



This chapter analyses the situation in European Union (EU) labour markets at a regional level. It starts by providing an overview of employment, focusing on those aged 20–64, including an analysis of the regional dispersion of employment to see whether or not employment rates are moving closer together (cohesion) or further apart. The second section looks at regional unemployment, the change in unemployment rates and one of the main concerns of policymakers — youth unemployment. The analysis of unemployment also includes information relating to regional cohesion, looking at the dispersion of unemployment rates. There follows some information in relation to regional wages and salaries, with an analysis of gross average hourly earnings and gross average annual earnings per employee.

## Main statistical findings

#### **Employment rates**

The EU-27 employment rate for the 20–64 age group increased from 66.5% in 2000 to peak at 70.4% in 2008 before the effects of the financial and economic crisis resulted in successive reductions to 69.1% in 2009 and 68.5% in 2010. There was almost no change in 2011, when the EU-27 employment rate for those aged 20–64 stood at 68.6%. As such, the employment rate in 2011 remained well below one of the Europe 2020 headline indicators, namely that at least 75% of the population aged 20–64 should be in employment by 2020.

Map 5.1 presents the distribution of employment rates for the 20–64 age group for NUTS level 2 regions, with the darkest colour shade indicating those regions that already exceeded the overall Europe 2020 target of 75% — it should be noted that individual EU Member States have set national targets which may be higher or lower than the EU-27 target (taking into account the different situations in each Member State); there are no specific employment rate targets at a regional level.

In 2011, 75 of the 270 NUTS level 2 regions in the EU for which data are available for the employment rate reported that they had an employment rate that was above 75.0%, while there was one additional region with an employment rate of exactly 75.0%. At the other end of the range, there were 74 regions where employment rates were at least 10.0 percentage points below the target; among these were 14 regions where the employment rate was at least 20.0 percentage points lower.

The highest regional employment rates in the EU were predominantly recorded in northern and central Europe, particularly in Germany, the Netherlands, Austria, Sweden and the United Kingdom, and to a lesser degree in Denmark and Finland, while there was also one region in each of the Czech Republic, Italy and Slovakia reporting an employment rate of more than 75.0%. The highest employment rate in 2011 was registered in the Åland region of Finland (84.1%), while there were seven other regions that had employment rates in excess of 80.0%: three of these were in Sweden (Stockholm, Småland med öarna and Västsverige), three were in southern Germany (Freiburg, Tübingen and Oberbayern — the latter includes Munich) and one was in the Netherlands (Utrecht).

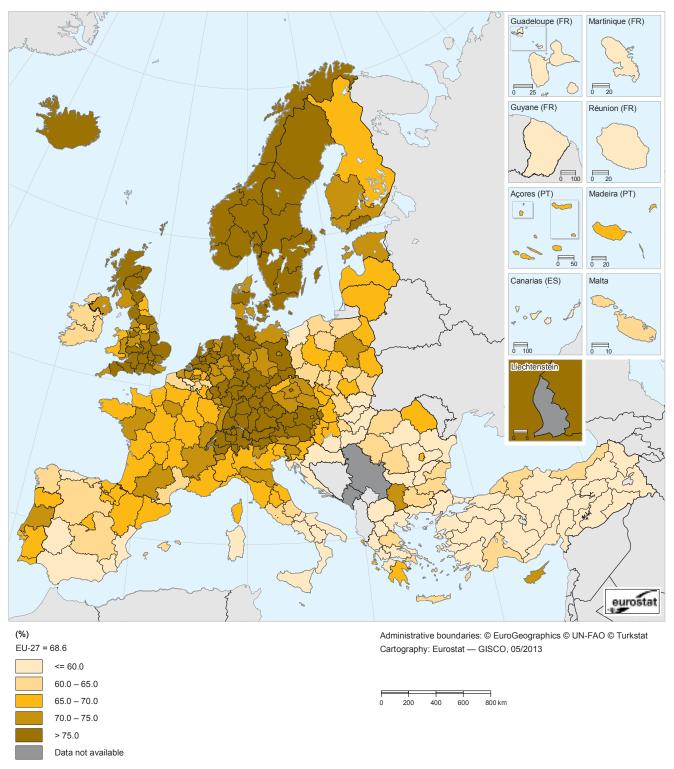
The lowest regional employment rates in 2011 were generally found in southern regions of Spain and Italy, as well as in Greece, Hungary, the Spanish overseas regions of the Ciudad Autónoma de Ceuta and the Ciudad Autónoma de Melilla, and the French overseas regions. Relatively low employment rates (60.0 % or lower) were also apparent in Belgium (for the capital city region of Région de Bruxelles-Capitale/Brussels Hoofdstedelijk Gewest and the western region of the Province/Provincie Hainaut), the north of Bulgaria, the northwest of Poland, the centre and south-east of Romania and the east of Slovakia. There were four regions in southern Italy where less than half of the population aged 20-64 was in employment, namely Puglia, Calabria, Sicilia and Campania where the lowest employment rate was registered (43.1%). Employment rates were also 50.0 % or lower in the French overseas region of Réunion (49.1%) and the Spanish Ciudad Autónoma de Ceuta (50.0%).

Employment rates in the EFTA regions were relatively high, as each level 2 region reported a rate that was above 75.0% in 2011, while nine EFTA regions recorded employment rates that were above 80.0%, peaking at 83.7% in central and eastern Switzerland (Zentralschweiz and Ostschweiz). This was in stark contrast to the acceding and candidate countries, where each region had an employment rate that was below 65.0%, while six Turkish regions (including Ankara and Istanbul) and the former Yugoslav Republic of Macedonia reported that less than half of those aged 20–64 were in employment. By far the lowest employment rates (among those regions displayed in Map 5.1) were recorded in the two eastern Turkish regions of Mardin, Batman, Şırnak, Siirt (36.0%) and Sanliurfa, Diyarbakir (35.6%).

# Changes in employment rates from 2008 to 2011

Labour markets generally lag economic activity and the effects of the financial and economic crisis were not evident in relation to the EU-27 employment rate until 2009. Map 5.2 provides an analysis of the change in employment rates from their most recent highs of 2008 compared with the latest situation for which data are available, namely in 2011. While some regions may have consistently recorded increases or decreases in the rate during this period, in many regions the rates may have moved in contrasting directions; in the case, for example, of an initial fall in 2009 and a subsequent recovery thereafter, the analysis shows the net impact

**Map 5.1:** Employment rate, persons aged 20–64, by NUTS 2 regions, 2011 (%)





of these contrasting movements. The EU-27 employment rate for those aged 20-64 had a net decline of 1.8 percentage points during the period 2008-11.

Almost three quarters (73.0%) of the 270 NUTS level 2 regions for which data are available reported a contraction in employment rates between 2008 and 2011. The biggest fall across EU regions during the period 2008-11 was recorded in the Spanish region of the Comunidad Valenciana — where the employment rate dropped by as much as 9.5 percentage points. There were reductions of at least 8.0 percentage points in the neighbouring Región de Murcia and the offshore Illes Balears, while reductions of at least 8.0 percentage points were also recorded in the Border, Midland and Western region of Ireland, in Latvia (one region at NUTS level 2), in the south of Bulgaria (Yuzhen tsentralen) and the far north of Greece (Anatoliki Makedonia, Thraki).

The employment rate was higher in 2011 than in 2008 in 67 of the 270 NUTS level 2 regions for which data are available, and despite the financial and economic crisis there were considerable gains recorded in some regions. The highest increase was in Corse (France), where the employment rate rose by 8.2 percentage points between 2008 and 2011 to reach 68.4%. The gains recorded in Corse were almost twice as high as the next highest increase, with the employment rate in the eastern German region of Sachsen-Anhalt rising by 4.5 percentage points to 75.0%. Aside from these two regions, there were 10 more regions in the EU where employment rates rose by more than 2.5 percentage points between 2008 and 2011 (as shown by the darkest shade in Map 5.2). These regions were almost exclusively in Germany — in particular within Niedersachsen and Sachsen; the only exception was the French overseas region of Martinique.

European social cohesion objectives seek to minimise disparities in regional labour markets. Having stood at 13.0% in 2000, the coefficient of variation for the dispersion of regional employment across the EU-27 generally followed a downward path through to 2007 (11.1%); this falling coefficient indicates that regional employment rates had, on average, moved closer together. The impact of the financial and economic crisis was evident thereafter, as the pattern was reversed, with the dispersion rate increasing for four successive years to reach 12.5 % by 2011 (see Figure 5.1).

The difference in employment rates between regions (across the NUTS level 2 regions of the same country) can also be measured in terms of a dispersion rate; note that by definition there are no dispersion rates for those Member States with only one or two regions at NUTS level 2, namely Estonia, Ireland, Cyprus, Latvia, Lithuania, Luxembourg, Malta and Slovenia. The most evident disparities in employment rates within the same country were in Italy, which recorded the highest dispersion rate (17.9%) among the EU Member States in 2011 (the regions in Italy were largely split on a north-south basis), followed by Spain (10.0%). Denmark, Portugal, the Netherlands, Sweden and Austria had the lowest dispersion for employment rates in 2011, all below 4.0 %, as did Norway and Switzerland. Both Turkey (12.7 %) and Croatia (10.1%) had dispersion rates that were higher than in all EU Member States except for Italy.

There was a mixed pattern to the development of dispersion rates across EU Member States between 2008 and 2011. Dispersion rates rose in 8 of the 19 countries for which data are available, particularly so in Romania, Spain, Bulgaria and Italy. By contrast, dispersion rates for Hungary, Portugal and Finland — and to a lesser extent, Germany, France, Austria, Denmark and the United Kingdom — narrowed, indicating that regional employment rates in these countries were becoming more homogeneous. A narrowing of dispersion rates could be the result of under-performing regions catching up with the national average, but could equally result from declining employment rates among those regions with above average performance.

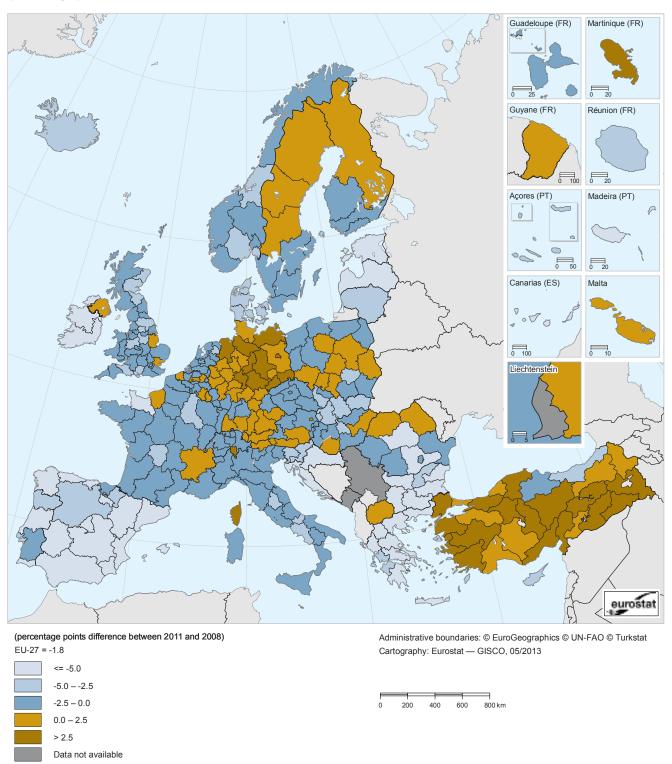
#### Male and female employment rates

The EU-27 female employment rate (the proportion of women aged 20-64 in employment) peaked in 2008 at 63.0 % before falling in consecutive years to 62.1 % in 2010; the latest information available shows that the female employment rate rose marginally to 62.2 % in 2011, still 0.8 percentage points below its pre-financial and economic crisis high. The male employment rate in the EU-27 also peaked in 2008 (77.9%) — some 14.9 percentage points above the corresponding female rate. Thereafter, the male employment rate fell to 75.0 % in 2010 and remained at the same rate in 2011. As such, the gender gap in employment rates narrowed steadily between 2008 and 2011, largely due to a higher fall for the male employment rate, which was more strongly affected by the financial and economic downturn.

Regionally, there is a strong link between the female employment rate and the overall employment rate, as Maps 5.1 and 5.3 show broadly similar patterns. Map 5.3 presents the distribution of female employment rates for NUTS level 2 regions in 2011, with Åland (Finland) reporting a female employment rate (81.3%) that was almost three times as high in Campania (Italy), where the lowest rate was recorded (27.7%). The corresponding range for male employment rates was considerably less, from a high of 86.8 % in Åland to a low of 56.3 % in Réunion (France).

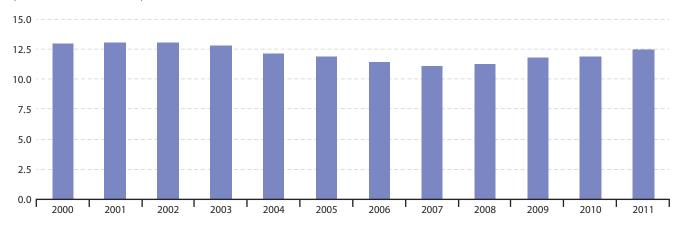
The Europe 2020 strategy does not make a distinction between the sexes with respect to its 75% target for the employment rate among those aged 20-64. There were 13 regions across the EU where female employment rates were in excess of 75.0% in 2011: aside from Åland these included another region in Finland (the capital city region of Helsinki-Uusimaa), six of the eight Swedish regions (Östra Mellansverige and Sydsverige were the exceptions), four regions in Germany (Freiburg, Tübingen, Brandenburg and Oberbayern), as well as Utrecht in the Netherlands. With the

**Map 5.2:** Change in employment rate, persons aged 20–64, by NUTS 2 regions, 2008–11 (¹) (percentage points difference between 2011 and 2008)



(¹) Chemnitz (DED4), Leipzig (DED5), Emilia-Romagna (ITH5), Marche (ITI3), Helsinki-Uusimaa (FI1B), Etelä-Suomi (FI1C), Pohjois- ja Itä-Suomi (FI1D), Cheshire (UKD6), Merseyside (UKD7) and Kontinentalna Hrvatska (HR04), 2009–11.

**Figure 5.1:** Dispersion of regional employment rates, persons aged 15–64, by NUTS 2 region, EU-27, 2000–11 (coefficient of variation)



Source: Eurostat (online data code: Ifst\_r\_Imder)

exception of two regions in Switzerland (Région lémanique and Ticino) and two regions in Norway (Sør-Østlandet and Hedmark og Oppland), all of the level 2 regions in Iceland, Norway and Switzerland also reported female employment rates above 75.0%.

In 2011, five out of the six lowest female employment rates across NUTS level 2 regions were recorded in the south of Italy — in Basilicata, Calabria, Puglia, Sicilia and Campania — where rates were consistently below 40%; the only other region to record such a low female employment rate was the overseas region of the Ciudad Autónoma de Ceuta (Spain). There was only one region in the acceding and candidate countries where the female employment rate was over 50 %, namely inland Croatia (Kontinentalna Hrvatska), while the north-eastern Turkish region of Trabzon, Ordu, Giresun, Rize, Artvin, Gümüşhane had a female employment rate of exactly 50.0%. There were five Turkish regions where fewer than one in four women aged 20-64 were employed in 2011, including İstanbul (with a female employment rate of 24.3%). The lowest female employment rates were recorded in the south-east of Turkey, in particular in Mardin, Batman, Şırnak, Siirt and in Şanlıurfa, Diyarbakır, where less than 10.0 % of all women aged 20–64 were in employment.

There were no NUTS level 2 regions in the EU where the female employment rate exceeded the male employment rate in 2011 (contrary to 2010, when the female employment rate in Lithuania had been 1.5 percentage points higher than the corresponding rate for men) — see Map 5.4. Female employment rates were generally relatively close to corresponding male employment rates in many Nordic and Baltic regions, as well as in several regions in Bulgaria and Germany. At the other end of the range, the largest differences between male and female employment rates were recorded in southern regions of the EU, in particular across southern Italy, Malta, Greece and the Spanish overseas regions of the Ciudad Autónoma de Ceuta and the Ciudad Autónoma de Melilla. The

biggest difference between male and female employment rates was recorded in Malta, where the male employment rate (78.8%) was 35.4 percentage points higher than the female employment rate. The gender gap between male and female employment rates was even wider in many Turkish regions — the widest differences (more than 50.0 percentage points) were recorded in the three south-eastern regions of: Mardin, Batman, Şırnak, Siirt; Şanlıurfa, Diyarbakır; and Gaziantep, Adıyaman, Kilis.

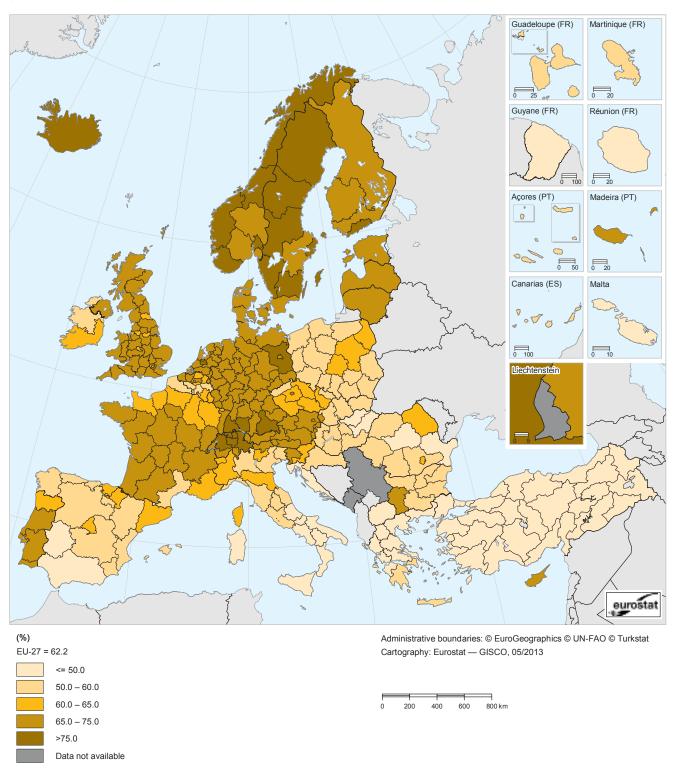
#### **Employment rates for older workers**

The EU-27 employment rate for older workers (aged 55–64) stood at 47.4% in 2011; this marked an increase of 11.9 percentage points when compared with the rate in 2000 and provided evidence of an extension in the average length of working lives in the EU. Despite the financial and economic crisis, the employment rate for older workers continued to expand throughout the period from 2007–11, although the pace of growth slowed in 2009 and 2010, before an expansion of 1.1 percentage points between 2010 and 2011.

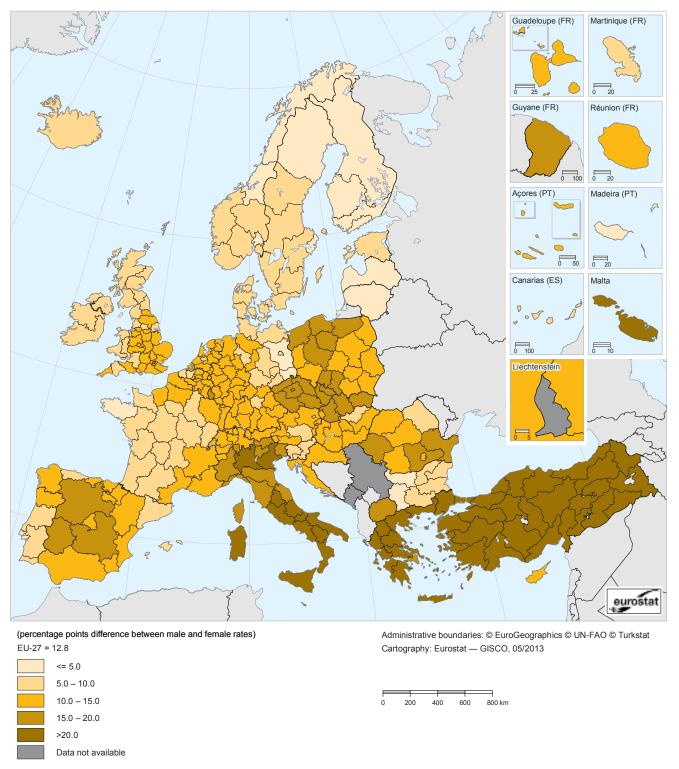
In 2011, there were 118 NUTS level 2 regions across the EU that had an employment rate for older workers above 50.0%; among these, 89 regions had a rate that exceeded 55.0%, 42 regions had a rate that exceeded 60.0%, 13 regions had a rate that exceeded 65.0%, while six had a rate that was over 70.0%. By contrast, there were 152 NUTS level 2 regions in the EU with an employment rate for older workers of 50.0% or less in 2011; 79 of these had a rate of 40.0% or less, and 23 regions recorded rates equal to or below 35.0%.

The highest employment rates for older workers in the EU were systematically recorded across Sweden, which accounted for the eight highest employment rates in 2011; the employment rate in the south of Sweden (Sydsverige) was equal, at 69.4%, to the rate recorded in Åland (a Swedish-speaking

**Map 5.3:** Female employment rate, persons aged 20–64, by NUTS 2 regions, 2011 (%)



**Map 5.4:** Gender gap for the employment rate, persons aged 20–64, by NUTS 2 regions, 2011 (percentage points difference between male and female rates)



island region of Finland located between Sweden and Finland). At the other end of the range, the 23 regions with the lowest employment rates for older persons (the lightest shade in Map 5.5) were principally found in Hungary, Malta, Poland, Slovenia and Romania, as well as in Belgium (the Province/Provincie Namur and the Province/Provincie Hainaut), Greece (Voreio Aigaio), France (Nord - Pas-de-Calais, Poitou-Charentes and Réunion) and Italy (Puglia). Many of the regions with low employment rates for older workers were historically dependent upon heavy industrial sectors (such as coal and steel), which have contracted greatly or even ceased to exist in some regions, leading to economic restructuring and associated job losses — especially for older workers whose skills may no longer be applicable to current labour market opportunities. The three regions in the EU with the lowest employment rates for older workers in 2011 were: the Polish region of Ślaskie (specialised in the mining of coal and lignite); the Hungarian region of Észak-Magyarország (mining and metallurgy); and the Slovenian region of Vzhodna Slovenija (vehicle production, mining and quarrying).

In the EFTA countries, there were generally relatively high employment rates for older workers. This was particularly true in Iceland (79.2%), and there were also a number of Norwegian and Swiss regions that recorded employment rates for older workers above 70.0 %. With the exception of Ticino (Switzerland), each level 2 region in Norway and Switzerland had an employment rate for older persons in excess of 60.0 %. By contrast, much lower employment rates for older workers were generally recorded in the acceding and candidate countries: there were only two Turkish regions where a majority of older workers were in employment — the region of Trabzon, Ordu, Giresun, Rize, Artvin, Gümüşhane (which borders the Black Sea coastline in north-eastern Turkey) and Ağrı, Kars, Iğdır, Ardahan (in the extreme east of the country); both of these regions are characterised as having relatively high levels of net emigration, which may reflect economic migration among younger generations. Otherwise, employment rates for older workers were situated between 30.0 % and 40.0 % in much of Turkey, in Croatia and in the former Yugoslav Republic of Macedonia. There were seven regions in Turkey where the employment rate of older workers fell to a level between 20.0 % and 30.0 %, while the lowest rate was recorded in İstanbul (16.1 %).

#### **Unemployment rates**

The unemployment rate in the EU-27 was 9.6% in 2011, the same figure as in 2010. Map 5.6 shows the distribution of unemployment rates by NUTS level 2 regions. The highest regional unemployment rate in 2011 was recorded in Andalucía in the south of Spain (30.4%), while the lowest unemployment rates were registered in the neighbouring Austrian regions of Salzburg and Tirol (both 2.5%).

Particularly high unemployment rates are shown in Map 5.6 using the darkest shade: there were 14 NUTS level 2 regions which posted unemployment rates in excess of 20.0% in 2011. Nine of these regions were in Spain (Andalucía, Canarias, Ciudad Autónoma de Ceuta, Región de Murcia, Extremadura, Comunidad Valenciana, Ciudad Autónoma de Melilla, Castilla-La Mancha and the Illes Balears), while there was also all four French overseas regions (Réunion, Guadeloupe, Guyane and Martinique), as well as the northern Greek region of Dytiki Makedonia (which borders both Albania and the former Yugoslav Republic of Macedonia). More generally, high unemployment rates (above 15.0%) were recorded in several other regions of Spain and Greece, as well as the Belgian capital city region (Région de Bruxelles-Capitale/Brussels Hoofdstedelijk Gewest), northeastern Bulgaria, the Border, Midland and Western region of Ireland, Campania in the south of Italy, Latvia, Lithuania, Észak-Magyarország in the north-east of Hungary, the Algarve in Portugal and eastern and central Slovakia.

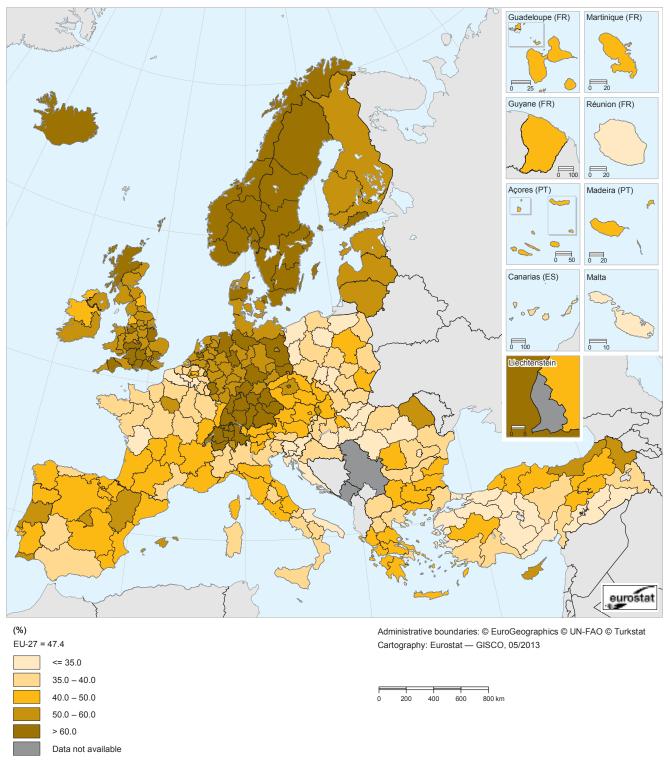
There were 45 NUTS level 2 regions across the EU that recorded an unemployment rate that was 5.0% or lower in 2011; of these, only six had an unemployment rate that was 3.0% or lower — they were Niederbayern, Oberbayern and Freiburg in southern Germany, Zeeland in the Netherlands, and the two Austrian regions of Salzburg and Tirol.

Apart from the Région lémanique and Ticino in Switzerland, unemployment rates in Norway and Switzerland were consistently below 5.0% in 2011. In Iceland, the unemployment rate experienced a steep increase, rising from 3.0% in 2008 to 7.2% in 2009 — despite a further increase in 2010 (7.6%), the unemployment rate in Iceland returned to 7.0% in 2011. Across the acceding and candidate countries, regional unemployment rates ranged from a high of 13.7% in İzmir (Turkey) down to rates of less than 5.0% in three other Turkish regions (Samsun, Tokat, Çorum, Amasya; Manisa, Afyonkarahisar, Kütahya, Uşak; and Balıkesir, Çanakkale).

The financial and economic crisis continued to have a strong asymmetric impact on regional labour markets in 2011; many regions saw declining unemployment rates, while others recorded considerable increases, as large disparities in regional unemployment persisted. Figure 5.2 shows that the dispersion of regional unemployment rates across the EU widened from 2007 onwards. The coefficient of variation of regional unemployment rates rose by 12.6 percentage points between 2007 and 2011, inferring that the labour market effects of the financial and economic crisis were unevenly spread between regions.

Belgium recorded the highest dispersion of regional unemployment rates in 2011 among the EU Member States, while Italy, Germany and Austria also had a relatively high dispersion. There were stark differences in unemployment rates between the regions of some of these Member States as

**Map 5.5:** Older persons employment rate, persons aged 55–64, by NUTS 2 regions, 2011 (%)



shown in Map 5.6. For example, there were much lower unemployment rates than in the rest of their Member State in the Vlaams Gewest (Flanders) region of Belgium, parts of western Germany and northern Italy, while there was a much higher rate in the capital city region (Wien) compared with the rest of Austria. The lowest degrees of dispersion for unemployment rates across NUTS level 2 regions were recorded in Denmark, Greece, Sweden, Portugal and the Netherlands — other than Greece, each of these countries also reported relatively low dispersion for regional employment rates — suggesting they had rather homogeneous labour markets from a regional perspective.

During the period 2008–11, the coefficient of variation for unemployment rates (across NUTS level 2 regions within a Member State) fell in many Member States — see Figure 5.3; note that during the period under consideration, unemployment rates were generally rising, even if the dispersion between different regions of the same country was narrowing. The largest reductions in dispersion between 2008 and 2011 were recorded in the Czech Republic, Hungary, Bulgaria and Italy.

#### Changes in unemployment rates

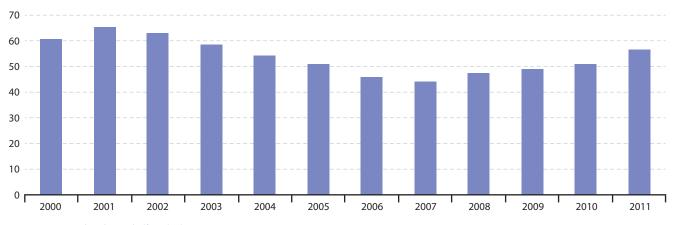
Between 2008 and 2011, the EU-27 unemployment rate rose by 2.6 percentage points to reach 9.6%. Map 5.7 reflects the change in regional unemployment rates over this period, presenting the percentage point difference between unemployment rates (the rate for 2011 minus that for 2008). Again it should be remembered that, while some regions may have consistently recorded increases or decreases in the rate during this period, in many other regions the rates may have moved in contrasting directions and the comparison of rates for 2011 with those for 2008 shows the net impact over the whole period. Out of the 269 NUTS level 2 regions in the

EU for which data are available, the unemployment rate increased between 2008 and 2011 in 214 regions, remained unchanged in three regions and fell in 52 regions.

The development of regional unemployment rates since 2008 shows that labour markets in the Spanish and Greek regions were hardest hit by the financial and economic downturn, although large increases in unemployment rates were also recorded in many other regions. By contrast, Germany and Luxembourg (the latter covered by a single region at this level of NUTS) were the only EU Member States where unemployment rates in all regions were lower in 2011 than they had been in 2008. The asymmetric nature of these changes was highlighted by the fact that declining unemployment rates were generally observed in those regions which were already characterised as having relatively low levels of unemployment, while unemployment rates tended to rise by a large amount in those regions already experiencing high levels of unemployment.

There were 13 regions across the EU-27 that reported their unemployment rate rising by more than 10.0 percentage points between 2008 and 2011. Eight of these regions were in Spain, while the remaining five regions were all in Greece. Rising unemployment was most apparent in the south and south-east of Spain, in the neighbouring regions of Murcia, Andalucía and the Comunidad Valenciana. Apart from all 38 German regions and Luxembourg, the unemployment rate was lower in 2011 than it had been in 2008 in 13 other regions, which were distributed across six different Member States: four regions in Belgium (three of which were in the Région Wallonne), three regions in France, two regions in each of Austria and Finland, and a single region in both the Netherlands and the United Kingdom. The biggest reductions in unemployment rates between 2008 and 2011 were

**Figure 5.2:** Dispersion of regional unemployment rates, persons aged 15–74, by NUTS 2 regions, EU-27, 2000–11 (coefficient of variation)

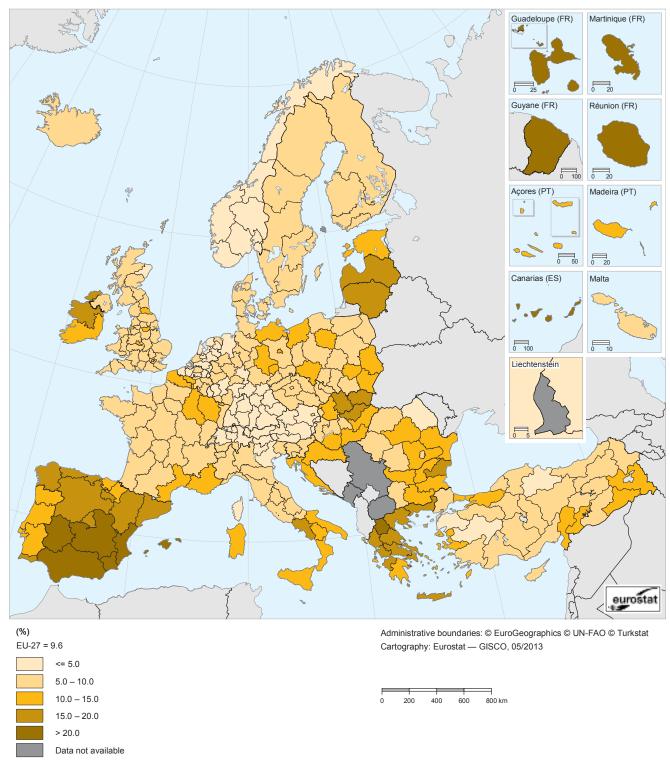


Source: Eurostat (online data code: lfst\_r\_lmdur)

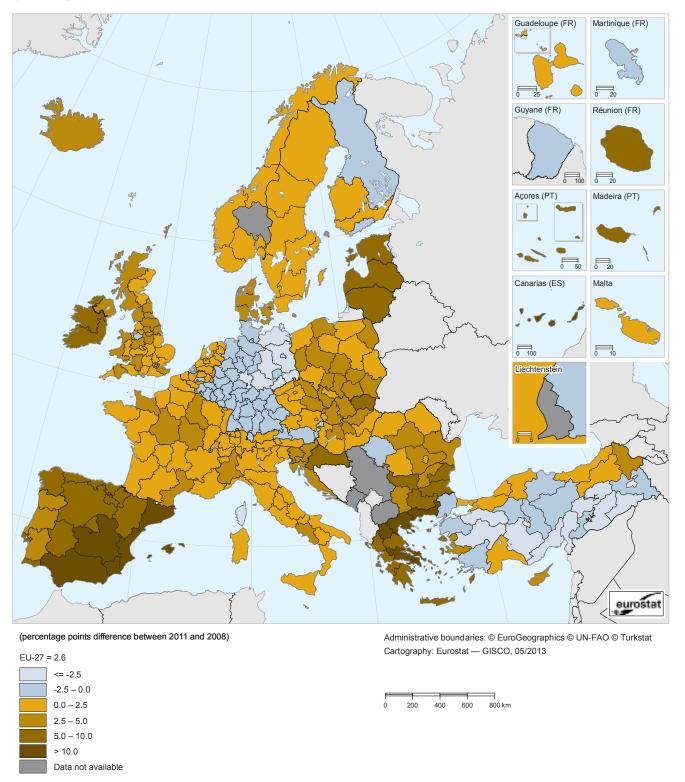
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**Map 5.6:** Unemployment rate, persons aged 15–74, by NUTS 2 regions, 2011 (1) (%)

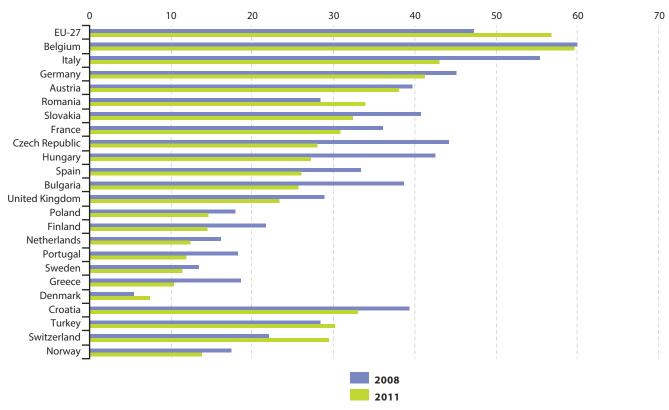


**Map 5.7:** Change in unemployment rate, persons aged 15–74, by NUTS 2 regions, 2008–11 (¹) (percentage points difference between 2011 and 2008)



**Figure 5.3:** Dispersion of regional unemployment rates, persons aged 15–74, by NUTS 2 regions, 2008 and 2011 (1)

(coefficient of variation)



(') Estonia, Ireland, Cyprus, Latvia, Lithuania, Luxembourg, Malta and Slovenia comprise only one or two NUTS level 2 regions, therefore dispersion rates are not applicable. Source: Eurostat (online data code: Ifst\_r\_Imdur)

recorded in two regions in the north-east of Germany — Sachsen-Anhalt (a reduction of 4.2 percentage points) and Mecklenburg-Vorpommern (– 4.4 percentage points).

Unemployment rates increased across all of the EFTA regions for which data are available between 2008 and 2011; this was particularly the case in Iceland. By contrast, the pattern in acceding and candidate countries was mixed. Both Croatian regions recorded increases in their respective unemployment rates of more than 4.0 percentage points, while a majority of Turkish regions recorded a reduction in their unemployment rates between 2008 and 2011. The largest reductions (in excess of 5.0 percentage points) were reported in the southern Turkish regions of: Adana, Mersin; Mardin, Batman, Şırnak, Siirt; and Şanlıurfa, Diyarbakır.

### Youth unemployment

Given that unemployment rates rose during the financial and economic crisis — while employment rates for older persons continued to grow — it is apparent that other age groups, and in particular young people aged 15–24, were disproportionately affected by the downturn in economic fortunes and the

shrinking labour market. The youth unemployment rate in the EU-27 was 21.4% in 2011, which was more than double the EU-27's overall unemployment rate (9.6%).

Map 5.8 presents the regional distribution of the youth unemployment rate at NUTS level 2 in 2011. There is a clear similarity between youth unemployment rates and total unemployment rates in terms of the pattern of regions with particularly high or particularly low rates. The youth unemployment rate exceeded 50.0% in 12 regions in 2011, including: the Spanish overseas regions of the Ciudad Autónoma de Ceuta (where the highest rate of 65.8 % was recorded) and the Ciudad Autónoma de Melilla (65.2%), as well as the Spanish regions of Andalucía, the Comunidad Valenciana, Extremadura and the Canarias; three of the French overseas regions (Guyane was the exception); and the three northern Greek regions of Dytiki Makedonia, Anatoliki Makedonia and Thraki Kentriki Makedonia. More generally, the effects of the financial and economic crisis were apparent, as youth unemployment rates above 40.0 % were observed in several more Greek and Spanish regions, as well as in the south of Italy and the east of Slovakia.

There were 45 NUTS level 2 regions across the EU that reported a youth unemployment rate that was 10.0% or lower in 2011 (or the latest available year). The lowest rates were generally registered in Germany (25 regions at or below 10.0%), the Netherlands (12 regions) and Austria (six regions), while a single region from Italy (Provincia Autonoma di Bolzano/Bozen) and from the Czech Republic (the capital city region of Praha) also reported youth unemployment rates of 10.0% or less. The three lowest youth unemployment rates in 2011 were recorded in the southern German regions of Freiburg (4.8%), Oberbayern (4.5%) and Tübingen (4.3%), while the Austrian region of Steiermark was the only other region in the EU where youth unemployment was equal to or below 5.0%.

Youth unemployment rates were higher than overall unemployment rates in each NUTS level 2 region for which data are available in 2011. The largest differences (in percentage point terms) between youth unemployment and overall unemployment rates were recorded in the Spanish overseas regions of the Ciudad Autónoma de Ceuta and the Ciudad Autónoma de Melilla, where youth unemployment rates were 40.8 points and 36.5 points higher respectively than the overall unemployment rate in 2011.

The highest youth unemployment rate among the EFTA countries was recorded in the Swiss region of Ticino (17.3 % in 2011), while approximately two thirds of the EFTA level 2 regions for which data are available reported a youth unemployment rate that was equal to or less than 10.0 %; the lowest youth unemployment rate was recorded in Zentralschweiz (4.2 %). By contrast, youth unemployment rates were much higher in the acceding and candidate countries, as only three Turkish regions recorded single-digit youth unemployment rates in 2011. Nevertheless, with the exception of the two Croatian regions — Kontinentalna Hrvatska (37.6 %) and Jadranska Hrvatska (32.6 %) — and the Turkish region of İzmir (25.5 %), youth unemployment rates remained below the EU-27 average in 2011.

The number of youths (aged 15-24) in the EU-27 who were unemployed increased between 2008 and 2011 by 1.1 million persons to reach 5.3 million in total, an overall increase of 25.6%. While the rising youth unemployment rate could be attributed, in part, to a higher number of persons being unemployed, it also resulted from demographic changes — as the EU-27 population aged 15–24 fell by 2.2 million persons between 2008 and 2011. These two movements combined, such that the youth unemployment rate passed from 15.8 % in 2008 to reach 21.4% by 2011. At the same time, an increasing proportion of young people remained in education — as some young people extended ongoing studies or returned to studying, in this way postponing their entry into the labour force; this decision may in part have been influenced by the state of the economy. These changes in the structure of the population also affected the relative weight of youth

unemployment in total unemployment. Just over one in four (25.1%) of those unemployed in the EU-27 in 2008 were aged 15–24; this share fell to 22.9% of the total number of persons unemployed in 2011.

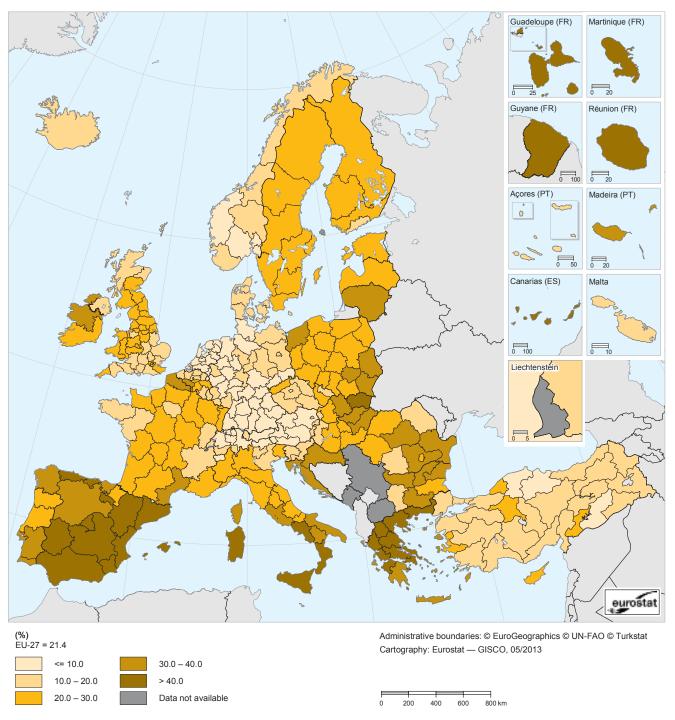
Map 5.9 provides some evidence of the impact of the financial and economic crisis on youth unemployment — in particular in Spain and Greece. Youth unemployment rates increased by more than 20.0 percentage points over the period 2008–11 in 11 Spanish and five Greek regions, as well as in the southern Bulgarian region of Yuzhen tsentralen (which borders Greece). The highest increase in youth unemployment was registered in the northern Greek region of Anatoliki Makedonia, Thraki where the unemployment rate rose by 30.6 percentage points between 2008 and 2011 to reach 52.4%.

There were another 49 NUTS level 2 regions in the EU where youth unemployment rates rose by more than 10.0 percentage points (but not more than 20.0 points) over the period 2008–11. These were spread across a wide range of Member States, including: seven regions in Poland, six more regions in Spain, five more regions each in Bulgaria and Greece and five regions in the United Kingdom, four regions in Portugal, three regions in each of Italy and Slovakia, two regions in each of Ireland, France and Romania, and a single region in the Czech Republic; the youth unemployment rate also rose by an amount between 10.0 and 20.0 percentage points in the Baltic Member States and in Cyprus (each covered by a single region at this level of the NUTS).

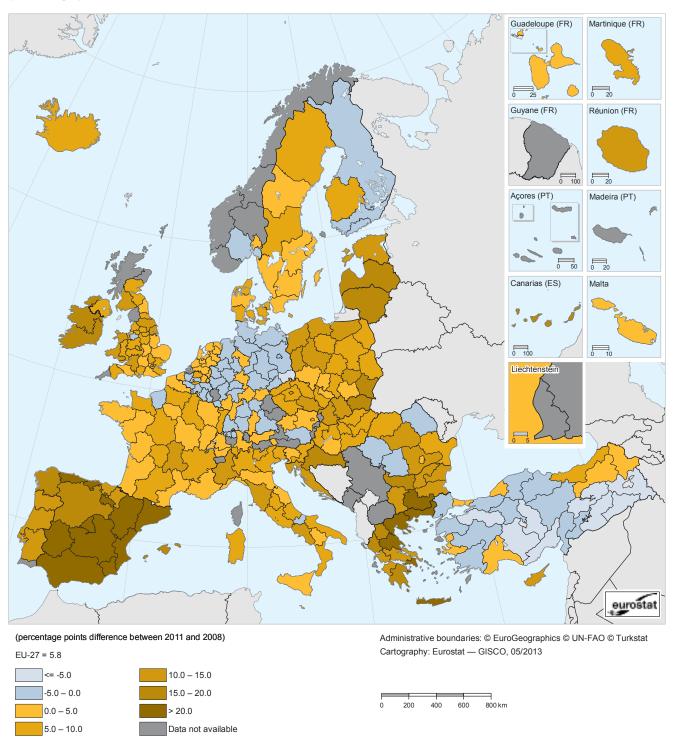
The youth unemployment rate fell in 41 of the 243 NUTS level 2 regions for which data are shown in Map 5.9; note that the comparison is generally made for the period 2008-11, although for a limited number of regions the period under consideration is 2009-11 or 2008-10. The largest reductions in the youth unemployment rate (in percentage point terms) were recorded in two German regions — Dresden (-7.8 points) and Hamburg (-5.3 points) — while the youth unemployment rate was reduced in a further 24 out of the remaining 32 German regions for which data are available (for two of these regions — Chemnitz and Leipzig — the reduction in youth unemployment rates was during the period 2009-11). Otherwise, there were also reductions in youth unemployment rates over the period 2008-11 across much of southern Belgium (except to the south of the capital in the Province/Provincie Brabant Wallon), south-western and north-eastern Romania, as well as in Molise (central Italy), Luxembourg (a single region at this level of the NUTS) and Steiermark (south-east Austria). The youth unemployment rate also fell in most of Finland (other than the western region of Länsi-Suomi) and in Cheshire (north-west England, the United Kingdom) between 2009 and 2011.

There was a large increase of 6.2 percentage points in the youth unemployment rate in Iceland between 2008 and 2011. Regional patterns were mixed in Switzerland, with an increase of a similar magnitude to that recorded in Iceland

**Map 5.8:** Youth unemployment rate, persons aged 15–24, by NUTS 2 regions, 2011 (1) (%)



**Map 5.9:** Change in youth unemployment rate, persons aged 15–24, by NUTS 2 regions, 2008–11 (¹) (percentage points difference between 2011 and 2008)



<sup>(</sup>¹) Chemnitz (DED4), Leipzig (DED5), Emilia-Romagna (ITH5), Marche (ITI3), Helsinki-Uusimaa (FI1B), Etelä-Suomi (FI1C), Pohjois- ja Itä-Suomi (FI1D), Cheshire (UKD6), Merseyside (UKD7) and Kontinentalna Hrvatska (HR04), 2009–11; Prov. Luxembourg (BE34), Oberfranken (DE24), Unterfranken (DE26), Kassel (DE73) and Tirol (AT33), 2008–10.

\*\*Source: Eurostat (online data code: Ifst\_r\_flu3rt)\*



being registered in the southern region of Ticino (a 6.1 percentage point increase), while the youth unemployment rate fell in the northern regions of Nordwestschweiz (by 0.3 points) and Zürich (by 1.7 points). Within the acceding and candidate countries, the youth unemployment rate rose by more than 10.0 percentage points in both Croatian regions (the biggest increase being recorded in Kontinentalna Hrvatska, up 15.4 points between 2009 and 2011), while the majority of the regions in Turkey reported a decline in their youth unemployment rates between 2008 and 2011. Indeed, youth unemployment rates fell in five Turkish regions by more than in any of the regions in the EU, while a sixth Turkish region reported a reduction that was equivalent to that recorded in Dresden (where the biggest decline in the EU was registered).

#### Earnings at a regional level

This section presents data on earnings at NUTS level 1, based on the structure of earnings survey (SES) — which is a sample business survey conducted every 4 years. The level of earnings depends not only on business-related factors (such as the economic activity, the size of the business and the existence of collective agreements), but also on employeerelated characteristics (sex, age, level of education, occupational group, length of service and working hours). From the employer's perspective, wages and salaries are a major part of the production costs for goods and services and largely correspond to the costs borne by an employer for employing staff. From the employee's point of view, earnings are usually the main component of disposable income. The cost of living in a particular country (or specific region) is an additional factor that influences earnings. However, earnings statistics that take account of different price levels — for example, those reported using purchasing power standards — are only available at a national level; the information presented below is denominated in euro terms.

Average gross hourly earnings across the EU-27 businesses economy (in other words, Sections B to N of the statistical classification of economic activities in the European Community — NACE Rev. 2) amounted to EUR 13.57 per hour in 2010. Map 5.10 shows the substantial regional differences in earnings per hour — which peaked at EUR 27.96 in Denmark (a single region at NUTS level 1). Earnings were generally highest in capital city regions and this was particularly apparent in the capital city regions of the United Kingdom, Belgium and France: London (EUR 24.83); the Région de Bruxelles-Capitale/Brussels Hoofdstedelijk Gewest (EUR 21.55); and the Île de France (EUR 20.57). Along with Denmark, each of these capital city regions featured among the six regions with the highest average hourly earnings in the EU; the other two were Luxembourg (EUR 21.50) and Ireland (EUR 20.64), both of which are covered by a single region at NUTS level 1 and by definition therefore also include the capital city. Average hourly earnings in Denmark were 15.7 times as high as in the EU region with the lowest average hourly earnings, namely Severna i Yugoiztochna in Bulgaria (EUR 1.78 per hour). Average gross earnings of EUR 5.00 or less per hour were recorded across 17 NUTS level 1 regions in 2010, including both Bulgarian regions, all four Romanian regions, two out of three Hungarian regions, five out of six Polish regions, all three of the Baltic Member States and Slovakia (the latter four countries are each covered by a single region at NUTS level 1).

In 2010, average gross annual earnings across the EU-27 amounted to EUR 30766; it should be noted that gross annual earnings include extraordinary payments, which are not included in the hourly earnings described above (for example 13th and 14th month salaries, productivity bonuses, profit shares and payments in kind). The regions or countries with the highest annual earnings were London (the United Kingdom), Denmark and the Région de Bruxelles-Capitale/Brussels Hoofdstedelijk Gewest (Belgium), in other words the same three regions with the highest average earnings per hour (although the positions of Denmark and London were reversed). On average, an employee in London received gross annual earnings of EUR 61113, which was almost EUR 3000 more than in Denmark and almost EUR 10 000 higher than in the Région de Bruxelles-Capitale/ Brussels Hoofdstedelijk Gewest. There were a further seven regions across the whole of the EU that reported average earnings above EUR 42500 per employee (as shown by the darkest shade in the map). The remaining seven included Luxembourg, the Finnish region of Åland, the German regions of Hamburg and Hessen, the French capital city region of Île de France, Vlaams Gewest in Belgium and one of its neighbouring regions from across the border in the Netherlands (West-Nederland).

At the other end of the scale, average earnings were EUR 10000 or less per year in both Bulgarian regions and all four Romanian regions, as well as in three Polish regions (Region Północno-Zachodni, Region Północny and Region Wschodni), two Hungarian regions (Dunántúl and Alföld És Észak), Lithuania and Latvia (single regions at NUTS level 1).

Gross annual earnings in Switzerland (EUR 59408) and Norway (EUR 54169) were almost as high as in London, while in Iceland these averaged EUR 30620 per employee in 2010. By contrast, annual earnings were considerably lower in the acceding and candidate countries, ranging from EUR 12280 in Croatia, through EUR 9764 in Turkey to a low of EUR 5666 for the former Yugoslav Republic of Macedonia.

# Data sources and availability

Most regional results in this chapter pertain to annual averages of the quarterly labour force survey (LFS). The survey population covers persons aged 15 and over, living in private

households (persons living in collective households, such as residential homes, boarding houses, hospitals, religious institutions and workers' hostels, are therefore not included). The population comprises all persons living in households surveyed during the reference week. The definition also includes persons who are absent for short periods due, for example, to studies, holidays, illness or business trips (but who have maintained a link with the household); persons on compulsory military service are not included. The survey follows the definitions and recommendations of the International Labour Organisation (ILO). To achieve further harmonisation, the EU Member States also adhere to common principles when formulating questionnaires.

Employment statistics can be used for a number of different analyses, including macroeconomic (in other words, labour as a production factor), productivity or competitiveness studies. They can also be used to study a range of social and behavioural aspects related to an individual's employment situation, such as the social integration of minorities, or employment as a source of household income.

The unemployment rate is an important indicator with both social and economic dimensions. Rising unemployment levels result in: a loss of income for affected individuals; increased pressure with respect to government spending on social benefits; and a reduction in tax revenue. From an economic perspective, unemployment may be viewed as unused labour capacity.

The following definitions may be of interest when reading the main findings of this chapter.

- Employed persons are those aged 15 years and over who, during the reference week, performed work, even for just 1 hour, for pay, profit or family gain or were not at work but had a job or business from which they were temporarily absent, for example due to illness, holidays, industrial dispute or education and training. The following exceptions apply to the age range used: aged 16 and over in Spain, Sweden (1995–2001) and the United Kingdom; aged 15–74 in Denmark, Estonia, Finland, Hungary, Latvia and Sweden (from 2001 onwards); aged 16–74 in Iceland and Norway.
- The employment rate represents employed persons as a percentage of the population. Note that in this publication the focus for employment is on those aged 20–64 (a Europe 2020 target) and so the employment rate that is presented relates to employed persons aged 20–64 as a percentage of the total population aged 20–64. The old-age employment rate represents employed persons aged 55–64 as a percentage of the total population aged 55–64.
- The dispersion rate of employment (unemployment) is the coefficient of variation for regional employment

- (unemployment) rates in a Member State (or another geographical aggregate), weighted by the active population of each region (geographical aggregate).
- The unemployed are persons aged 15–74 who were without work during the reference week, or were currently available for work and were either actively seeking work in the past 4 weeks or had already found a job to start within the next 3 months. The following exceptions apply to the age range used: aged 16–74 in Spain, Sweden (for the years 1995–2001), the United Kingdom, Iceland and Norway. The unemployment rate represents unemployed persons as a percentage of the economically active population. The youth unemployment rate relates to persons aged 15–24.

The structure of earnings survey provides harmonised data on the components of gross earnings; this information is collected every 4 years. The 2010 survey provides information on the level of hourly, monthly and annual remuneration, personal characteristics of employees (sex, age, occupation, length of service, highest educational level attained) and information relating to employers (economic activity, size and economic control of the enterprise). These statistics are collected under Council Regulation (EC) No 530/1999 concerning structural statistics on earnings and on labour costs and Commission Regulation (EC) No 1738/2005 amending Regulation (EC) No 1916/2000 as regards the definition and transmission of information on the structure of earnings.

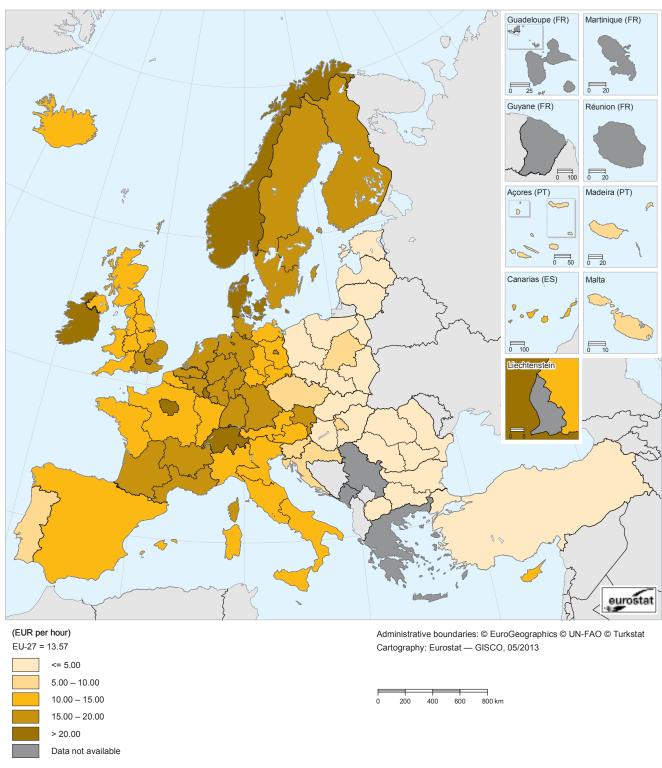
## Context

Geographical mobility is cited as an important factor that contributes towards success within regional labour markets. One example is the flow of commuters on a daily or weekly basis for work from relatively poor regions with few jobs to richer regions where there are a wider range of job opportunities.

Employment is a key factor in combating social exclusion. Promoting more and better jobs, supporting the integration and participation of disadvantaged groups and developing an inclusive society accessible to all are overarching objectives which underpin EU funding. A large part of the expenditure from the European Social Fund (ESF) during the period 2007–13 aimed to promote access to employment and social inclusion for various groups; special emphasis was given to younger and older workers, migrants and ethnic minorities. Specific actions were also aimed at helping women to get (back) into work, reducing gender-based segregation of the labour market and better reconciling work and private life.

The European employment strategy (EES) was launched at the Luxembourg jobs summit in November 1997 and was

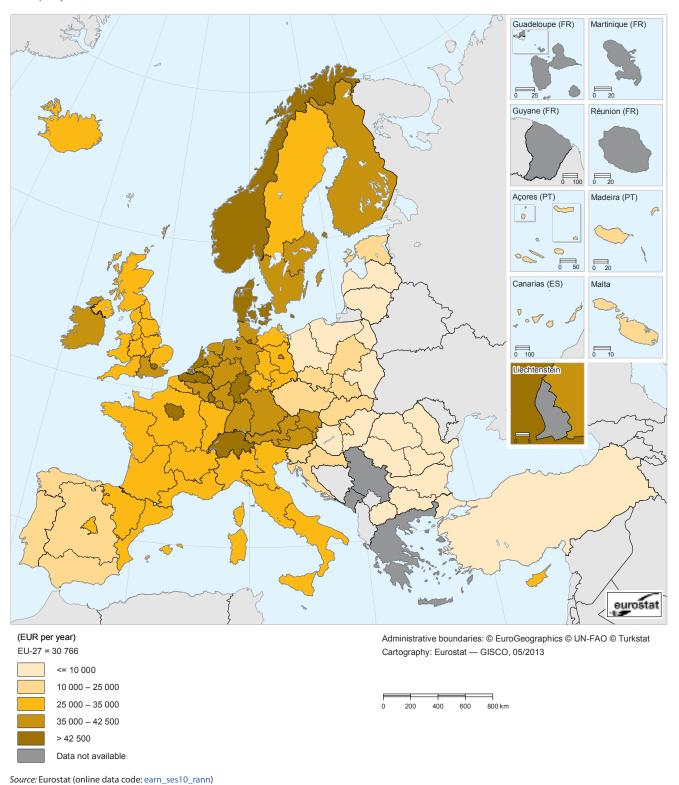
**Map 5.10:** Gross hourly earnings per employee for enterprises in the business economy, by NUTS 1 regions, 2010 (¹) (EUR per hour)



Source: Eurostat (online data code: earn\_ses10\_rhr)

**Map 5.11:** Gross annual earnings per employee for enterprises in the business economy, by NUTS 1 regions,  $2010 \, (^1)$ 

(EUR per year)



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revamped in 2005. Integrated economic and employment guidelines were updated as part of the Europe 2020 strategy. Furthermore, when adopting the Europe 2020 strategy, the European Council agreed on five headline targets, the first being to raise the employment rate for women and men aged 20–64 years old to 75% by 2020. As part of the flagship initiatives within the Europe 2020 strategy, 'An agenda for new skills and jobs' and 'Youth on the move', (youth) unemployment and employment rates will be targeted through a range of policies, including proposals aimed at education and training institutions, or measures for the creation of a (work) environment conducive to higher activity rates and higher labour productivity. There are also initiatives aimed at facilitating the entry of young people into the labour market.

When there is an economic downturn, it usually takes some time before the unemployment rate begins to rise. Equally, once the economy starts to pick up, employers usually remain cautious about hiring new staff and it may again take some time before unemployment rates start to fall. The financial

and economic crisis resulted in a decline in economic activity that was generally at its strongest during 2008 and 2009. As labour market indicators tend to lag economic phenomena, it was not until 2009 that labour markets within the EU-27 started to experience the full impact of the crisis, as the gains made in employment rates over the previous decade were reversed in the space of a year. Male, youth and longterm unemployment appear to be more susceptible to cyclical economic changes than overall unemployment. Indeed, social policymakers often face the challenge of remedying these situations by designing ways to increase employment opportunities for various groups of society, those working in particular economic activities or those living in specific regions. The slow pace of recovery from the financial and economic crisis and mounting evidence of rising unemployment led the European Commission to make a set of proposals — 'Towards a job-rich recovery' (COM(2012) 173 final) - in April 2012 for measures to boost jobs through a dedicated employment package.