



EUROPEAN SEMESTER THEMATIC FACTSHEET

TERTIARY EDUCATION ATTAINMENT

1. INTRODUCTION

Increasing the number of people who complete tertiary (higher) education and improving its quality are important for sustainable and inclusive growth. **Higher rates of tertiary education attainment, combined with better quality and relevance, can attenuate skills shortages** in knowledge-intensive economic sectors. This in turn promotes productivity growth, innovation and competitiveness. Given the fast pace of technological progress and the intensity of global competition, with labour markets requiring ever-increasing skill levels, high tertiary education attainment levels can sustain smart, sustainable growth. By contrast, persisting inequalities and geographic disparities in higher education attainment compound the overall inequality between EU regions and cause uneven growth¹.

The Europe 2020 strategy has set a **headline target of increasing the number of people in the EU aged 30 to 34 attaining tertiary education to at least 40%**. Member States have also set national targets, sometimes more ambitious (Figure 1). Progress against these targets has been steady for more than a decade, even during the economic crisis.

In May 2017 the European Commission set out a **renewed EU agenda for**

higher education². This Communication focuses on broadening access to and participation in higher education, as well as on reducing dropout rates. It aims to do so through provision of more transparent information on educational opportunities and outcomes, tailored guidance and financial support to students from low-income backgrounds.

A parallel initiative on **graduate tracking** aims to improve the availability of detailed, comparable data on graduate employment and social outcomes. The aim here is to help young people to make informed choices and universities to improve the design of their courses.

This factsheet focuses on higher education. The thematic factsheet 'Skills for the labour market' provides a picture of the employability of graduates, within a broader analysis of skills' demand and supply.

2. POLICY CHALLENGES: OVERVIEW OF PERFORMANCE IN EU COUNTRIES

The average rate of **tertiary education attainment in the EU was 39.1%** in 2016. This was nearly half a point more than the previous year and 10 points above the 2006 level (Figure 1). Eighteen Member States reached the Europe 2020 target of 40% or more. Fourteen also reached their national targets for tertiary education attainment: Denmark, Germany³, Estonia, Greece, Italy, Cyprus, Latvia, Lithuania, Hungary,

¹ See: 'Education and Training Monitor 2015' and 'Mind the Gap — education inequality across EU regions', 2012.

² COM(2017)247 final.

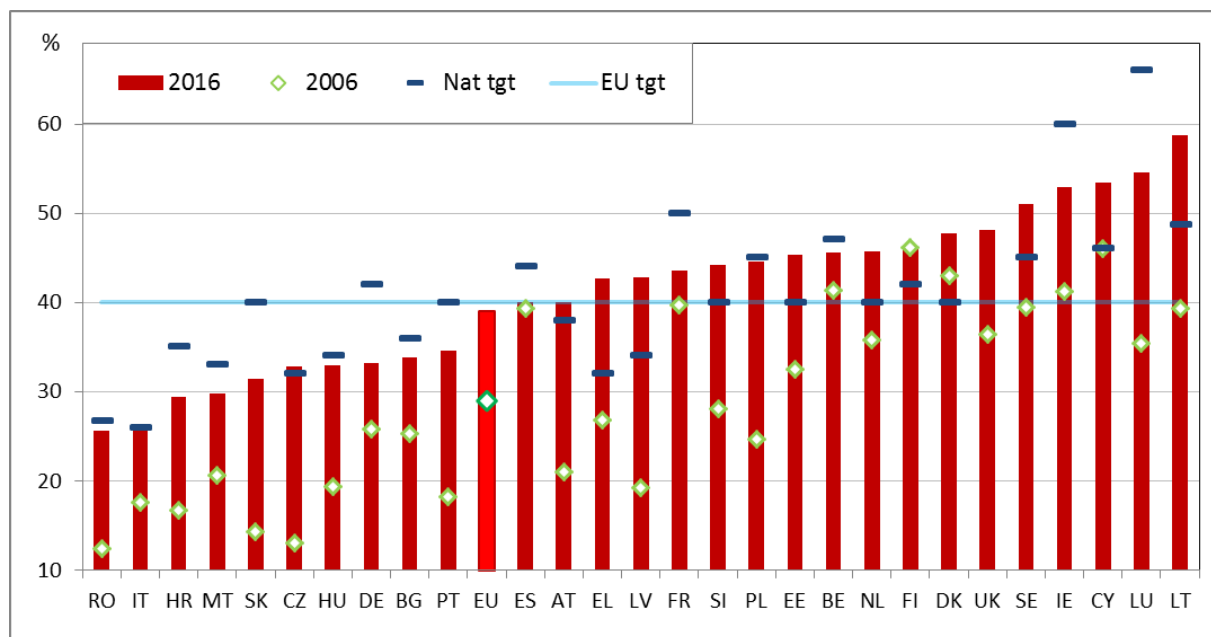
³ Germany's national target (42 %) includes post-secondary non-tertiary education (ISCED level 4).

the Netherlands, Austria, Slovenia, Finland and Sweden.

Despite the widespread progress on this target, **attainment rates continue to vary widely by gender and place of birth**. Young women are far more likely to complete tertiary education in most Member States: their attainment rate averages almost 10 percentage points (pps) higher than that of men.

Native-born people have generally higher attainment rates than those born abroad, although in a few Member States the opposite is true (Figure 2). In Ireland and the UK, people born outside the EU have particularly high rates; at the other end of the spectrum, in Greece, Spain, Italy, Cyprus and Slovenia foreign-born people have relatively low rates.

Figure 1 – Tertiary education attainment (population aged 30-34)



Source: Eurostat (LFS, table edat_ifse_03). Note: The indicator covers the share of the population aged 30-34 who have successfully completed an ISCED level between 5 and 8. The national target for Germany includes post-secondary non-tertiary education (ISCED level 4). Luxembourg's performance and national target reflect to a large extent the highly educated immigrant population living and working in the country rather than the outcome of its education and training system. For France, the 50% national target refers to the age group 17-33. For Finland, the national target is defined more narrowly than the EU headline target and excludes technological institutes. For further information on national targets and their definitions, see http://ec.europa.eu/eurostat/documents/4411192/4411431/Europe_2020_Targets.pdf

In addition to the challenges presented above, there are four other important policy dimensions to consider.

1. Spatial and social inequalities. One issue is how to prevent inequality being repeated in each successive generation by ensuring that students from all socioeconomic backgrounds have access to higher education. People from disadvantaged backgrounds remain under-represented in tertiary education and have higher university dropout rates.

Another often related issue is the persistent wide geographical disparities

in higher education attainment⁴ between but also within Member States. These may contribute to income inequality at regional level, cause 'brain drain' and undermine the regions' growth.

2. Low completion rates point to efficiency and/or equity issues within tertiary education systems. Lengthy study periods and a high proportion of students who fail to graduate undermine

⁴ See: 'Mind the Gap — education inequality across EU regions', 2012.

the efficiency of higher education systems. In order to increase the efficiency of public investment in higher education particular efforts to reduce high dropout rates may be needed. Belgium, Greece, France, Italy, Hungary, the Netherlands, Austria, Poland, Romania, Sweden⁵ and Slovenia have the highest dropout rates in the EU. Moreover, completion rates remain marked by inequalities: students from poor socioeconomic backgrounds are by far the most likely to drop out of tertiary education⁶.

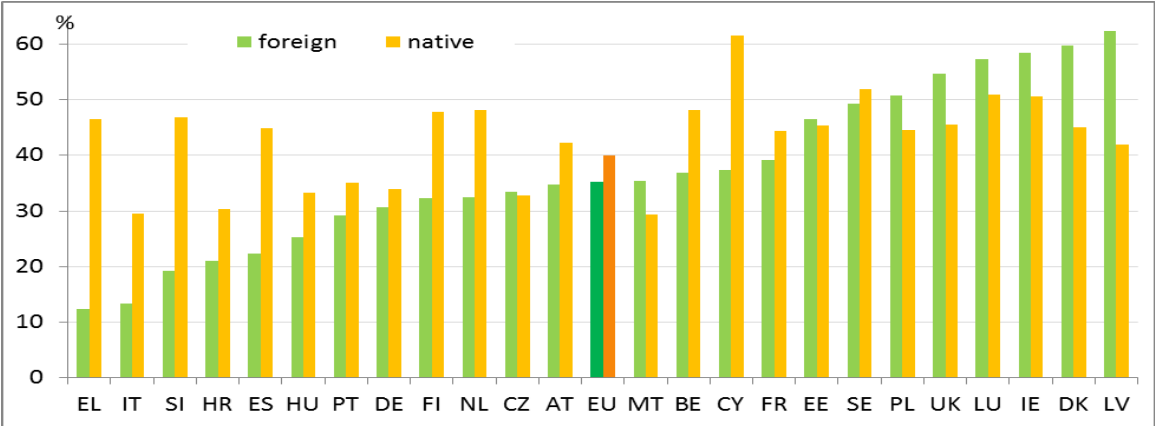
3. The quality of higher education institutions. This is generally difficult to measure and hence to relate to funding mechanisms. The quality of education on offer and the perceived added value of a higher education qualification for future employment are key in determining the attractiveness of higher education.

4. Closely linked to the previous dimension, higher education's insufficient alignment with labour market needs underlies the low employment rates of tertiary graduates.

The EU employability benchmark⁷ tracks graduate employment rates across the Member States. The rates are one criterion for assessing both how relevant the higher education offered is to the needs of the labour market and the quality of the education itself. The employment rates are also affected by short-term fluctuations in labour demand due to economic cycles. Comparable data regarding the competence of graduates would be needed to assess the quality of higher education independently of its relevance.

Closer collaboration with employers and greater feedback from graduates would help make academic curricula more relevant to finding jobs and would better guide students' choices before and during their studies. Increasing the variety of study modes (such as part-time study or distance learning) and further developing higher vocational education and professional higher education are also seen as helpful. They can make the education offer more flexible and better suited to the needs of businesses as well as of current and future workers.

Figure 2 – Tertiary education attainment by country of birth



Source: Eurostat (LFS, table edat_ifs_9912). Note: data not available for Bulgaria, Lithuania, Romania or Slovakia

⁵ For Sweden, the figure on dropout rates includes students entering single courses who may never have intended to study all the courses required for a degree (an estimated 40% in Sweden).

⁶ Education and Training Monitor. European Commission / NESET network of experts, 2013.

⁷ Employment rate of individuals aged 20 to 34 who graduated no more than three years before the reference year (see thematic factsheet on skills for the labour market, which also discusses other ways of improving skills matching, e.g. through better intelligence and anticipation).

3. POLICY LEVERS TO ADDRESS THE POLICY CHALLENGES

Developed countries such as the US, Canada, Japan, Korea and Australia outperform Europe in tertiary education attainment. Europe's comparatively low levels can undermine its competitiveness and its potential to generate smart growth. Up to 2020 and beyond most job openings will require higher education⁸.

The following types of measures are particularly relevant for raising attainment levels.

1. Increasing overall higher education attainment levels generally involves broadening the intake to include students from all parts of society. This means attracting more students from disadvantaged socioeconomic backgrounds or places, from ethnic groups or who have a disability. Broadening access for under-represented groups is not only important from a social fairness perspective; it is crucial for countries that are still making the transition from elite to mass higher education systems and for countries facing demographic decline.

Key measures to **broaden participation** include removing financial barriers to participation - an area where current policy trends vary - and bringing more flexibility into the routes by which people enter higher education. To overcome barriers to broadening access to higher education, it is important to ensure that effective pathways exist for making the transition to it from vocational education and training. Improving the recognition of knowledge already acquired in non-formal contexts is an important measure for many Member States, particularly to encourage more adult learners to enter higher education.

Measures to broaden access should not be limited to higher education but should encompass earlier stages of education too. This is because students from vulnerable groups often do not complete even secondary education⁹.

⁸ See the Cedefop skills forecast.

⁹ See thematic factsheet 'Early leavers from education and training'.

2. A key measure to **increase completion rates** and reduce the time students take to achieve a degree is improving guidance and counselling to help them choose an appropriate course (pre-entry guidance). This is especially helpful in systems with comparatively open access to higher education. Another key measure is providing better support for students during their studies. In general, more student-centred approaches to learning are needed, with manageable staff-student ratios and intelligent use of ICT support. Designing student-support instruments may also help them complete their studies.

3. Making sure that higher education courses develop students' skills that are **relevant to the world of work** is an important aspect of ensuring higher education remains attractive in the long term. Several measures can play an important role in improving the employability of graduates:

- making graduate employment data more readily and widely available, and making greater use of skills projections (including tracking graduate employment outcomes);
- involving stakeholders more closely in designing and evaluating courses;
- making more systematic use of work-based placements; and
- making the structure of study programmes, including interdisciplinary learning paths, more flexible.

All programmes should foresee developing cross-cutting skills, such as problem-solving, communication and team work, in addition to developing subject-specific knowledge. In countries with high levels of graduate unemployment, reviewing the balance of students entering different disciplines in order to identify areas of oversupply will also help employment outcomes. So will giving current and prospective students better guidance.

4. CROSS-EXAMINATION OF POLICY STATE OF PLAY

Because Member States have different national systems and starting points in terms of higher education attainment, their key priorities to meet the national targets in this area vary significantly.

Nevertheless, it is possible to categorise individual Member States' priorities in accordance with the key policy dimensions highlighted previously.

1. Broadening access to higher education. Twelve Member States have some form of performance-based funding mechanisms with a social dimension which provide funding to higher education institutions if they meet a defined level of performance on social objectives. Most commonly performance-based funding mechanisms are used to support the participation of students with disabilities or from disadvantaged socio-economic backgrounds.

Ireland launched a 'National plan of equity of access to higher education' in 2015. It has five key goals and sets out more than 30 actions to help under-represented groups get into tertiary education. These groups include disadvantaged, mature or disabled students and members of the Traveller community.

The Czech Republic has increased grants to students in need as well as the number of profession-oriented programmes in order to promote stronger social diversity among tertiary education students. Sweden has launched an inquiry into the governance and financing of higher education with a view to increasing the number of students from disadvantaged backgrounds. Croatia is using the European Social Fund (ESF) to provide support to students from disadvantaged backgrounds.

2. Reducing dropout rates and the time it takes to complete a degree. Estonia has revised its higher education funding system to encourage students to complete their studies in the nominal time. Belgium's Flemish region is supporting alternative approaches such as short-cycle programmes in higher education.

3. Improving the quality of higher education and making it more relevant for the labour market. Slovenia has an ambitious plan to make higher education funding more performance-oriented. Bulgaria is implementing performance-based funding and focusing efforts on increasing participation

in fields related to science, technology, engineering and mathematics (STEM). In Malta, several initiatives aim to increase the number of graduates in science-related subjects.

Belgium's Flemish community has developed a STEM action plan involving all educational levels, while the francophone community is focusing on work-based learning in sectors where skills shortages have been identified or are expected. Croatia provides ESF-funded scholarships for students in STEM. Estonia has set up a forecasting tool to anticipate labour market and skills needs, with recommendations for forward planning in education and training.

Poland has introduced a national system of graduate tracking to address the need for better information on labour market outcomes. Romania is currently developing a tool to monitor graduates' integration into the labour market. Spain's recent National Pact on education seeks to better adapt educational offers to local industry demands, review the funding model and promote university excellence. Cyprus, Portugal, Slovakia and Sweden have recently taken measures to strengthen quality assurance in higher education.

Date: 6.11.2017

5. REFERENCES

- European Commission: Education and Training Monitor 2017
http://ec.europa.eu/education/policy/strategic-framework/et-monitor_en
- European Commission: Thematic factsheet on skills for the labour market and Thematic factsheet on Early school leavers
https://ec.europa.eu/info/strategy/european-semester/thematic-factsheets/labour-markets-and-skills_en
- NESSE (2012), Mind the Gap — education inequality across EU regions
<http://www.nesse.fr/nesse/activities/reports/activities/reports/mind-the-gap-1>
- NESET (2013), Drop-out and Completion in Higher Education in Europe among students from under-represented groups
<http://www.nesetweb.eu/sites/default/files/HE%20Drop%20out%20AR%20Final.pdf>

6. USEFUL RESOURCES

- European Commission: Higher Education policy
<http://ec.europa.eu/education/policy/higher-education/>
- European Expert Network on Economics of Education (EENEE)
<http://www.eenee.de/eeneeHome/EENEE.html>
- Network of Experts on Social Aspects of Education and Training (NESET: <http://nesetweb.eu/en/>); its predecessor NESSE published several useful reports, including: Mind the Gap — education inequality across EU regions, 2012
- Cedefop skills forecast
<http://www.cedefop.europa.eu/EN/about-cedefop/projects/forecasting-skill-demand-and-supply/skills-forecasts.aspx>

ANNEX

Table 1 – Tertiary education attainment (total)

	2000	2006	2010	2011	2012	2013	2014	2015	2016	Target
EU 28	22.4 ^{EU2 7}	29.0	33.8	34.8	36.0	37.1	37.9	38.7	39.1	40
Belgium	35.2	41.4	44.4	42.6	43.9	42.7	43.8	42.7	45.6	47
Bulgaria	19.5	25.3	28.0	27.3	26.9	29.4	30.9	32.1	33.8	36
Czech Republic	13.7	13.1	20.4	23.7	25.6	26.7	28.2	30.1	32.8	32
Denmark	32.1	43.0	41.2	41.2	43.0	43.4	44.9	47.6	47.7	40
Germany	25.7	25.8	29.7	30.6	31.8	32.9	31.4	32.3	33.2	42
Estonia	30.8	32.5	40.2	40.2	39.5	42.5	43.2	45.3	45.4	40
Ireland	27.5	41.3	50.1	49.7	51.1	52.6	52.2	52.3	52.9	60
Greece	25.4	26.9	28.6	29.1	31.2	34.9	37.2	40.4	42.7	32
Spain	29.2	39.4	42.0	41.9	41.5	42.3	42.3	40.9	40.1	44
France	27.4	39.7	43.2	43.1	43.3	44.0	43.7	45.0	43.6	50
Croatia	:	16.7	24.5	23.9	23.1	25.6	32.1	30.8	29.3	35
Italy	11.6	17.6	19.9	20.4	21.9	22.5	23.9	25.3	26.2	26
Cyprus	31.1	46.1	45.3	46.2	49.9	47.8	52.5	54.5	53.4	46
Latvia	18.6	19.3	32.6	35.9	37.2	40.7	39.9	41.3	42.8	34
Lithuania	42.6	39.4	43.8	45.7	48.6	51.3	53.3	57.6	58.7	48.7
Luxembourg	21.2	35.5	46.1	48.2	49.6	52.5	52.7	52.3	54.6	66
Hungary	14.8	19.4	26.1	28.2	29.8	32.3	34.1	34.3	33.0	30.3
Malta	7.4 ^u	20.7	22.1	23.4	24.9	26.0	26.5	27.8	29.9	33
Netherlands	26.5	35.8	41.4	41.2	42.2	43.2	44.8	46.3	45.7	40
Austria	:	21.1	23.4	23.6	26.1	27.1	40.0	38.7	40.1	38
Poland	12.5	24.7	34.8	36.5	39.1	40.5	42.1	43.4	44.6	45
Portugal	11.3	18.3	24.0	26.7	27.8	30.0	31.3	31.9	34.6	40
Romania	8.9	12.4	18.3	20.3	21.7	22.9	25.0	25.6	25.6	26.7
Slovenia	18.5	28.1	34.8	37.9	39.2	40.1	41.0	43.4	44.2	40
Slovakia	10.6	14.4	22.1	23.2	23.7	26.9	26.9	28.4	31.5	40
Finland	40.3	46.2	45.7	46.0	45.8	45.1	45.3	45.5	46.1	42
Sweden	31.8	39.5	45.3	46.8	47.9	48.3	49.9	50.2	51.0	40
United Kingdom	29.0	36.4	43.1	45.5	46.9	47.4	47.7	47.9	48.2	:

Source: Eurostat (LFS, table [t2020_41]).

Note: the national target for Germany includes post-secondary non-tertiary education (ISCED level 4), which is however not included in the data columns 2000 to 2016; France and Finland have slightly different definitions of the national target.

Table 2 — Tertiary education attainment by gender

	Males				Females				Gender gap 2016		Female share (%)
	2013	2014	2015	2016	2013	2014	2015	2016	Absolute (F-M)	Relative (% F-M)	
EU 28	32.8	33.6	34.0	34.4	41.4	42.3	43.4	43.9	9.5	24.3	55.9
Belgium	36.2	37.4	36.7	40.4	49.3	50.2	48.7	50.7	10.3	22.6	55.7
Bulgaria	21.8	23.4	24.8	27.2	37.6	39.0	39.9	41.0	13.8	40.8	58.3
Czech Republic	24.0	24.2	24.7	27.2	29.6	32.5	35.9	38.7	11.5	35.1	57.2
Denmark	35.2	39.4	39.6	41.0	51.8	50.5	55.9	54.6	13.6	28.5	56.3
Germany	32.2	32.0	32.2	33.4	33.7	30.8	32.4	33.0	-0.4	-1.2	48.8
Estonia	31.8	32.8	34.5	38.8	53.7	54.2	56.7	52.4	13.6	30.0	55.8
Ireland	45.9	45.1	45.1	46.6	58.7	58.6	58.6	58.5	11.9	22.5	58.4
Greece	30.8	32.9	35.3	36.2	39.0	41.6	45.5	48.8	12.6	29.5	58.7
Spain	37.1	36.8	34.8	33.5	47.5	47.8	47.1	46.6	13.1	32.7	58.5
France	39.4	39.2	40.3	38.1	48.4	47.9	49.6	48.8	10.7	24.5	57.5
Croatia	21.7	25.6	23.7	22.2	29.7	38.9	38.1	36.7	14.5	49.5	61.6
Italy	17.7	18.8	20.0	19.9	27.3	29.1	30.8	32.5	12.6	48.1	61.8
Cyprus	41.6	46.0	46.7	43.9	53.4	58.2	61.6	62.1	18.2	34.1	60.7
Latvia	28.3	27.8	26.8	30.1	53.1	52.3	56.5	56.1	26.0	60.7	64.2
Lithuania	41.9	44.0	47.2	48.1	60.8	62.7	68.4	68.8	20.7	35.3	60.1
Luxembourg	49.2	49.8	46.8	52.7	55.6	55.4	57.7	56.5	3.8	7.0	50.9
Hungary	26.8	28.0	27.6	26.4	37.8	40.3	41.0	39.6	13.2	40.0	59.4
Malta	22.7	22.8	23.6	27.4	29.5	30.5	32.2	32.5	5.1	17.1	52.6
Netherlands	40.1	41.6	43.0	41.7	46.4	48.0	49.6	49.7	8.0	17.5	54.3
Austria	26.4	38.3	37.5	38.3	27.8	41.6	40.0	42.0	3.7	9.2	51.9
Poland	32.9	34.2	35.1	35.6	48.4	50.2	52.0	53.9	18.3	41.0	59.2
Portugal	24.0	23.2	23.3	27.3	35.7	38.9	40.1	41.6	14.3	41.3	61.6
Romania	21.6	22.9	24.2	23.9	24.2	27.2	27.2	27.4	3.5	13.7	51.9
Slovenia	31.1	30.0	32.0	33.6	49.6	53.6	56.4	55.3	21.7	49.1	61.3
Slovakia	22.3	22.5	22.8	24.0	31.8	31.5	34.4	39.4	15.4	48.9	60.9
Finland	37.6	38.2	38.1	38.4	52.9	52.6	53.4	54.4	16.0	34.7	57.0
Sweden	41.8	42.4	43.2	43.4	55.2	57.9	57.7	59.2	15.8	31.0	56.3
United Kingdom	44.4	44.3	44.5	46.0	50.4	51.1	51.1	50.3	4.3	8.9	52.7

Source: Eurostat (LFS, tables [t2020_41] and [lfsa_pgaed]).

Note: Absolute gender gap = tertiary attainment rate females — tertiary attainment rate males;
 Relative gender gap = Absolute gender gap / Total tertiary attainment rate * 100;
 Female share (%) = Female tertiary graduates 30-34 / Total tertiary graduates 30-34 (in %).

Table 3 — Tertiary education attainment by country of birth

	2010			2016			Foreign — Native Gap
	Total	Foreign-born	Native	Total	Foreign-born	Native	
EU 28	33.8	28.3	34.7	39.1	35.3	39.9	-4.6
Belgium	44.4	36.3	46.5	45.6	36.9	48.2	-11.3
Bulgaria	28.0	:	27.9	33.8	:	33.7	:
Czech Republic	20.4	31.1	20.1	32.8	33.4	32.7	0.7
Denmark	41.2	28.5	42.7	47.7	59.8	45.1	14.7
Germany	29.7	23.9	31.2	33.2	30.8	34.1	-3.3
Estonia	40.2	56.6	39.5	45.4	46.5	45.3	1.2
Ireland	50.1	55.1	48.5	52.9	58.4	50.5	7.9
Greece	28.6	11.5	31.7	42.7	12.3	46.5	-34.2
Spain	42.0	24.4	47.4	40.1	22.4	44.8	-22.4
France	43.2	32.1	44.9	43.6	39.1	44.3	-5.2
Croatia	24.5	14.9	25.3	29.3	20.5	30.2	-9.7
Italy	19.9	12.7	21.3	26.2	13.4	29.5	-16.1
Cyprus	45.3	36.2	50.9	53.4	37.1	61.7	-24.6
Latvia	32.6	:	32.8	42.8	62.4	42.0	20.4
Lithuania	43.8	:	43.6	58.7	:	58.2	:
Luxembourg	46.1	51.2	39.5	54.6	57.2	50.9	6.3
Hungary	26.1	46.8	25.7	33.0	25.3	33.2	-7.9
Malta	22.1	28.9	21.8	29.9	35.6	29.3	6.3
Netherlands	41.4	34.2	42.8	45.7	32.4	48.2	-15.8
Austria	23.4	24.2	23.1	40.1	34.8	42.3	-7.5
Poland	34.8	:	34.8	44.6	50.7	44.6	6.1
Portugal	24.0	19.9	24.7	34.6	29.2	35.1	-5.9
Romania	18.3	:	18.3	25.6	:	25.6	:
Slovenia	34.8	13.8	36.2	44.2	19.2	46.8	-27.6
Slovakia	22.1	:	22	31.5	:	31.5	:
Finland	45.7	24.7	47.2	46.1	32.3	47.8	-15.5
Sweden	45.3	43.2	45.9	51.0	49.2	51.9	-2.7
United Kingdom	43.1	42.4	43.3	48.2	54.7	45.6	9.1

Source: Eurostat (LFS, table [edat_lfs_9912]).