27 employment rate rose from an average of 64.4 % in 2006 to 65.3 % in 2007. It is still 4.6 percentage points short of achieving the Lisbon employment target. Looking back to employment figures for 2000, when the targets were set, it is clear that the rise in employment fell short of ambitions. It now seems increasingly unlikely that the Lisbon targets for employment will be achieved by 2010, since there are only three years left, and especially given the recession and economic difficulties we are currently facing, which are highly likely to have a negative impact on employment in the coming years.

The latest quarterly data available at national level confirm this. The employment rate for the EU-27 in the last quarter of 2008 was 65.8 % and 64.6 % in the first quarter of 2009.

Social and territorial cohesion is one of the EU's goals, so it is important to look at regional labour markets and how they change over time. Map 3.1 shows the regional employment rate for the 15–64 age group, by NUTS 2 regions, in 2007.

In 2007, only 81 of the 264 NUTS 2 regions in the EU-27 for which data was available had already achieved the Lisbon target (shaded with the darkest colour in Map 3.1), while 59 regions were still

10 percentage points below the overall employment target set for 2010.

A cluster of regions right in the centre of Europe, comprising regions in southern Germany and in Austria, recorded relatively high employment. The northern EU regions, comprising regions in the Netherlands, the United Kingdom, Denmark, Sweden and Finland, also recorded relatively high employment. Low regional employment rates were mainly found in the southern regions of Spain and Italy and in east European countries.

The range between the lowest and the highest regional employment rate in 2007 was still significant, with the highest employment rate almost twice as high as the lowest. The figures ranged from 43.5 % in Campania (Italy) to 79.5 % in Åland (Finland).

Employment throughout the EFTA regions was above 70 %. In the candidate countries, employment rates ranged from 25.7 % in Mardin (Turkey) to 62.4 % in Sjeverozapadna Hrvatska (Croatia).

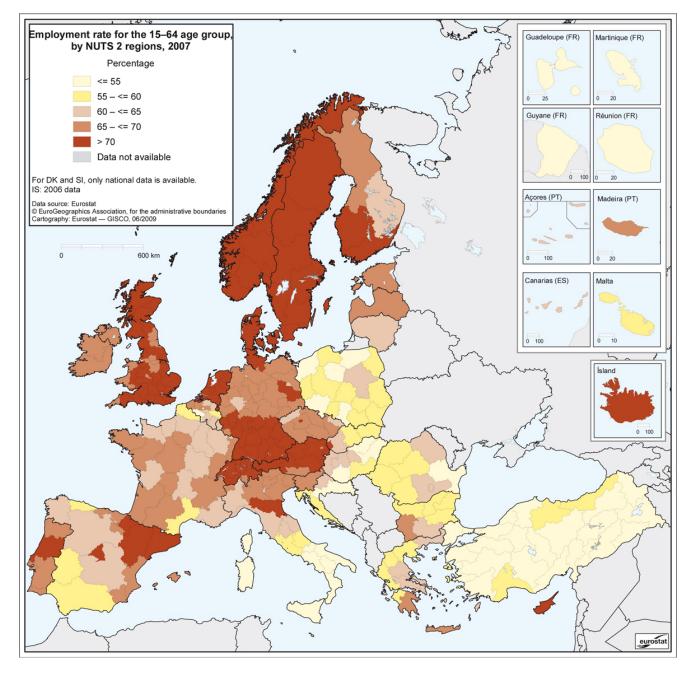
The other two Lisbon targets set for employment — for the female employment rate to exceed 60 % and for the older-worker employment rate to exceed 50 % — are closer to being fulfilled, but still appear increasingly unlikely to be achieved by 2010.

The female employment rate in the EU-27 increased in 2007 by 1 percentage point to 58.3 %. Out of the three targets, this seems the most promising, but the negative impacts on the labour market that are likely to be felt in the coming years should not be overlooked. Regional female employment rates varied widely in 2007, from a minimum of 27.9 % in Campania (Italy) to a maximum of 76.4 % in Åland (Finland).

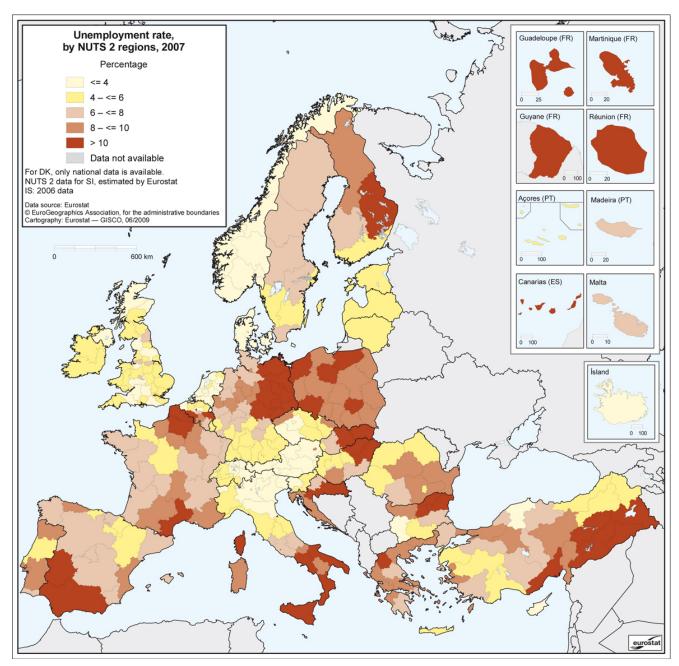
The employment rate of older workers, i.e. employed persons aged 55–64 years, was 44.7 % in 2007, which is 1.2 percentage points higher than in 2006. At regional level, older-worker employment rates ranged from a low of 21.8 % in Śląskie (Poland) to a high of 72.8 % in Småland med öarna (Sweden). The EU-27 unemployment rate fell significantly in 2007 by 1 percentage point to 7.2 %, the steepest fall since 2000.

Unemployment is distributed quite evenly throughout the EU. Map 3.2 shows that, in spite of the good performance in 2007, some regions still record a double-digit unemployment rate. These are mainly located in the south of Spain, the south of Italy and the eastern regions of Germany. Some regions in Slovakia, Poland and Hungary also recorded unemployment rates above 10 % in 2007.

Map 3.1: Employment rate for the 15–64 age group, by NUTS 2 regions, 2007 *Percentage*



Map 3.2: Unemployment rate, by NUTS 2 regions, 2007 *Percentage*



The lowest levels of unemployment were recorded in all regions in the Netherlands and Austria, the northern parts of Italy and Belgium and the southern parts of the United Kingdom. There are still big differences in regional unemployment rates, ranging in 2007 from 2.1 % in Zeeland (Netherlands) to 25.2 % in Réunion (France).

Long-term unemployment, which is the worse case of unemployment, also fell in 2007. The share of long-term unemployment, i.e. the share of persons looking for a job for more than one year as a percentage of all unemployed, stood at 43 %, a decrease of 2.8 percentage points compared with 2006. This decrease was seen in most EU regions, but two regions recorded a significant increase of more than 10 percentage points in one year, Brabant Wallon (Belgium) and Corse (France).

In all EFTA regions, unemployment was below 5 %. In the candidate countries, the rate ranged from 3.1 % in Kastamonu to 18 % in Mardin (both in Turkey).

Lastly, a brief word on the cohesion of labour markets. In 2007, the dispersion of employment and unemployment rates, which measures regional differences of employment and unemployment levels, decreased from 45.6 to 44.1 for unemployment, and from 11.4 to 11.1 for employment. This means that, overall, the rise in employment and the fall in unemployment were not achieved at the cost of letting some regions lag behind, continuing the five-year trend.

Regional work patterns

Hours usually worked are the hours most commonly or typically worked in a short period of time, e.g. during a week. For each employed person, this indicator shows the number of hours spent working, including regular overtime work and excluding regular absences.

Working time patterns are influenced by several factors, such as different historical and cultural backgrounds, female participation in regional labour markets, specialisation in a specific industry and the share of part-time workers.

Map 3.3 shows the different usual weekly hours of work in a person's main job. The map reveals two clear facts: the average number of usual weekly hours of work varies considerably among the EU-27 and regional differences are larger between countries than within countries (4).

Employed persons living in Greece and in east European countries, e.g. Bulgaria, the Czech Republic, Poland and Slovakia, tend to spend more time at work, on average, than other European citizens, while employed persons living in the Nordic countries and in the United Kingdom tend to spend less time at work. In 2007 the average number of hours usually spent at work varied from 30.1 hours per week in Groningen and Overijssel (both Netherlands) to 45.7 hours in Notio Aigaio (Greece), which is 1.5 times more than in the two Dutch regions.

It is obvious that the share of part-time workers has a significant influence in lowering the average hours spent at work. Unfortunately no breakdown of average hours worked into part-time workers and full-time workers is available at regional level.

All regions in the Netherlands record a remarkably low average compared with other regions. The highest value in the Netherlands was found in Flevoland with an average of 31.6 hours per week, which is still 2.4 hours less than in Martinique (France), the region with the lowest value of all regions in the EU-27, not counting the Netherlands. This leads us to conclude that the Netherlands is a special case regarding the average time spent at work and the reasons for this will be analysed more in detail later.

Differences in the usual weekly hours of work are not as great among regions in the same country as they are between different EU regions. In fact, the average time spent at work in one region depends less on the region itself than to which country it belongs. Nevertheless, some countries, such as Belgium, Germany and France, record regional differences in the time spent at work.

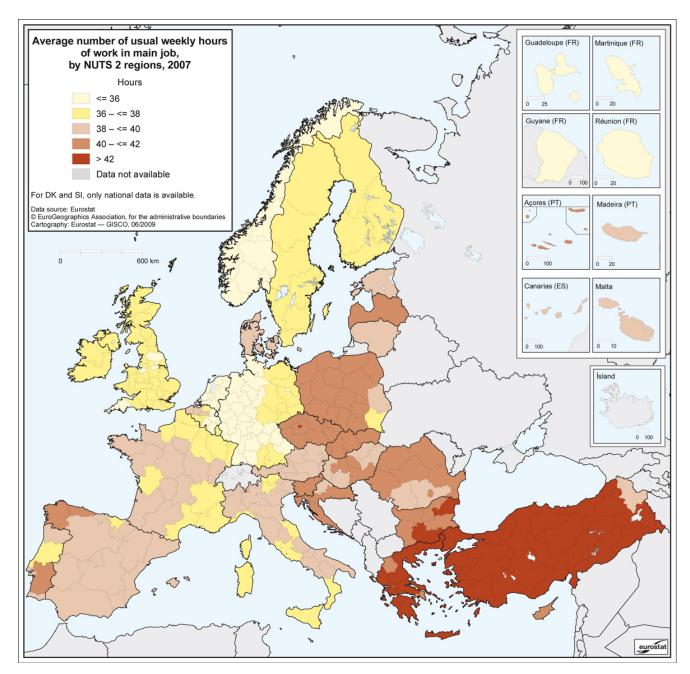
Two regions recorded significantly higher usual number of hours spent at work than the rest of the country: Praha (Czech Republic) and Inner London (United Kingdom), both capital regions. In the capital region of Greece, the precise opposite was found, with the capital recording a significantly lower average than in other Greek regions.

Significantly lower averages compared with the rest of their respective countries were also observed in Ciudad Autónoma de Ceuta and Ciudad Autónoma de Melilla in Spain, Åland in Finland and in the French overseas departments, Guadeloupe, Martinique, Guyane and Réunion. All these regions are islands or regions that are not contiguous to other country regions (Guyane (France) and the two Spanish autonomous cities). This geographic separation enhanced the marked differences in time patterns, while in contiguous regions the average time spent at work tended to be more similar.

Now let's look at the factors causing these differences to usual weekly hours spent at work at

^(*) This statement can be confirmed in a regression. Some 95 % of the regional variability in time spent at work can be explained with (a) the share of part-time workers, (b) the share of employees, (c) the share of employed persons per economic sector and (d) a country dummy variable. The country defect is very significant in this regression.

Map 3.3: Average number of usual weekly hours of work in main job, by NUTS 2 regions, 2007 Hours



regional level. Most differences in the regional working time can be explained by two other regional labour market indicators: the percentage of part-time workers and the percentage of employees (which means all persons employed, not including self-employed or family workers). The share of part-time workers in overall employment is responsible for lowering the average weekly hours of work, and the share of employees also seems to have a significant influence on the average time that an employed person spends in his or her job, since self-employed and family workers tend to spend more time in their jobs (5).

Part-time jobs: lowering the average working time

The main factor explaining the low average of usual weekly hours of work in main job in a re-

gion is the share of part-time workers, and this is quite evident in the Dutch regions. In 2007, the share of employed men working part time was 23.6 % and the share of women working part time was an impressive 75 % in the Netherlands. Having almost a quarter of men and three quarters of women working part time substantially lowers the average of usual weekly hours at work.

Working part time is more a country-level characteristic, as shown in Map 3.4, which shows scant regional differences within each country. The map also shows well-defined patterns of the share of part-time workers. These patterns are so well defined that the EU-27 regions can be divided into four distinct groups of part-time workers:

• Group 1: the Dutch regions, with a share of 46.8 % of part-time workers;

(*) It has, however, to be noted that the statistical measurement of weekly working hours of selfemployed and family workers is quite difficult and hence less reliable than other statistics.

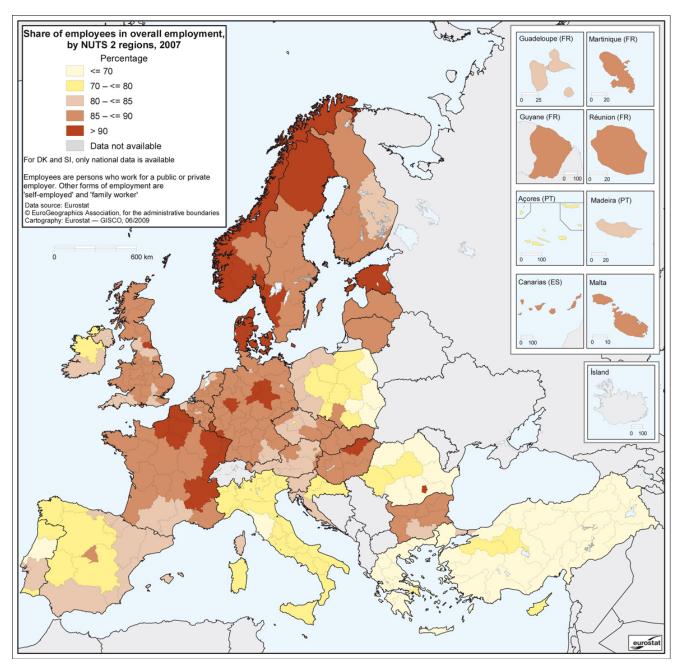
Table 3.1: Average number of usual weekly hours of work in main job, by NUTS 2 regions, 2007

	Average number of usual weekly hours of work in main job				
	Country		Regional minimum	Regional maximum	
EU-27	38.0	30.1	Groningen	45.7	Notio Aigaio
BE	37.1	35.8	Prov. Limburg (B)	38.7	Prov. West-Vlaanderer
BG	41.6	40.5	Severozapaden	42.4	Severoiztochen
CZ	41.7	40.4	Moravskoslezsko	43.3	Praha
DK	39.5	:	:	:	:
DE	35.5	34.1	Bremen	37.4	Thüringen
EE	39.5	-	-	-	-
IE	36.4	36.1	Border, Midland and Western	36.5	Southern and Eastern
EL	42.5	41.4	Attiki	45.7	Notio Aigaio
ES	39.3	37.3	Ciudad Autónoma de Ceuta	40.7	Galicia
FR	38.0	34.0	Martinique	39.6	Basse-Normandie
IT	38.4	37.2	Calabria	39.1	Piemonte
CY	40.2	-	-	-	-
LV	40.7	-	-	-	-
LT	38.8	-	-	-	-
LU	36.7	-	-	-	-
HU	40.2	39.8	Dél-Dunántúl	40.6	Közép-Magyarország
MT	39.0	-	-	-	-
NL	30.8	30.1	Groningen	31.6	Flevoland
AT	38.9	38.2	Vorarlberg	39.7	Kärnten
PL	41.0	37.9	Podkarpackie	41.9	Podlaskie
PT	39.0	37.2	Centro (P)	40.1	Alentejo
RO	40.5	39.1	Sud — Muntenia	41.4	Bucureşti — Ilfov
SI	40.3	-	-	-	-
SK	41.1	40.1	Východné Slovensko	41.7	Západné Slovensko
FI	37.5	36.0	Åland	37.8	Länsi-Suomi
SE	36.4	36.2	Västsverige	36.7	Övre Norrland
UK	36.9	35.3	North Yorkshire	39.5	Inner London

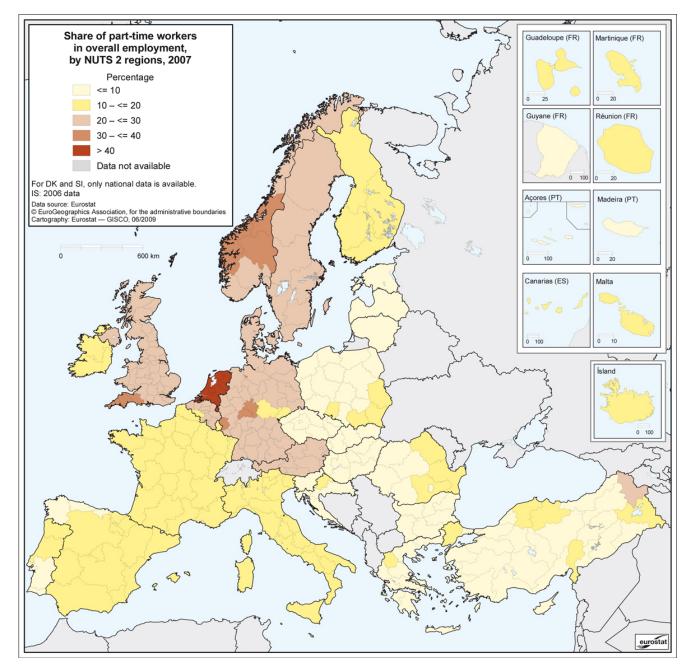
Notes: NUTS level 2 employment data not available for DK

^{- =} not applicable (EE, IE, CY, LV, LT, LU, MT and SI comprise only one or two NUTS level 2 regions)

Map 3.4: Share of employees in overall employment, by NUTS 2 regions, 2007 *Percentage*



Map 3.5: Share of part-time workers in overall employment, by NUTS 2 regions, 2007 *Percentage*





- Group 2: regions in the Nordic EU-27 countries, plus Belgium, Germany, Austria and the United Kingdom, which together have an average share of 25 %;
- Group 3: regions in Ireland, Spain, France, Italy, Luxembourg, Malta and Portugal, with an average share of 14.2 %;
- Group 4: the rest of the EU-27 regions, mainly from the new Member States, with an average share of part-time workers of 7.2 %.

Over the past five years, the EU-27 has recorded an increase of 1.6 percentage points in the share of part-time workers. This increase was recorded in most regions in Group 1 (1.9 percentage points), Group 2 (2.2 percentage points) and Group 3 (2.6 percentage points), as defined above. The opposite trend was recorded in most Group 4 regions, with a decrease in the share of part-time workers of 0.7 percentage points over the last five years.

Turkish regions recorded a relatively low share of part-time workers in 2007 as compared with the EU regions, with 8.8 % of employed persons working part time.

Employees spend less time at work

Employed persons are classified according to their working status. Regional labour market data are

broken down into three categories: employees (which comprises all personnel with a contract of employment), self-employed and family workers.

The number of hours a person spends at work per week seems to be related to his or her working status, since employees tend to spend less time working per week compared to family workers or self-employed persons. Map 3.5 shows the regional distribution of the share of employees in overall employment.

The share of employees in total employment tends to be lower compared with other EU regions in almost every region of Greece, Italy, Poland and Romania and in the north-western part of Spain and in the northern part of Portugal. The share of employees in overall employment at regional level varies from a minimum of 45.8 % in Peloponnisos (Greece) to a maximum of 96.1 % recorded in București — Ilfov (Romania).

Apart from some exceptions, like in Romania or in Spain, the share of employees tends to be more or less even within countries, showing that, as with the share of part-time workers, the level of employees depends mostly on the country. Nevertheless, there are some region-specific differences that could be linked to the type of activity predominant in these regions.

Employee status is closely related to the type of sector in which a person is employed. For in-

persons in the agriculture sector, by NUTS 2 regions, 2007

Percentage

40

30

40

40

40

50

60

70

80

90

100

Figure 3.1: Share of employees in overall employment versus share of employed

stance, the share of family workers and selfemployed in agriculture tends to be higher than in other sectors. Agriculture has the lowest share of employees of all sectors. Based on this, we can conclude that rural regions tend to have a lower share of employees, which also tends to lead to a higher average in usual weekly hours of work.

There is a significant negative correlation between the share of employees and the share of employed persons in agriculture, as shown in Figure 3.1.

Each point in Figure 3.1 represents one NUTS 2 region where data was available for 2007. The points roughly align on a downward straight line. That means that regions with higher levels of employment in agriculture are more likely to have lower shares of employees and, consequently, higher averages of weekly time spent at work. At country level, the effect of employment in the agriculture sector is maybe not so significant in explaining differences in the average hours spent at work, since the share of persons working in the agricultural sector is not very high in most countries. But at regional level, especially in rural areas, this is an important factor to consider in order to have a better understanding of different regional time patterns.

To sum up, we can conclude that the average usual time spent at work in a specific region varies significantly throughout the EU-27, which is explained not only by the share of part-time workers, the most influential factor, but also by the share of employees, who tend to spend less time at work. The share of employees depends itself on the predominant sector in each region.

While part-time work appears to be influenced more at national level, the average time a person spends at work, the share of employees and the distribution of employment among sectors is influenced more at regional level.

Conclusion

The results presented in this chapter show that 2007 was a year of strong performance regarding both employment and unemployment, and disparities in regional labour markets have narrowed. Nonetheless, the Lisbon employment targets seem unlikely to be achieved. The recession currently faced by Europe and the rest of the world will make the Lisbon employment targets even more difficult to achieve, since labour markets are expected to deteriorate.

The number of hours per week that people usually spend at work was also analysed in this chapter. If we look at working time patterns at regional level, the differences are clearly greater between countries than between regions within the same country, but there are also some regional variations. The average time a person living in a specific region spends at work depends on many factors, such as female participation in the labour market, the share of parttime workers, the share of employees and the predominant sector of activity. All these factors dictate how much free time people have on average.

Although it seems like an odd paradox, the average time people spend at work does not equate to strong labour market or economic performance. In fact, it is precisely the reverse.



Methodological notes

The source of regional labour market information down to NUTS level 2 is the European Union labour force survey (LFS). This is a quarterly household sample survey conducted in the Member States of European Union.

The LFS target population is made up of all members of private households aged 15 or over. The survey follows the definitions and recommendations of the International Labour Organisation (ILO). To achieve further harmonisation, the Member States also adhere to common principles in drafting questionnaires.

All regional results presented here concern NUTS 2 regions and all regional figures are annual averages of the quarterly surveys.

For further information on regional labour market statistics, see the metadata on the Eurostat website (http://ec.europa.eu/eurostat).

Definitions

Population covers persons aged 15 and over, living in private households (persons living in collective households, i.e. residential homes, boarding houses, hospitals, religious institutions and workers' hostels, are not included). This comprises all persons living in the households surveyed during the reference week. This definition also includes persons absent from the households for short periods (but having retained a link with the private household) owing to studies, holidays, illness, business trips, etc. Persons on obligatory military service are not included.

Employed persons are persons aged 15 years and over (16 and over in Spain, Sweden and the United Kingdom (1995–2001); 15–74 years in Denmark, Estonia, Finland, Hungary, Latvia, Norway and Sweden (from 2001 onwards); and 16–74 years in Iceland) who worked during the reference week, even for just one hour, for pay, profit or family gain, or who did not work but had a job or business from which they were temporarily absent because of, for example, illness, holidays, industrial dispute, education or training.

Unemployed persons are persons aged 15–74 years (in Norway, Spain and Sweden (1995–2000), the United Kingdom and Iceland 16–74 years) who were without work during the reference week, were currently available for work and were either actively seeking work in the past four weeks or had already found a job to start within the next three months.

Employment rate represents employed persons as a percentage of the population.

Unemployment rate represents unemployed persons as a percentage of the economically active population. The unemployment rate can be broken down further by age and gender. The youth unemployment rate covers persons aged 15–24 years.

Long-term unemployment share represents the long-term unemployed (12 months or longer) as a percentage of the total unemployed persons.

Dispersion of employment (unemployment) rates is the coefficient of variation of regional employment (unemployment) rates in a country, weighted by the absolute population (active population) of each region.

Usual weekly hours of work in main job are the hours most commonly or typically worked in a short period of time, e.g. during a week, in a person's main job.

Employees are all personnel with a contract of employment with a local entity or enterprise. 'Other personnel' include active proprietors, family helpers, the self-employed, trainees without a contract of employment and voluntary workers.

Part-time employees are considered to be those who, in accordance with a contract with the employer, did not perform a full day's work or did not complete a full week's work within the local entity.



Self-employed persons are defined as persons who work in their own business, professional practice or farm for the purpose of earning a profit, and who do not employ any other person.

Family workers are persons who help another member of the family to run an agricultural holding or other business, provided they are not considered as employees.