

Education

4





Education, vocational training and, more generally, lifelong learning play a vital role in the economic and social strategies of the European Union (EU). This chapter presents Eurostat's regional educational statistics and includes information relating to enrolment, educational attainment and participation. Education is one of five pillars which are central to Europe's growth strategy, Europe 2020, and several of the indicators presented in this chapter are used to study the progress being made at a regional level in relation to a range of benchmark targets for the Europe 2020 initiative.

Main statistical findings

Figures for the EU-27 for 2010 indicate that there were around 93.1 million students enrolled in the regular education system covering all levels of education from primary to postgraduate studies; there were an additional 14.9 million young students enrolled in pre-primary education.

Participation of 4-year-olds in education

The legal age to start education varies across the EU Member States: in Luxembourg and in Northern Ireland (the United Kingdom) compulsory education starts at age 4, while in other EU regions it starts between 5 and 7 years of age; enrolment in pre-primary education is generally voluntary across most EU Member States. The Europe 2020 strategy emphasises raising participation rates of young children in preparation for the start of compulsory education. One of its headline targets is to raise the share of children participating in pre-primary education to at least 95 % by the year 2020.

Map 4.1 shows that 91.7% of 4-year-olds were in pre-primary or primary education across the whole of the EU-27 in 2010. Participation rates of 4-year-olds in pre-primary or primary education were generally high — national averages of over 95 % in Belgium, Denmark, Germany, Ireland, Spain, France, Italy, Luxembourg, the Netherlands and the United Kingdom, as well as in Iceland and Norway. By contrast, Greece, Poland and Finland reported that fewer than 70 % of four year-olds were enrolled; lower rates were also recorded in the EFTA countries of Liechtenstein and Switzerland, as well as in the acceding and candidate countries of Croatia, the former Yugoslav Republic of Macedonia and Turkey.

There were 55 regions in the EU that reported more than 99.0% of 4-year-old children attending pre-primary or primary education in 2011; most of these were in France (16 NUTS level 2 regions), Spain (13 regions), the Netherlands (seven regions) and the United Kingdom (seven NUTS level 1 regions), Belgium and Italy (five regions each), while there was also a single region in Denmark (Sjælland).

There were 14 regions in the EU where 65.0% or less of 4-year-olds participated in pre-primary or primary education. The lowest participation rate for 4-year-olds was recorded in the northern Polish region of Warminsko-Mazurskie (50.4%). The regions with relatively low levels of participation were predominantly found in Poland (11 regions), along with a single region from Slovakia (Východné Slovensko), as well as Greece and Finland for which only national data are available.

Among the EFTA regions, there were high participation rates for 4-year-olds in pre-primary or primary education in Iceland (national data for 2010) and across all seven Norwegian regions, with rates in excess of 95%. By contrast, participation rates in Liechtenstein and six of the seven Swiss regions were relatively low, ranging from 62.0% in the Région lémanique down to 16.4% in Zentralschweiz. The only exception to this general pattern was the Swiss region of Ticino (which borders Italy), where the participation rate stood at 98.3%.

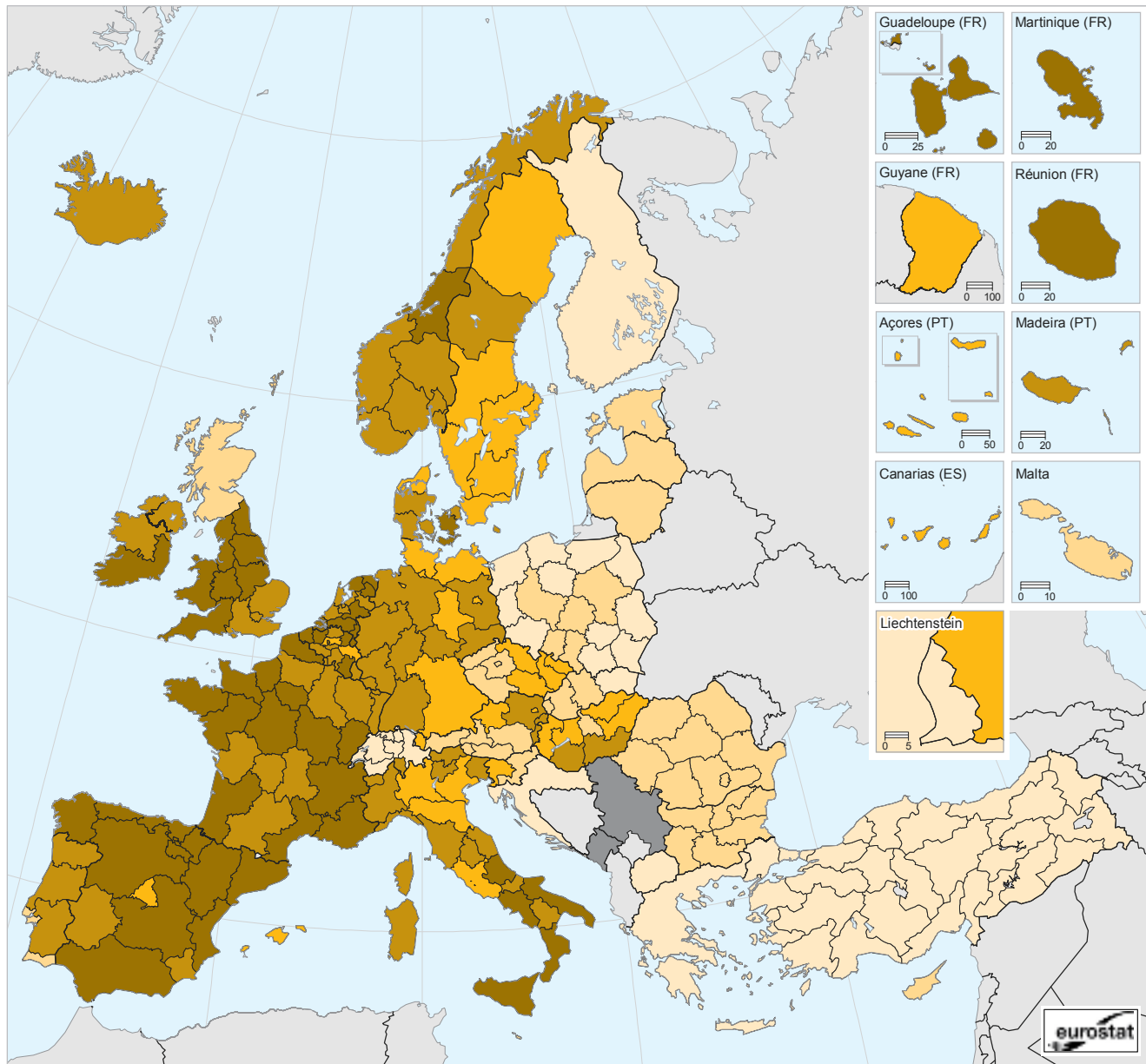
Each region within the acceding and candidate countries reported participation rates for 4-year-olds in pre-primary or primary education that were 65.0% or less. Only national data are available for Croatia and the former Yugoslav Republic of Macedonia (data for 2010), where rates stood at 57.4% and 24.0% respectively. More than half of the 25 level 2 Turkish regions reported that less than 20.0% of four year-olds participated in pre-primary or primary education in 2011. The lowest participation rate was recorded for the southern Turkish region of Gaziantep, Adiyaman, Kilis (9.7%), while the second lowest rate was recorded for İstanbul (10.9%).

Students aged 17 in education

The number of students aged 17 in education (all levels combined) in the EU-27 in 2010 was 5.2 million, equivalent to 91.7% of all 17-year-olds. The age of 17 is important as it often marks the age at which young people are faced with a choice between: remaining in education; following some form of training; or looking for a job. The number of 17-year-olds in education relative to the population of 17-year-olds exceeded 80% in the vast majority of the regions within the EU in 2011, and this pattern was repeated across all of the EFTA regions — see Map 4.2. As such, for one reason or another, the vast majority of young people aged 17 remained in the education system at or even after the end of compulsory schooling. There were several regions where the number of 17-year-olds in education was higher than the number of 17-year-olds resident in the same region; among other reasons, this may arise from students resident in one region crossing regional borders to attend an establishment in another region (or country) that provides a specific course or training.

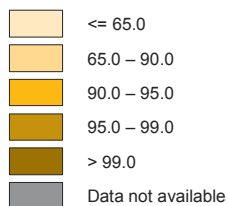
There were 19 regions in the EU where fewer than four out of five 17 year-olds remained in education in 2011. The highest number of such regions was recorded in Romania

Map 4.1: Participation rates of 4-year-olds in pre-primary and primary education (ISCED levels 0 and 1), by NUTS 2 regions, 2011 ⁽¹⁾
(% of 4-year-olds)

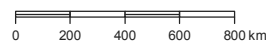


(% of four year-olds)

EU-27 = 91.7



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⁽¹⁾ EU-27, Denmark, Ireland, Greece, Latvia, Lithuania, Luxembourg, Malta, Sweden, the United Kingdom, Iceland, Liechtenstein and the former Yugoslav Republic of Macedonia, 2010; Germany and the United Kingdom, by NUTS 1 regions; Greece, Finland and Croatia, national level.

Source: Eurostat (online data code: [educ_regind](#))



(five out of the eight NUTS level 2 regions in that country), while relatively low ratios were also recorded in the island regions of Malta (one region at this level of NUTS), the Illes Balears (Spain) and the Região Autónoma dos Açores (Portugal). Ratios of 80.0% or less were also registered in three northern Italian regions (the Provincia Autonoma di Bolzano/Bozen, the Provincia Autonoma di Trento, as well as Lombardia) and three NUTS level 1 regions in the United Kingdom (the East Midlands; Yorkshire and the Humber; and Wales). There were five other countries that each reported one region with less than four out of five 17-year-olds remaining in education; they were: the Province/Provincie Vlaams-Brabant in Belgium, Yugoiztochen in Bulgaria, Strední Čechy in the Czech Republic, the overseas territory of Guyane in France and Niederösterreich in Austria. Note that some students domiciled in a particular region may choose or have to travel to another region (or country in the example of Malta) in order to be able to continue their educational studies once they have passed the compulsory schooling age.

Among the EFTA regions, the lowest shares of 17-year-olds remaining in education were recorded in the relatively sparsely populated regions of Nord-Norge (Norway) and Iceland (national data for 2010 at this level), as well as in three regions running across the centre of Switzerland — from west to east, the Espace Mittelland, Zentralschweiz and Ostschweiz — although the shares were still well above 80.0% in all of these regions. Among the acceding and candidate country regions, the proportion of 17-year-olds who remained in education was above 80.0% in Croatia (national data) and three Turkish regions (including the capital city region of Ankara and two north-western regions of Bursa, Eskişehir, Bilecik and Tekirdağ, Edirne, Kırklareli). There were four Turkish regions where the proportion of 17-year-olds who remained in education was 50.0% or lower — they were all in the south and east of the country, namely: Sanliurfa, Diyarbakir; Mardin, Batman, Sirnak, Siirt; Agri, Kars, Iğdir, Ardahan; and Van, Mus, Bitlis, Hakkari. The lowest ratio of 17-year-olds remaining in education was recorded in Van, Mus, Bitlis, Hakkari, where the share was only slightly more than one third (35.5%) in 2011.

Early leavers from education and training

An indicator that presents information about early leavers from education and training tracks the proportion of individuals aged 18–24 who have finished no more than a lower secondary education, and who are not involved in further education or training: some 13.5% of 18- to 24-year-olds in the EU-27 were classified as early leavers from education and training in 2011, with a somewhat higher proportion of male early leavers (15.3%) compared with female early leavers (11.6%). Europe's growth strategy, Europe 2020, has set an EU-27 target for the proportion of early leavers from education and training to be below 10% by 2020; there are

individual targets for each of the Member States that range from 5% to 29%.

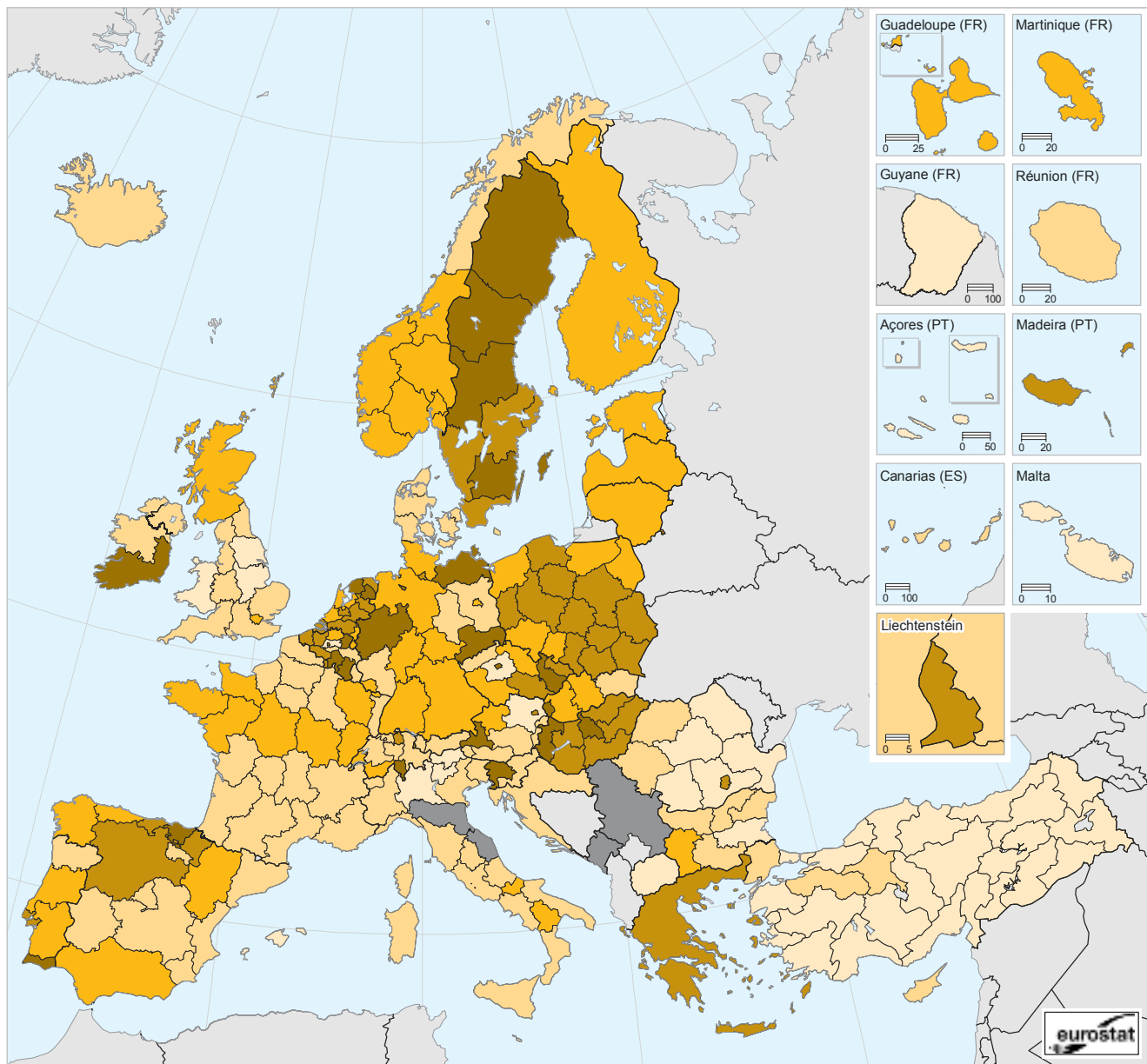
Map 4.3 shows that the proportion of early leavers from education and training varied significantly across the EU in 2011. There were 26 NUTS level 1 regions where no more than 1 in 10 of the population aged 18–24 were classified as early leavers from education and training (the first two shades in the map). Most of these 26 regions were concentrated in central and eastern Europe, where some of the lowest proportions of early leavers from education and training were found. This area spread from Lithuania down through the six Polish NUTS level 1 regions into the Czech Republic and Slovakia (both one region at this NUTS level) and the capital city region of Közép-Magyarország (Hungary) and continued through all three Austrian regions down into Slovenia. In total, these 26 regions were spread across 15 different EU Member States and also included three out of the four NUTS level 1 regions in the Netherlands, all three Swedish regions, as well as a single region from each of Belgium (Vlaams Gewest), Bulgaria (the capital city region of Yugoiztochen), Denmark (one region at this NUTS level), France (Ouest), Luxembourg (one region at this NUTS level) and Finland (only national data available).

There were only five regions where the share of early leavers from education and training was equal to or below 5.0%, they were: Slovenia (4.2%), the two Polish regions of Poludniowy and Centralny (both 4.6%), the Czech Republic (4.9%) and Slovakia (5.0%).

In 11 NUTS level 1 regions across the EU, early leavers accounted for more than one fifth of the population aged 18–24; these regions were all located in southern Europe. They included: five of the Spanish regions (all except the capital city region of the Comunidad de Madrid and the Noreste region); all three regions in Portugal; the islands of Italy (Isole); Malta (one region at NUTS level 1); and the eastern part of Romania (Macroregiunea doi). The highest ratios for early leavers were recorded in three island regions, namely, the Portuguese islands of the Região Autónoma dos Açores (44.3%) and the Região Autónoma da Madeira (37.3%), as well as Malta (33.5%; note that the Maltese series are under review), while two Spanish regions — the south of Spain (Sur) and the islands of the Canarias — were the only other regions where early leavers aged 18–24 accounted for more than 30.0% of the population aged 18–24. Note that young persons who are officially residing at their parents' address in one of these regions may follow an educational course in another region or in another country and hence the indicator needs to be interpreted with some care when large numbers of students leave a region to study elsewhere.

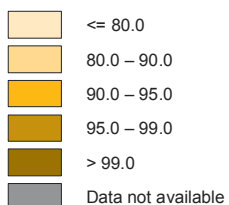
Map 4.4 shows the change in the proportion of early leavers from education and training — the comparison is generally based on the 5-year period 2006–11. Across the whole of the EU-27, the proportion of early leavers fell by 2.0 percentage points from 15.5% to 13.5% by 2011. The biggest

Map 4.2: Students aged 17 years in all levels of education (ISCED levels 0–6), by NUTS 2 regions, 2011 ⁽¹⁾
(% of 17-year-olds)



(% of 17 year-olds)

EU-27 = 91.7



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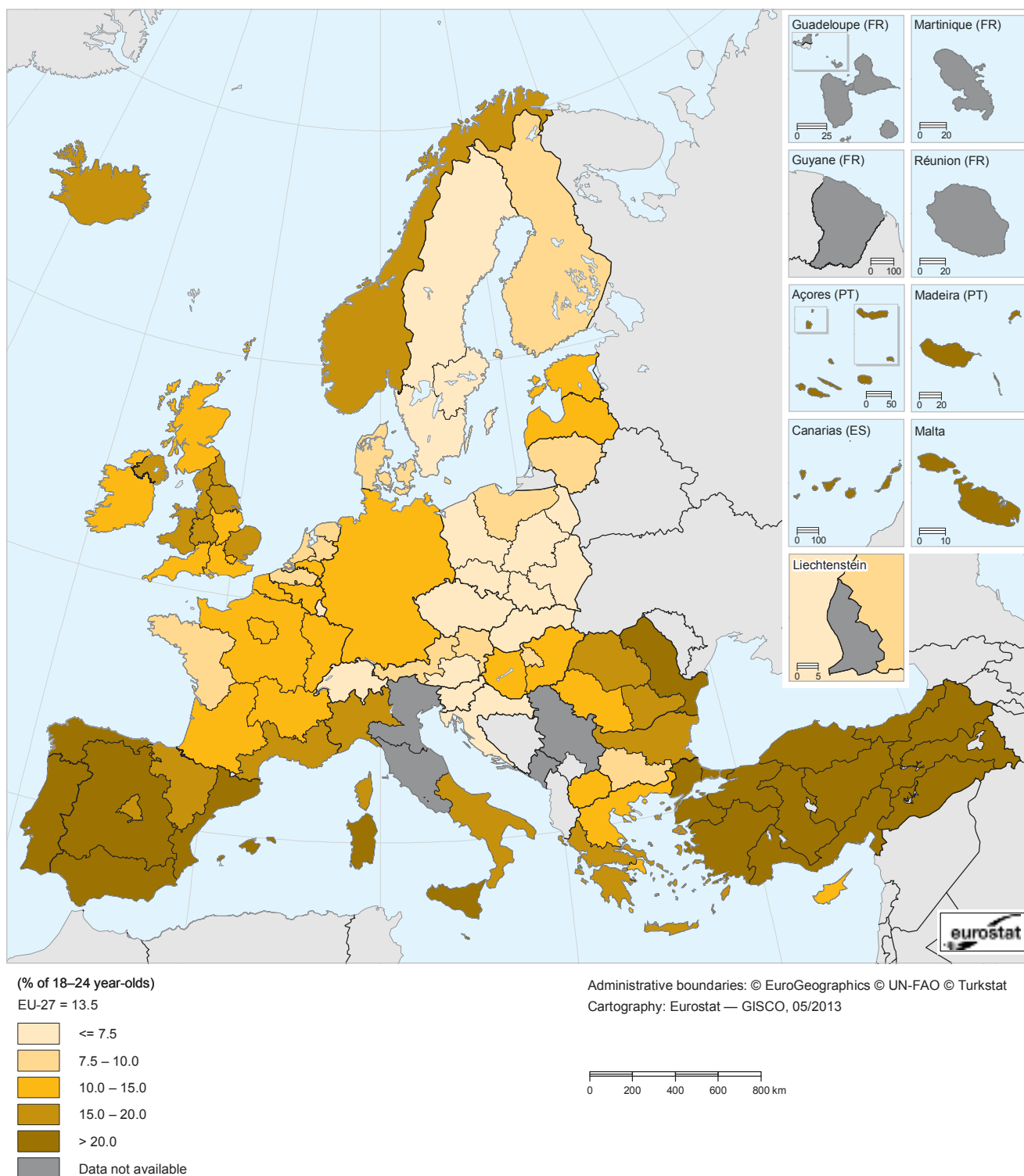


⁽¹⁾ Number of students aged 17 years divided by the resident population of 17-year-olds; EU-27, Denmark, Estonia, Ireland, Greece, France, Cyprus, Latvia, Lithuania, Luxembourg, Malta, Sweden, the United Kingdom, Iceland, Liechtenstein and the former Yugoslav Republic of Macedonia, 2010; Germany and the United Kingdom, by NUTS 1 regions; Greece, Finland and Croatia, national level.

Source: Eurostat (online data code: [educ_regind](#))

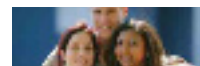


Map 4.3: Early leavers from education and training, by NUTS 1 regions, 2011 ⁽¹⁾
(% of 18- to 24-year-olds)



⁽¹⁾ Proportion of those aged 18–24 years having attained at most a lower secondary education and not being involved in further education or training; Região Autónoma da Madeira (PT3), 2010; Germany and Finland, national level; the Maltese series are under review by the Maltese Statistical Office and Eurostat — the review concerns the classification of certain qualifications at secondary level and the revision could mean a reduction of about 8 percentage points for all data.

Source: Eurostat (online data code: [edat_lfse_16](#))



reductions were recorded for the three Portuguese regions — the largest decline being recorded for the mainland region of Continente, down 15.9 percentage points to a 22.3% share. The three Portuguese regions were the only regions in the EU where the proportion of early leavers was reduced by 10.0 percentage points or more during the period 2006–11. There were five other regions across the EU where the proportion of early leavers was reduced by at least 5.0 percentage points: these included two regions in Spain (the Comunidad de Madrid and Sur), the East Midlands in the United Kingdom, Malta (one region at this level of NUTS; note again that the Maltese series are under review) and the northern Greek region of Voreia Ellada.

There were also considerable reductions in the number of early leavers from education and training in most Turkish regions; all but two of the regions in Turkey recorded a reduction of at least 5.0 percentage points. The two exceptions were the eastern region of Ortadogu Anadolu and the capital city region of Bati Anadolu, where rates were nevertheless reduced by 4.1 and 4.6 percentage points respectively. The largest reductions (more than 10.0 percentage points) in the rate of early leavers in Turkey were recorded at either end of the country: in the south-eastern region of Güneydogu Anadolu and in the western region of Ege (that includes the city of İzmir). There was also a considerable reduction in the proportion of early leavers from education and training in the former Yugoslav Republic of Macedonia where the share fell by 9.3 percentage points. Among the EFTA countries, the only region to record a reduction of at least 5.0 percentage points was Iceland (one region at this level of NUTS) where the share fell by 5.9 percentage points.

Across the 95 regions for which data are available in Map 4.4, there were 18 regions where the proportion of early leavers from education and training rose between 2006 and 2011; Croatia (one region at this level of NUTS) was the only region from outside of the EU. Most of the increases experienced between 2006 and 2011 were relatively small, as 13 regions (including Croatia) reported that their proportion of early leavers did not increase by more than 1.0 percentage points. The remaining five regions were located across five different Member States, with the highest increase (4.4 percentage points) being recorded for Macroregiunea unu (north-west and central Romania). The south-west of France (Sud-Ouest), Scotland in the north of the United Kingdom, Luxembourg (one region at this level of NUTS) and the Region Poludniowo-Zachodni in the south-west of Poland were the other regions where the proportion of early leavers rose by an amount in excess of 1.0 percentage points between 2006 and 2011.

Information relating to the proportion of early leavers may also be analysed with respect to gender differences. As noted above, the proportion of female early leavers from education and training was, on average, 3.7 percentage points lower for the EU-27 in 2011 than the corresponding ratio for men. The widest differences between the sexes were recorded in

southern Europe, where the rates for male early leavers were generally much higher than those for females — see Figure 4.1. This was particularly the case across Greece, Spain, Italy and Portugal, as well as in the islands of Cyprus and Malta (each one region at this level of NUTS; data for the latter are under review), but was also true in Latvia and Lithuania (also one region for each country), the Méditerranée and Nord - Pas-de-Calais regions of France, the Région Wallonne in Belgium and Northern Ireland in the United Kingdom.

Among the 84 NUTS level 1 EU regions for which data are available, there were only six where the proportion of male early leavers was lower than the proportion of female early leavers in 2011. Both Bulgarian NUTS level 1 regions featured in this list, including the region with the most atypical distribution — Severna i yugoiztochna Bulgaria (north and south-west Bulgaria), where the proportion of male early leavers (15.6%) was 3.0 percentage points lower than the corresponding rate for women (18.6%). The southern Austrian region of Südtirol reported that its proportion of male early leavers was 2.0 percentage points lower than the corresponding rate for females. The remaining four regions where rates were lower for men recorded only minor differences between the sexes; indeed, male rates were 0.5 or 0.6 percentage points lower in each of these regions: Yugoiztochna i yuzhna tsentralna (covering the remainder of Bulgaria); two regions in the west of the United Kingdom (Wales and the West Midlands); and Dunántúl (western Hungary).

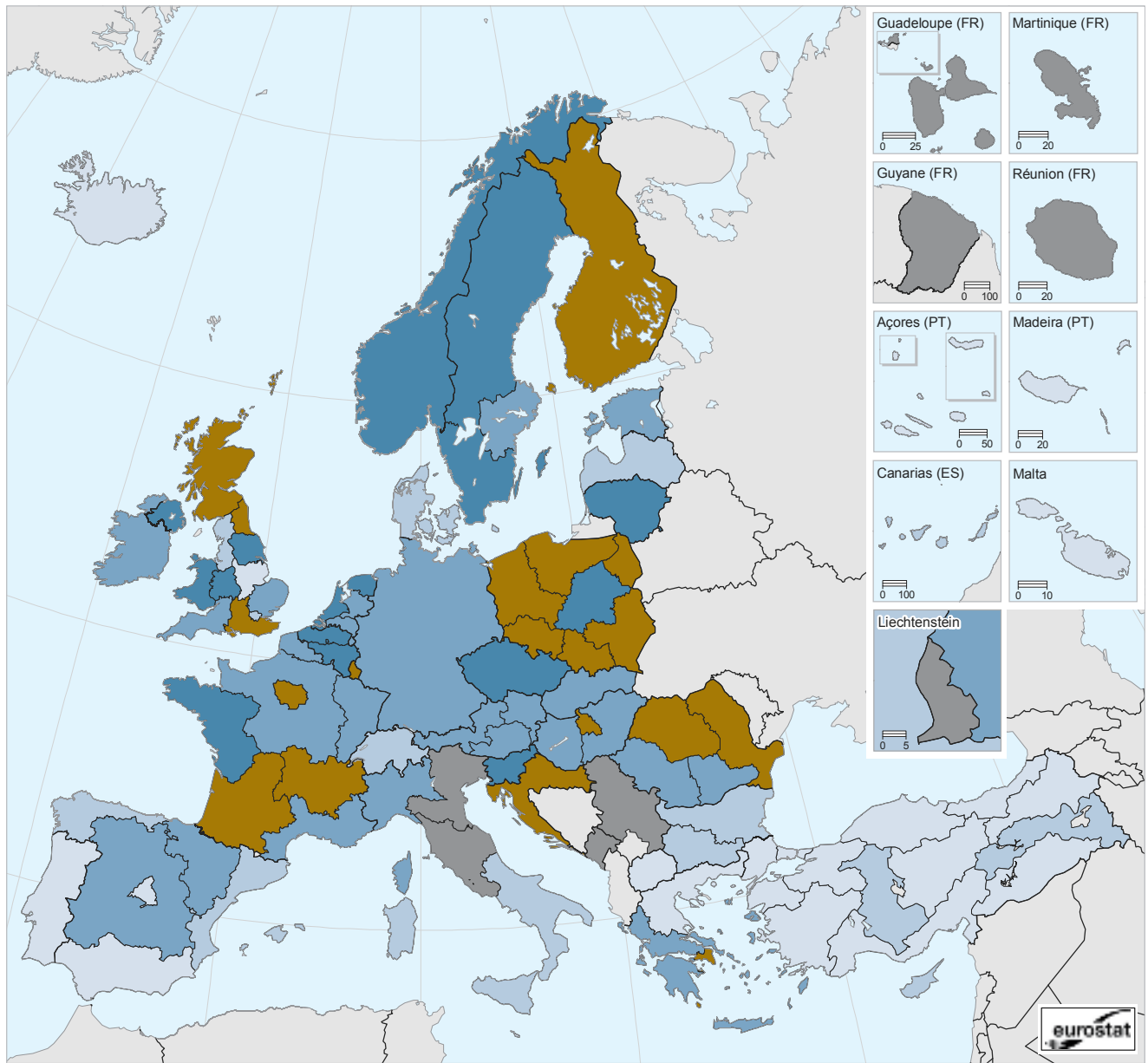
The proportion of early leavers was consistently higher among men than among women in each of the EFTA regions; this was particularly true in Norway and Iceland (one region at this level for each country), where the proportion of men leaving education and training early was 6.8 and 5.1 percentage points higher than the corresponding rate for women. The female rate for early leavers from education and training was also lower than that recorded for males in Croatia (only national data available). By contrast, each level 1 region in Turkey recorded a lower proportion of early leavers for men than for women; there were double-digit differences between the sexes in half of the Turkish regions, with the difference peaking at 16.8 percentage points in the north-eastern region of Kuzeydogu Anadolu. The male rate for early leavers from education and training was also lower than that recorded for females in the former Yugoslav Republic of Macedonia (3.3 points difference).

Students in tertiary education

Tertiary education is the level of education offered by universities, vocational universities, institutes of technology and other institutions that award academic degrees or professional certificates. In 2010 (the 2009/10 academic year), the number of students enrolled in tertiary education in the EU-27 stood at 19.8 million; this was equivalent to 62.7% of all persons aged 20–24.

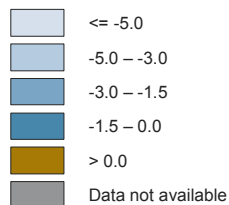


Map 4.4: Change in proportion of early leavers from education and training, by NUTS 1 regions, 2006–11 ⁽¹⁾
(percentage points difference between 2011 and 2006, % of 18- to 24-year-olds)



(percentage points difference between 2011 and 2006, % of 18–24 year-olds)

EU-27 = -2.0



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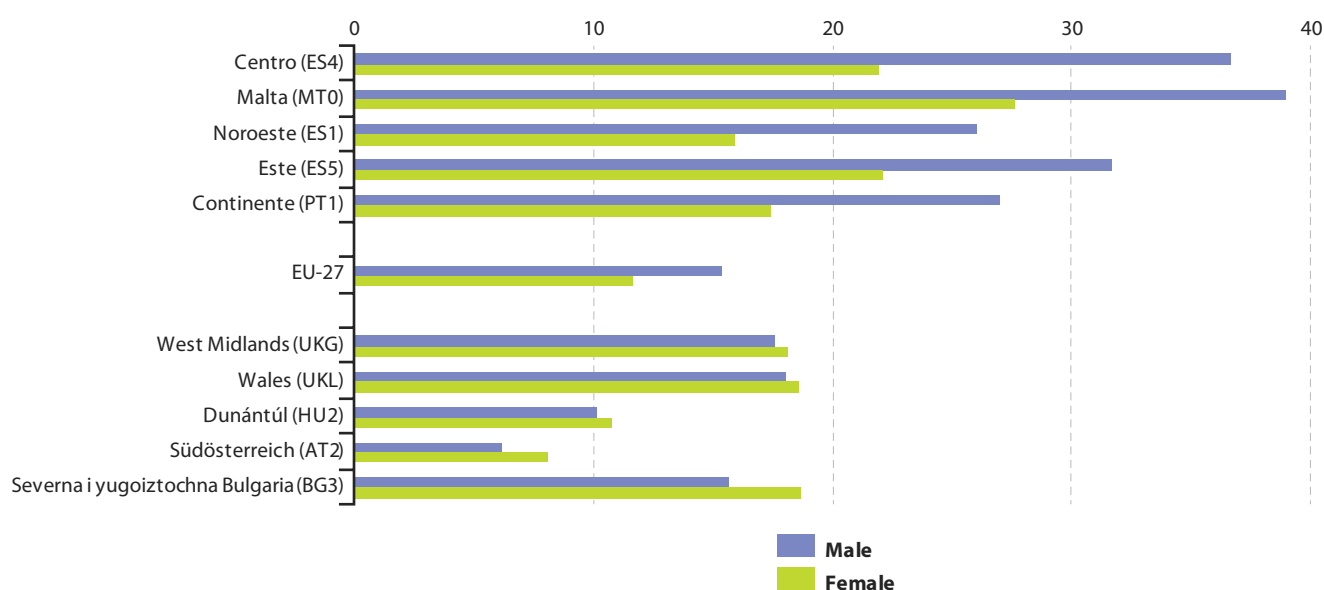
Cartography: Eurostat — GISCO, 05/2013



⁽¹⁾ Czech Republic, Denmark, Romania, Sweden, the United Kingdom and Croatia, 2007–11; Luxembourg, 2009–11; Região Autónoma da Madeira (PT3), 2006–10; the Netherlands, 2006–09; Germany and Finland, national level; the Maltese series are under review by the Maltese Statistical Office and Eurostat.

Source: Eurostat (online data code: [edat_lfse_16](#))

Figure 4.1: Early leavers from education and training, NUTS 1 regions with atypical gender gaps, 2011 ⁽¹⁾ (%)



⁽¹⁾ Based on the five regions with the biggest gender gaps in both directions (subject to data availability); Rheinland-Pfalz (DEB), Luxembourg (LU0), Südösterreich (AT2) and Northern Ireland (UKN), 2010; Berlin (DE3), 2009; Finland, national level; the Maltese series are under review by the Maltese Statistical Office and Eurostat — the review concerns the classification of certain qualifications at secondary level and the revision could mean a reduction of about 8 percentage points for all data.

Source: Eurostat (online data code: [edat_lfse_16](#))

Map 4.5 shows the number of students enrolled in a university or similar (tertiary level) education in each region relative to the number of residents aged 20–24 in the same region: this gives an idea of how attractive each region is to tertiary students. Note that it is possible that some students are not resident in the region where they study. For this reason there are some regions which show very high values (especially those of more than 100%) as they host large universities or other tertiary education institutions; these high ratios reflect the fact that these regions attract considerable numbers of students from other regions. Note that with the promotion of education and learning for all members of society, tertiary level students may increasingly fall outside of the traditional 20- to 24-year-old age group (used as the denominator for this ratio).

Of the 16 regions across the EU that reported more students enrolled in tertiary education than residents aged 20–24 in 2010/11, a majority (11) were capital city regions: Praha (the Czech Republic), Bratislavský kraj (Slovakia), București - Ilfov (Romania), Wien (Austria), the Région de Bruxelles-Capitale/Brussels Hoofdstedelijk Gewest (Belgium, data are for 2009/10), Mazowieckie (Poland), Zahodna Slovenija (Slovenia), the Comunidad de Madrid (Spain), Lisboa (Portugal), Attiki (Greece, data are for 2008/09) and Közép-Magyarország (Hungary). Four of the five remaining regions across the EU that reported more tertiary level students than residents aged 20–24 were in northern and western Greece — each reporting a ratio of students in tertiary education to residents aged 20–24 that

was higher than in the capital city region of Attiki; the fifth region was in Belgium (the Province/Provincie Brabant Wallon).

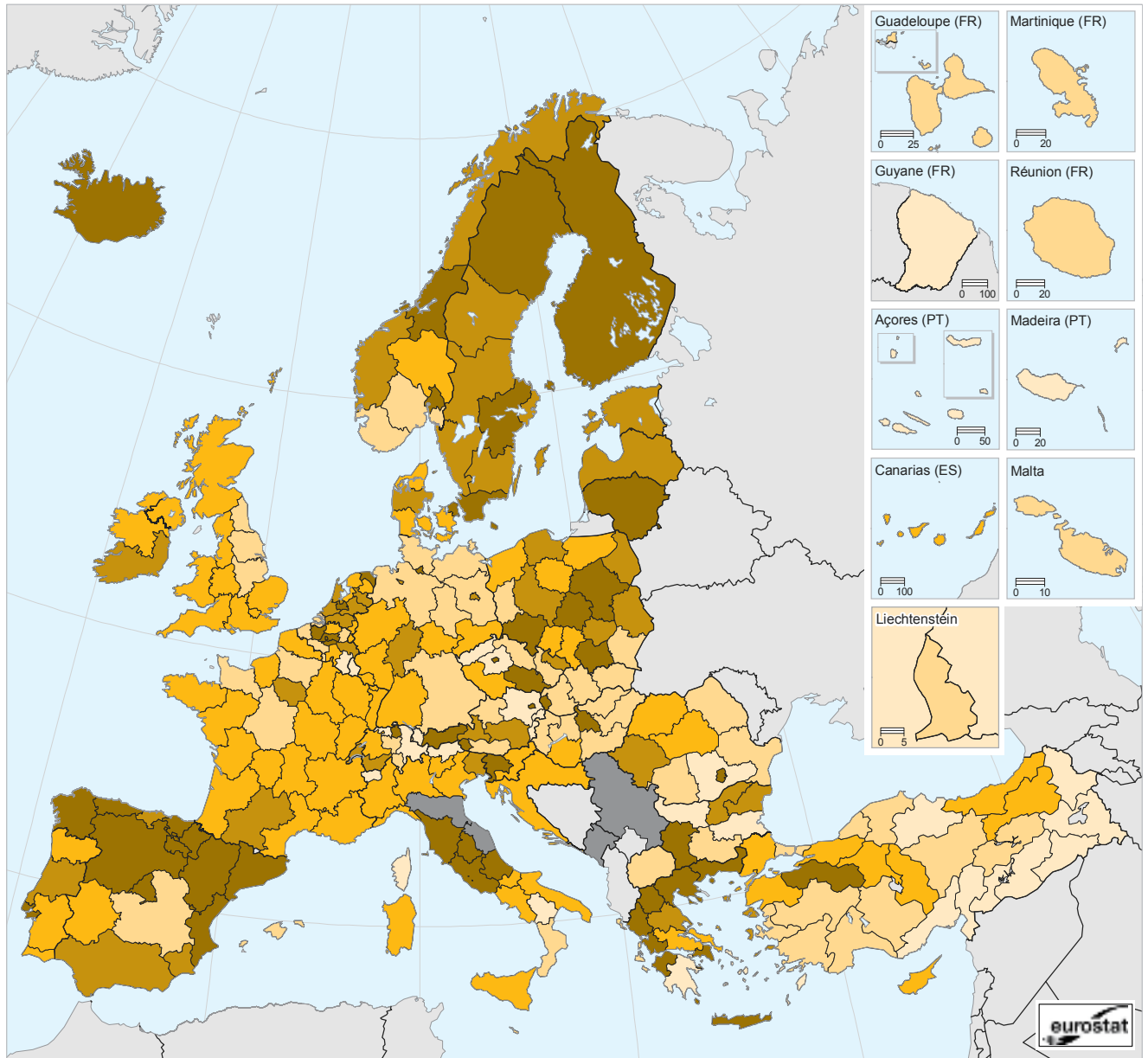
Capital city regions also reported the highest concentration of tertiary students in Bulgaria, Denmark, Ireland, France, Italy and the United Kingdom, although their ratios were below 100%. As such, Germany was the only large Member State to report its most dense concentration of tertiary students outside of the capital city region, as Hamburg (75.4%) and Bremen (71.0%) recorded ratios that were higher than that recorded in Berlin (65.7%); the other exceptions to this general pattern were the Netherlands (where Groningen had the highest concentration of tertiary students (90.3%)), and in the far north of Sweden (where Övre Norrland had the highest concentration (97.5%)).

Within the EFTA countries, the highest ratios of students in tertiary education as a percentage of the population aged 20–24 were recorded in the Norwegian regions of Trøndelag and Oslo og Akershus (where shares rose above 100%) and the Swiss region of Zürich (97.9%).

In Turkey there was a particularly high concentration of tertiary students in Bursa, Eskişehir, Bilecik — this may be attributed to there being an open university in Eskişehir, where a high proportion of students are enrolled on distance learning courses. Otherwise, the ratio of students enrolled in tertiary education to residents aged 20–24 was below 60% for all of the remaining regions in the candidate and accession countries.

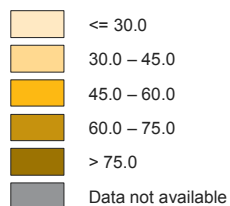


Map 4.5: Total number of students in tertiary education (ISCED levels 5 and 6), as a percentage of the population aged 20–24, by NUTS 2 regions, 2011 ⁽¹⁾ (%)

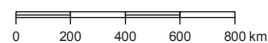


(%)

EU-27 = 62.7



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Cartography: Eurostat — GISCO, 05/2013



⁽¹⁾ Total number of tertiary students divided by the resident population of 20- to 24-year-olds; data covers enrolments at regional level in school year 2010/11; Belgium, Denmark, Estonia, Ireland, France, Italy, Cyprus, Latvia, Lithuania, Luxembourg, Malta, Sweden, the United Kingdom, Iceland, Liechtenstein and the former Yugoslav Republic of Macedonia, 2009/10; Greece, 2008/09; Germany and the United Kingdom, by NUTS 1 regions; Finland and Croatia, national level.

Source: Eurostat (online data code: [educ_regind](#))

Tertiary educational attainment

The final three maps in this chapter provide information relating to the proportion of the population that has attained a higher level of education — in other words, a university or similar (tertiary level) education. Map 4.6 gives an indication of recent tertiary educational attainment levels among those aged 30–34. Map 4.7 presents information on the change in levels of tertiary educational attainment among the same age group, based upon an analysis of differences between 2006 and 2011. Map 4.8 presents information on a wider age group, namely those aged 25–64, presenting data for the proportion of the working age population that attained a tertiary education.

In 2011, for the EU-27 as a whole, just over one third (34.6%) of 30- to 34-year-olds had completed tertiary education. These figures support the premise that a rising proportion of the EU's population is studying to a higher level — in keeping with one of the Europe 2020 targets, namely that by 2020 at least 40% of persons aged 30–34 in the EU-27 should have attained a tertiary level education.

Map 4.6 shows that in 2011 there were 30 regions in the EU (among the 91 NUTS level 1 regions for which data are available) which recorded in excess of 40% of their population aged 30–34 having attained a tertiary level of education. Among these, there were six regions from the United Kingdom, four each from Spain and France, all three regions from Belgium, two of the three Swedish regions, and a single region each from Germany, Hungary, the Netherlands and Poland. Denmark, Estonia, Ireland, Cyprus, Lithuania and Luxembourg also reported that more than 40% of their population aged 30–34 had attained a tertiary level education (each of these countries is a single region at this level of NUTS), as did Finland (for which only national data are available).

Given that most persons aged 30–34 will have completed their tertiary education prior to the age of 30, this indicator may be used to assess the attractiveness (or pull effect) of regions with respect to the employment opportunities they may offer graduates. There were seven regions in the EU where more than half of the population aged 30–34 had attained a tertiary education level, with graduates in the United Kingdom drawn to London, the neighbouring South East (of England) and to Scotland, while those in Spain were attracted to the capital city region of the Comunidad de Madrid and to the Noreste (which includes the cities of Bilbao, Donostia-San Sebastián and Zaragoza). The other two regions that reported shares of more than 50.0% were also capital city regions, namely, the Île de France (which includes Paris and its surrounding area) and Östra Sverige (which includes Stockholm) in eastern Sweden.

By contrast, there were six regions where less than one in five persons aged 30–34 had attained a tertiary level education in 2011. Three of these six regions were located in Romania

(with shares of 16.5% to 18.0%): the only NUTS level 1 Romanian region to be an exception was the capital city region of *Macroregiunea trei*. Two regions were in Italy including the region with the lowest ratio across the whole of the EU, namely *Isole* (16.1%) which includes Sardinia and Sicily; the other Italian region was the south (*Sud*, 16.6%). The sixth and final region was Saarland in Germany (19.1%).

Bati Anadolu (23.6%) — which includes the Turkish capital city of Ankara — was the only Turkish region to report that more than one in five of its residents aged 30–34 had attained a tertiary level education. By contrast, the lowest ratios presented in Map 4.6 were recorded for the north-east of Turkey (*Kuzeydogu Anadolu*), where only just over 1 in 10 (10.2%) of the population aged 30–34 had attained a tertiary level education.

The penultimate map on education shows the change in the proportion of residents aged 30–34 having attained a tertiary level of education over the period 2006–11. Across the whole of the EU-27, this proportion increased by 5.7 percentage points over the period under consideration, such that 34.6% of the population aged 30–34 had completed a tertiary education level by 2011. If this rate of change is maintained through to 2020, then the Europe 2020 target of at least 40% of EU-27 residents aged 30–34 attaining a tertiary level education by 2020 should be attained.

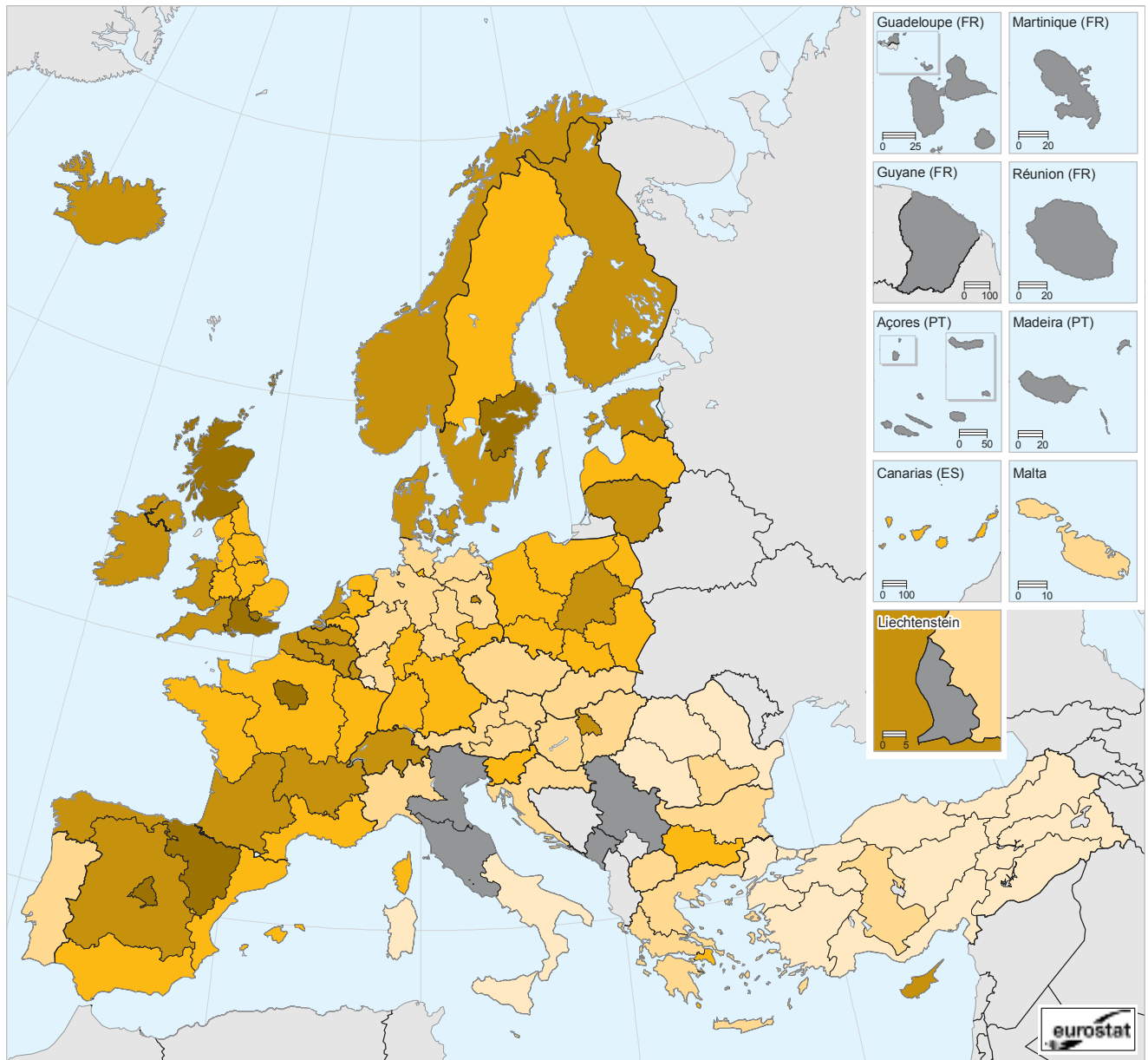
Latvia (national data at this level of NUTS) reported the most rapid increase in its proportion of residents aged 30–34 with a tertiary level education, their share rising by 16.5 percentage points between 2006 and 2011. There were 12 other regions in the EU where double-digit percentage point increases were recorded, including all six NUTS level 1 regions in Poland, four regions in the United Kingdom (including London), the capital city region of Hungary (*Közép-Magyarország*) and the Czech Republic (one region at this level of NUTS).

By contrast, there were eight regions where the proportion of residents aged 30–34 having attained a tertiary level education declined during the period 2006–11. None of the reductions were particularly large, as the most sizeable reduction was the decline of 0.7 percentage points recorded for *Südösterreich*. Among the seven other regions, two were in France (including the capital city region of *Île de France*) and there were also the two island Member States of Cyprus and Malta, as well as *Vlaams Gewest* (Belgium), *Mecklenburg-Vorpommern* (Germany) and the whole of Finland (for which only national data are available).

Map 4.8 shows the proportion of the population aged 25–64 in 2011 who had successfully completed a tertiary level education. The demographic structure of each region has some influence on this measure, as younger generations tend to report higher levels of educational attainment than older persons (due to a rising share of the population studying for longer and to higher levels). In 2011, an average of 26.8%

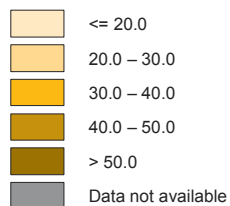


Map 4.6: Persons aged 30–34 with tertiary education (ISCED levels 5 and 6) attainment, by NUTS 1 regions, 2011 ⁽¹⁾
(% of 30- to 34-year-olds)



(% of 30–34 year-olds)

EU-27 = 34.6



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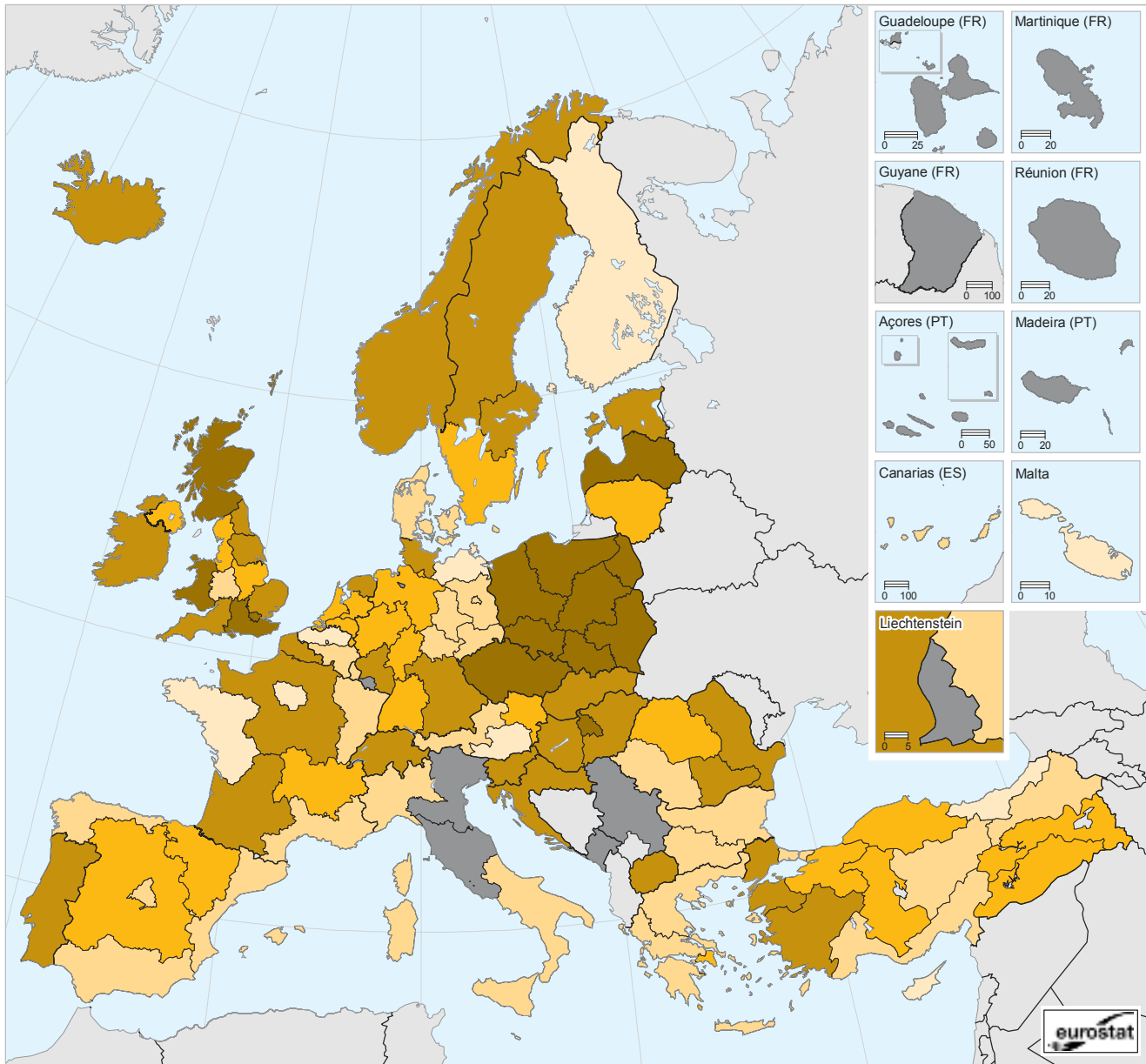
Cartography: Eurostat — GISCO, 05/2013



⁽¹⁾ Bremen (DE5) and Saarland (DEC), 2004; Sweden, provisional; Finland, national level.

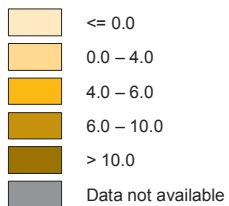
Source: Eurostat (online data code: edat_lfse_12)

Map 4.7: Change in proportion of persons aged 30–34 with tertiary education (ISCED levels 5 and 6) attainment, by NUTS 1 regions, 2006–11 ⁽¹⁾
(percentage points difference between 2011 and 2006, % of 30- to 34-year-olds)

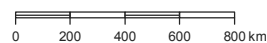


(percentage points difference between 2011 and 2006, % of 30–34 year-olds)

EU-27 = 5.7



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Cartography: Eurostat — GISCO, 05/2013



⁽¹⁾ Denmark, Sachsen-Anhalt (DEE), Romania, Sweden and Croatia, 2007–11; Luxembourg, 2009–11; Sweden, provisional; Finland, national level.
Source: Eurostat (online data code: [edat_lfse_12](#))



of the EU-27's working age population (25–64 years) had attained a tertiary level of education. This can be compared with the corresponding share (34.6%) for 30- to 34-year-olds in order to show the differences in levels of attainment between the generations.

There were 39 NUTS level 2 regions in the EU (out of a total of 258 regions for which data are available) where more than 35.0% of the population aged 25–64 had completed a tertiary level education. As with the analysis for those aged 30–34, those regions with the highest shares were often characterised as being capital city regions or other densely populated urban regions; these regions are likely to be more attractive to highly qualified persons with respect to the employment opportunities they can potentially offer. The United Kingdom reported 15 regions with more than 35.0% of the population aged 25–64 having completed a tertiary level of education, while there were four regions in each of Belgium and Spain, two in each of Germany, France, the Netherlands and Sweden, and a single region in the Czech Republic, Denmark, Ireland and Slovakia. The pull of capital city regions was apparent as they featured in each of the 11 Member States that reported at least one region with more than 35.0% of its resident population aged 25–64 having completed a tertiary level education. In addition, the whole of Estonia, Cyprus and Luxembourg had shares above 35.0% (all three of these countries are covered by a single region at NUTS level 2), as did Finland (for which there is only national data available).

The highest share of the population aged 25–64 having completed a tertiary level education was recorded for Inner London (the United Kingdom, 59.7%), while the Belgian region of the Province/Provincie Brabant Wallon (to the south of Brussels) had the second highest share (55.7%) and was the only other region in the EU to report that a majority of its working age (25–64) population had attained a tertiary level of education. Outside of the EU Member States, Oslo og Akershus (the capital city region of Norway) and Zürich (Switzerland) reported the highest shares of residents aged 25–64 who had attained a tertiary level of education (48.8% and 42.6% respectively); there were two additional Norwegian regions and two additional Swiss regions that reported shares above 35.0%.

At the bottom end of the ranking, 75 regions in the EU reported that 20% or less of their resident population aged 25–64 had attained a tertiary level education. Among these, 19 regions were in Italy (every Italian region for which data are available), eight were in Austria (all but the capital city region of Wien), seven each were in the Czech Republic, Romania and Greece (all except the capital city regions of Praha and Bucuresti – Ilfov, and just over half of all the regions in Greece), six each were in Hungary and Portugal (all except the capital city regions of Közép-Magyarország and Lisboa), four each were in Bulgaria and Poland, three from Slovakia (all except the capital city region of Bratislavský kraj), two from France and one from Spain; Malta (which is just one

NUTS level 2 region) also had a ratio below 20%. Looking within each country, the regions which had the lowest proportion of working age residents with a tertiary level education were often concentrated in rural or remote regions — for example the islands, southern and mountainous regions of Italy, the island regions of the Região Autónoma dos Açores and the Região Autónoma da Madeira or the rural Alentejo region in Portugal, or regions in the east of Romania.

None of the EFTA regions reported that 20% or less of their resident population aged 25–64 had attained a tertiary level education — the lowest share in the EFTA regions was recorded for the relatively mountainous region of Hedmark og Oppland, the only landlocked region in Norway (29.0%). By contrast, Ankara (23.7%) was the only region in the acceding and candidate countries (among those for which data are available) to report that more than one in five of its resident population aged 25–64 had attained a tertiary level education. There were nine level 2 regions in Turkey where there were fewer than 1 in 10 persons aged 25–64 with a tertiary level of education; the lowest share was recorded for the north-eastern region of Ağrı, Kars, Iğdır, Ardahan (6.7%).

Data sources and availability

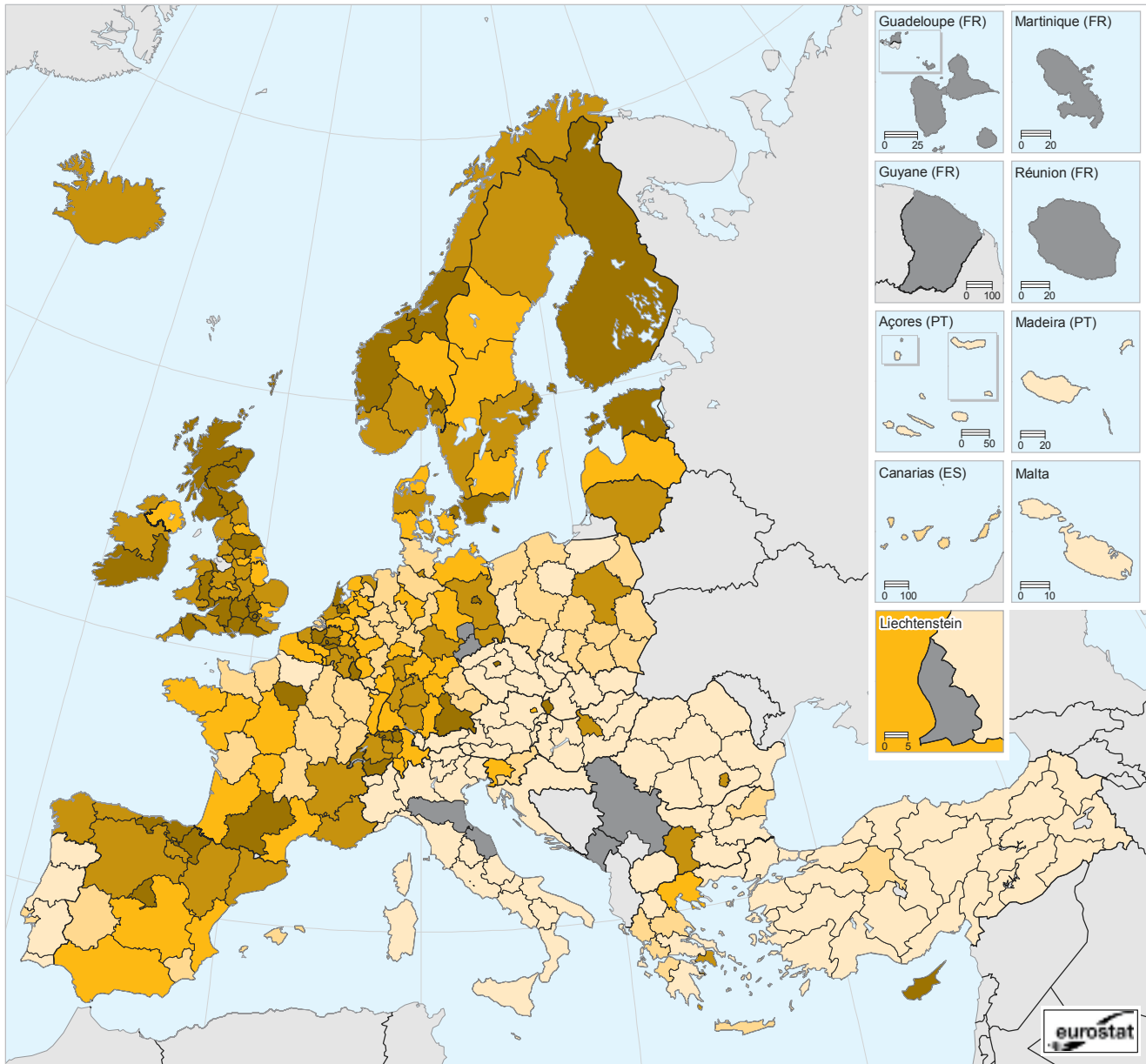
As the structure of education systems varies from one country to another, a framework for assembling, compiling and presenting regional, national and international education statistics and indicators is a prerequisite for comparability. The International Standard Classification of Education (ISCED) provides the basis for collecting data on education. ISCED-97 (the current version of a classification introduced in 1997) classifies all educational programmes by field of education and educational level; it presents standard concepts and definitions. A full description is available on the United Nations Educational, Scientific and Cultural Organisation (UNESCO) Institute for Statistics (UIS) website. ISCED-97 distinguishes seven levels of education:

- pre-primary education (level 0);
- primary education (level 1);
- lower secondary education (level 2), upper secondary education (level 3);
- post-secondary non-tertiary education (level 4);
- tertiary education (first stage) (level 5) and tertiary education (second stage) (level 6).

A review of the ISCED began in 2009 and the revised classification (ISCED 2011) was adopted by a UNESCO General Conference in November 2011. The first statistics to be based on ISCED 2011 are expected to be published in 2015.

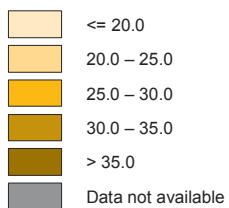
Eurostat collates education statistics at a European level as part of a jointly administered exercise that includes the UNESCO-UIS, the Organisation for Economic Cooperation and Development (the OECD) and Eurostat — often referred

Map 4.8: Persons aged 25–64 with tertiary education (ISCED levels 5 and 6) attainment, by NUTS 2 regions, 2011 ⁽¹⁾
(% of 25–64 year-olds)

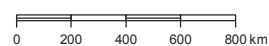


(% of 25–64 year-olds)

EU-27 = 26.8



Administrative boundaries: © EuroGeographics © UN-FAO © Turkstat
Cartography: Eurostat — GISCO, 05/2013



⁽¹⁾ Sweden, provisional; Finland and Croatia, national level.
Source: Eurostat (online data code: [edat_lfse_11](#))



to as the UOE data collection exercise. Otherwise, statistics on early leavers from education and training and on tertiary educational attainment are collected through the EU's labour force survey.

Statistics on enrolment in education include all initial education programmes and adult education programmes with content similar to initial education programmes or leading to qualifications similar to the corresponding initial programmes. Apprenticeship programmes are included, except those which are entirely work-based and which are not supervised by any formal education authority.

The indicator on early leavers from education and training tracks the proportion of individuals aged 18–24 who have finished no more than a lower secondary education (ISCED levels 0, 1, 2 or 3c), and who are not engaged in further education and training.

Education attainment is defined as the proportion of people of a given age group (excluding those who did not answer the question concerning the highest level of education or training attained) having attained a given education level.

Note that Maps 4.2 and 4.5 mix two distinct concepts, namely a numerator based on a count of students who are recorded according to the educational institution where they are inscribed and a denominator that is based on population statistics which are recorded according to residence. As a result, the region of study does not always match the region of residence. Furthermore, student numbers may also include persons who are not registered in the population register (for example, temporary foreign students). It is therefore possible that a region reports ratios in excess of 100% of the population attending a specific education level — this is particularly the case for higher education levels where student mobility becomes a more usual phenomenon.

Context

Diversity of national education systems

Age is generally the sole criterion for admission to full-time compulsory primary education, which starts at the age of 5 or 6 in most EU Member States, although Bulgaria, Estonia, Lithuania, Finland and Sweden have a compulsory starting age of 7, and compulsory education in Cyprus and Northern Ireland (the United Kingdom) starts before the age of 5. On average, full-time compulsory education lasts 9 or 10 years in most of the EU Member States, exceeding this in Latvia, Malta and most parts of the United Kingdom (11 years), Luxembourg, Portugal and Northern Ireland (12 years), Hungary and the Netherlands (13 years). In general, compulsory education is completed at the end of lower secondary education, although in some countries it continues into

upper secondary education: full-time compulsory education continues beyond the age of 16 in Hungary, the Netherlands and Portugal as does part-time compulsory education in Belgium, Germany and Poland.

At the age of 16 or 17, many young people are faced with the choice of whether to remain in education, go into training or look for a job. Upper secondary education usually begins at the end of full-time compulsory education and typically requires 8 years or more of full-time education (starting from the beginning of primary level) for admission. General upper secondary education includes school programmes which, upon successful completion, typically give access to university-level programmes. Vocational upper secondary education is designed mainly to introduce students to the world of work and prepare them for further vocational or technical education programmes. Students generally start upper secondary education at the age of 15–17 and finish it 2 to 4 years later; the starting/finishing ages and the age range depend on national educational programmes. Access to tertiary-level education typically requires successful completion of an upper secondary and/or post-secondary non-tertiary level programme.

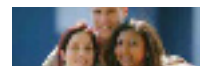
In February 2011, the European Commission adopted a communication titled 'Early childhood education and care: providing all our children with the best start for the world of tomorrow' (COM(2011) 66 final). This noted that early childhood education and care is an essential foundation for successful lifelong learning, social integration, personal development and later employability and that it is particularly beneficial for the disadvantaged and can help to lift children out of poverty and family dysfunction.

Most Europeans spend significantly longer in education than the legal minimum requirement. This reflects the choice to enrol in higher education, as well as wider participation in lifelong learning initiatives, such as mature (adult) students returning to education — often in order to retrain or equip themselves for a career change.

The opportunities which the EU offers its citizens for living, studying and working in other countries make a major contribution to cross-cultural understanding, personal development and the realisation of the EU's economic potential. Each year, well over a million EU citizens of all ages benefit from EU-funded educational, vocational and citizenship-building programmes.

Education and training 2020

Around one in seven children leave school or training early and this has an impact on individuals, society and economies. In January 2011, the European Commission adopted a communication titled 'Tackling early school leaving: a key contribution to the Europe 2020 agenda' (COM(2011) 18 final). This outlined the reasons why pupils decide to leave



school early and gave an overview of existing and planned measures to tackle this issue across the EU.

Political cooperation within the EU was strengthened through the education and training 2010 work programme which integrated previous actions in the fields of education and training. The follow-up to this programme, the strategic framework for European cooperation in education and training (known as ET 2020), was adopted by the Council in May 2009. This strategy set a number of benchmarks to be achieved by 2020:

- at least 95 % of children between the age of 4 and the age for starting compulsory primary education should participate in early childhood education;
- an average of at least 15 % of adults aged 25–64 should participate in lifelong learning.

Two new benchmarks on learning mobility were adopted by the Council in November 2011:

- by 2020, an EU average of at least 20 % of higher education graduates should have had a period of higher education-related study or training (including work placements) abroad, representing a minimum of 15 European credit

transfer and accumulation system (ECTS) credits or lasting a minimum of 3 months;

- by 2020, an EU average of at least 6 % of 18- to 34-year-olds with an initial vocational education and training qualification should have had an initial vocational education and training (VET) related study or training period (including work placements) abroad lasting a minimum of 2 weeks, or less if documented by Europass.

Another benchmark on employability was added in May 2012:

- by 2020, the share of employed graduates (20- to 34-year-olds) having left education and training no more than 3 years before the reference year should be at least 82 %.

Early leavers from education and training and tertiary educational attainment are headline indicators for the Europe 2020 strategy. They were selected to help to monitor progress towards a smarter, knowledge-based, greener economy, delivering high levels of employment, productivity and social cohesion. In the flagship initiative 'Youth on the move', the European Commission has set out its proposals concerning how the EU can reach its Europe 2020 targets in the domains of education and employment, both nationally and for the EU as a whole.