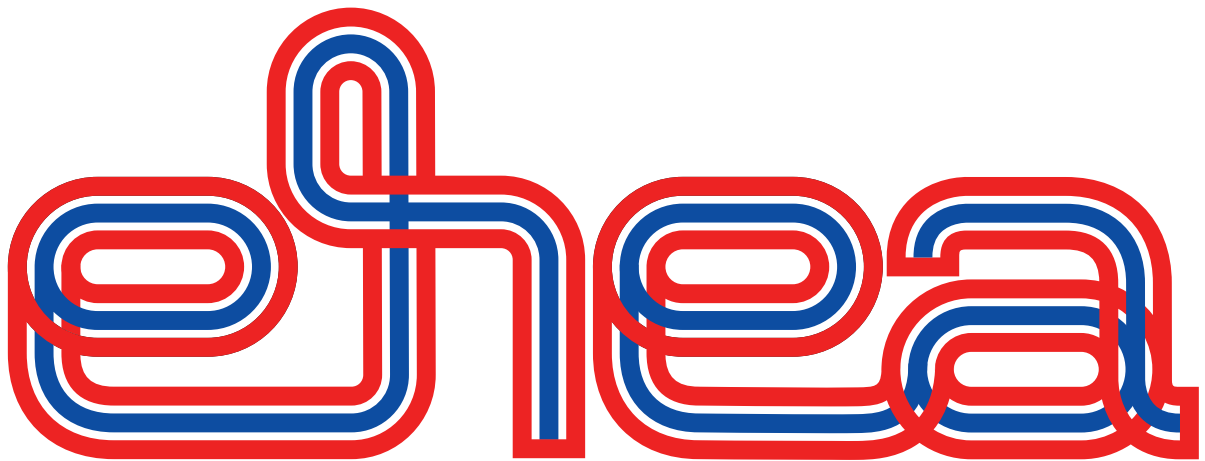




European  
Commission

# The European Higher Education Area in 2024

*Bologna Process  
Implementation Report*



This document is published by the European Education and Culture Executive Agency (EACEA, Unit A6 – Platforms, Studies and Analysis).

**Please cite this publication as:**

European Commission / EACEA / Eurydice, 2024. *The European Higher Education Area in 2024: Bologna Process Implementation Report*. Luxembourg: Publications Office of the European Union.

**European Education and Culture Executive Agency**

Unit A6 – Platforms, Studies and Analysis  
Boulevard Simon Bolivar 34 (Unit A6)  
B-1049 Brussels

E-mail: [eacea-eurydice@ec.europa.eu](mailto:eacea-eurydice@ec.europa.eu)

Website: <http://eurydice.eacea.ec.europa.eu>

*Printed by the Publications Office of the European Union in Luxembourg*

Text completed in April 2024.

Luxembourg: Publications Office of the European Union, 2024

© European Education and Culture Executive Agency, 2024

The reuse policy of European Commission documents is implemented by Commission Decision 2011/833/EU of 12 December 2011 on the reuse of Commission documents (OJ L 330, 14.12.2011, p. 39). Unless otherwise noted, the reuse of this document is authorised under a Creative Commons Attribution 4.0 International (CC BY 4.0) licence (<https://creativecommons.org/licenses/by/4.0>). This means that reuse is allowed provided appropriate credit is given and any changes are indicated.

For any use or reproduction of elements that are not owned by the European Union, permission may need to be sought directly from the respective rightholders.

Print

ISBN 978-92-9488-603-3

doi:10.2797/351309

EC-02-24-018-EN-C

PDF

ISBN 978-92-9488-602-6

doi:10.2797/483185

EC-02-24-018-EN-N

# CHAPTER 1: EUROPEAN HIGHER EDUCATION

## AREA KEY DATA

---

### The 2020 Rome Communiqué

The 2020 Rome Communiqué, adopted by Ministers of Higher Education of the European Higher Education Area (EHEA) in the Rome Ministerial Conference in November 2020, outlines a vision for 'building an inclusive, innovative and interconnected EHEA by 2030, able to underpin a sustainable, cohesive and peaceful Europe' and commits to 'overcoming the social inequities that still limit the achievement of a fully inclusive EHEA' <sup>(1)</sup>.

### Chapter outline

This chapter provides information on the framework conditions for higher education in the different countries of the EHEA. The aim is to give insight on the evolution of these conditions in the context of the Bologna Process implementation across the EHEA through statistical data on key features of European higher education. The topics covered are: evolution of student and staff involvement; access, participation, and employability of higher education students; changes in the number of higher education institutions; evolution of public funding in higher education.

### Technical note

The comparative overview is based on a five-year period. Data has been produced for reference years between 2015/2016 and 2020/2021 (the most recent year with statistical data available). Data comparison between the two time-points, however, must be interpreted with caution due to the impact and limitations introduced by the COVID 19 pandemic for reference year 2020/2021.

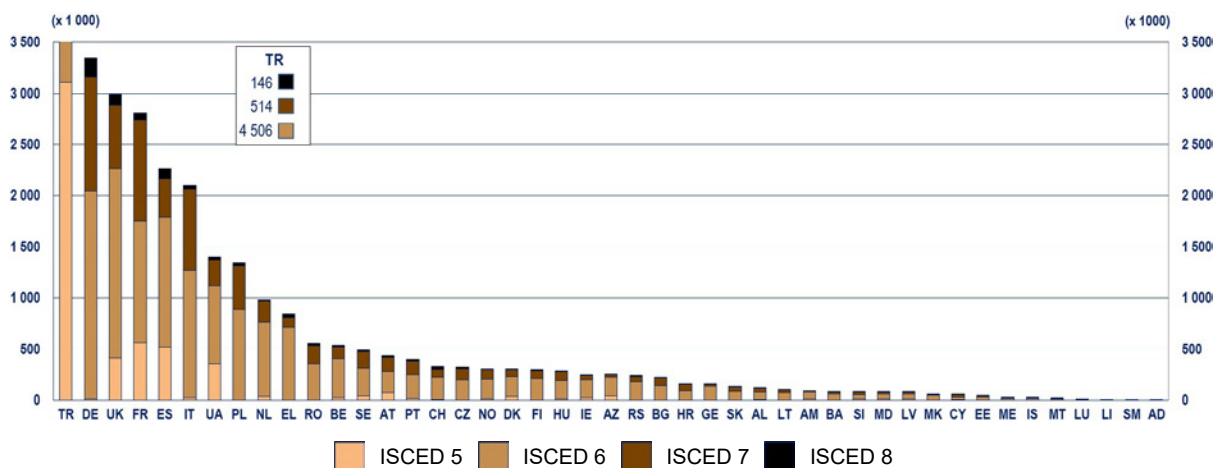
---

<sup>(1)</sup> Rome Ministerial Communiqué, 19 November 2020.

## 1.1. Student population

Figure 1.1 shows the number of students enrolled in tertiary education in 2020/2021, and their distribution in each ISCED level between ISCED 5 and ISCED 8. ISCED 5 corresponds to short-cycle programmes, ISCED 6 to first-cycle programmes (bachelor programme or equivalent), ISCED 7 to second cycle (master programme or equivalent) and ISCED 8 to third-cycle programmes (doctoral or equivalent).

Figure 1.1: Number of students enrolled in tertiary education by ISCED level, 2020/2021



(x 1 000)	TR	DE	UK	FR	ES	IT	UA	PL	NL	EL	RO	BE	SE	AT	PT	CH
ISCED 5	3 114.6	11.0	414.3	565.7	524.3	23.1	357.0	0.5	33.8	:	:	25.1	41.0	74.1	18.1	3.3
ISCED 6	4 506.1	2 032.4	1 844.6	1 185.8	1 263.1	1 244.7	770.6	884.8	730.8	715.1	359.3	379.3	275.3	203.2	231.1	221.8
ISCED 7	514.2	1 115.9	621.2	992.7	377.9	795.7	247.6	431.9	206.2	95.0	178.1	116.6	155.1	141.7	131.0	80.6
ISCED 8	145.7	192.3	113.9	65.1	95.8	33.3	26.7	30.6	16.9	33.7	23.1	18.8	19.1	19.4	23.5	26.7
	CZ	NO	DK	FI	HU	IE	AZ	RS	BG	HR	GE	SK	AL	LT	AM	BA
ISCED 5	1.0	10.7	35.7	:	11.8	22.7	41.5	:	:	0.01	:	2.4	5.8	:	12.3	:
ISCED 6	198.7	198.0	193.9	210.6	183.2	175.2	180.6	180.0	147.8	91.9	139.2	83.2	74.4	75.2	68.9	59.1
ISCED 7	107.2	93.5	69.4	76.0	82.4	42.1	23.8	51.2	72.0	65.1	17.5	48.8	40.5	27.0	10.6	22.5
ISCED 8	21.8	9.3	9.2	18.7	10.1	9.5	3.2	11.4	6.6	3.9	3.8	6.6	3.0	2.7	0.9	1.2
	SI	MD	LV	MK	CY	EE	ME	IS	MT	LU	LI	SM	AD		EHEA	
ISCED 5	10.6	14.7	14.1	:	3.8	:	:	0.8	2.4	0.9	:	:	0.01			5 397.2
ISCED 6	45.9	44.8	44.2	50.9	23.2	27.5	19.5	14.8	9.3	3.1	0.4	0.8	0.6			19 392.7
ISCED 7	22.8	18.8	18.2	3.9	24.9	15.2	3.1	5.8	6.1	2.8	0.3	0.08	0.05			7 172.8
ISCED 8	3.5	2.3	2.0	0.5	1.7	2.3	0.1	0.7	0.6	0.9	0.2	0.01	0.03			1 021.6

Source: Eurostat, UOE and additional collection for the other EHEA countries.

### Notes:

Countries are arranged by the total number of students in tertiary education. The graph is scaled to three thousand for readability. >1 000 (x 1 000) no decimals; <1 000 (x 1 000): 1

EHEA: refers to total number of students across all countries with available data.

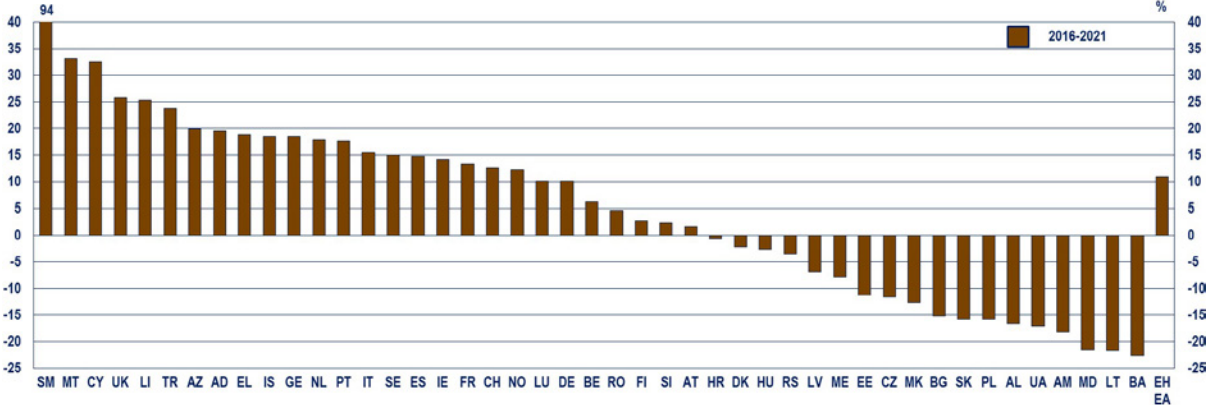
There were about 32.985 million tertiary education students enrolled in the EHEA in the academic year 2020/2021. Overall, across the EHEA, most tertiary students (58.8%) were enrolled in first-cycle programmes (bachelor programmes), while 21.7% were enrolled in second-cycle programmes (master's degree or equivalent level), and 3.1% in third-cycle programmes (doctoral or equivalent level). 16.4% of tertiary education students were enrolled in short-cycle tertiary education programmes.

Türkiye (8.3 million) and Germany (3.4 million), which each had a total population close to 85 million, accounted for the highest number of tertiary education students – equivalent to about 35% of the EHEA total student population. It is noticeable that Türkiye had an ISCED 5 student population that exceeded the combined total ISCED 5 population of the rest of the EHEA countries, and at ISCED 6 level had the

largest number of bachelor students. All education levels considered, the United Kingdom (2.9 million), and France (2.8 million), had the next largest student populations followed by Spain and Italy – each with more than 2 million students enrolled in tertiary education. These six countries accounted for 66% of the total student population in the EHEA. Ukraine and Poland had more than 1 million students, while 4 out of the 45 countries with available data (nearly 9%) had more than 500 000 students in tertiary education. In the remaining 33 EHEA countries with available data, the median number of enrolled students was 123 797, while the average number of students was 166 959.

Figure 1.2 shows the percentage change in the number of students enrolled in tertiary education over a five-year period, between the most recent time-point (2020/2021) for which data is available and 2015/2016.

**Figure 1.2: Percentage change in the number of students enrolled in tertiary education, 2015/2016°-2020/2021**



%	SM	MT	CY	UK	LI	TR	AZ	AD	EL	IS	GE	NL	PT	IT	SE	ES
2016-2021	93.8	33.2	32.6	25.9	25.5	23.8	20.0	19.5	18.9	18.5	18.5	18.0	17.7	15.5	15.1	14.9
	IE	FR	CH	NO	LU	DE	BE	RO	FI	SI	AT	HR	DK	HU	RS	LV
2016-2021	14.3	13.3	12.6	12.3	10.2	10.1	6.2	4.7	2.8	2.4	1.7	-0.6	-2.1	-2.7	-3.4	-6.8
	ME	EE	CZ	MK	BG	SK	PL	AL	UA	AM	MD	LT	BA			EHEA
2016-2021	-7.9	-11.2	-11.6	-12.7	-15.1	-15.7	-15.8	-16.5	-17.0	-18.1	-21.4	-21.6	-22.7			11.0

Source: Eurostat, UOE and additional collection for the other EHEA countries.

**Notes:**

Countries are arranged by the percentage change in the number of students in tertiary education (2016-2021). EHEA: percentage change calculated based on total number of students of countries with data available for both reference years.

Compared to 2015/2016, the student population continued to increase in more than half of the countries. The total percentage increase registered in EHEA was 11% (calculated as the percentage change in the total student population at all education levels across the EHEA between the two reference time points).

27 of 45 EHEA countries with available data recorded an increase, and most of these countries registered a rise of more than 15% (all education levels considered). The largest percentage increase in the number of enrolled students took place in San Marino (93.8%), followed by Malta (33.2%), and Cyprus (32.6%). Among the countries with a large student population (see Figure 1.1 for reference), Türkiye and the United Kingdom recorded an increase of more than 20%, while Germany, France, Spain, and Italy saw an increase of more than 10%. The most pronounced increase was recorded in Türkiye – more than 1.5 million students, and in the United Kingdom – more than 600 000 students. A notable increase of 300 000 students or more was observed in France and Germany, and nearly 300 000 in Spain and Italy.

Despite the overall upward trend observed during this period, 18 countries saw a decline in student enrolments, with decreases ranging between 0.6% (Croatia) to 22.7% (Bosnia and Herzegovina). Steep decreases of more than 20% were also observed in Lithuania (21.6%), and Moldova (21.4%), followed by Armenia (18%), Ukraine (17%), Albania, Poland, Slovakia, and Bulgaria (more than 15%). North

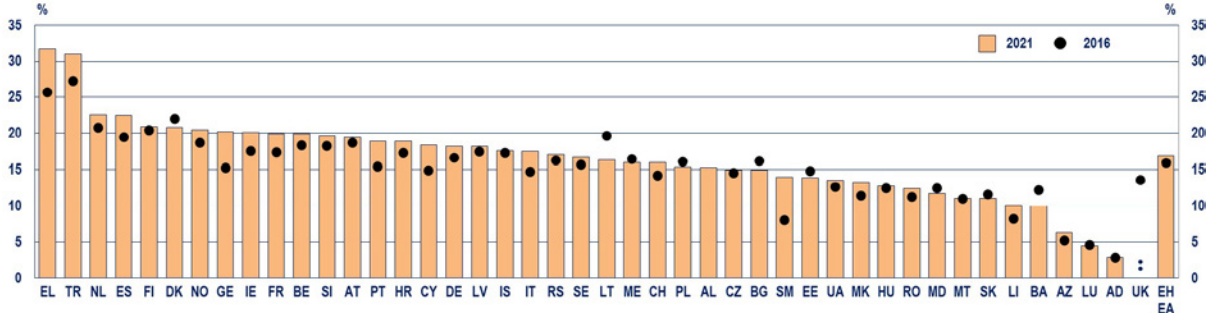
Macedonia, Czechia, and Estonia registered a decrease of more than 11%. Among the countries with the largest student populations in this group, Ukraine, and Poland registered decreases of more than 250 000 students. This report is unable to analyse all the factors that may explain the different changes during the reference period. Policy and reforms in the education area may have had an impact upon the conditions to participate in higher education, and so too may broader demographic and socio-economic developments.

To understand the changing structures of the (higher) education systems it is also important to bear in mind, for example, whether short-cycle tertiary programmes exist, and whether part-time study is facilitated. Country-specific characteristics, national policies aimed at increasing tertiary entry and completion rates, financing provided to institutions and students are all important features to consider.

Changes in economic and learning conditions also influence the desire and ability of young people to enrol in higher education. Institutional conditions are also relevant and include: (a) admission rules and procedures, (b) the cost/benefit analysis involved in acquiring higher education – such as fees, financial support, employment rates of graduates, and (c) the length of studies.

Figure 1.3 presents the change in enrolment rates in tertiary education between 2015/2016 and 2020/2021 for students aged 18-34, the most frequent age-range for students attending higher education. The indicator thus shows the share of the national population aged 18-34 that studies in tertiary education.

**Figure 1.3: Enrolment rates in tertiary education (as a % of the total population aged 18-34), 2015/2016°-°2020/2021**



%	EL	TR	NL	ES	FI	DK	NO	GE	IE	FR	BE	SI	AT	HR	PT	CY	DE	LV	IS	IT	RS	SE	LT
2021	31.7	31.0	22.6	22.5	20.9	20.8	20.5	20.2	20.1	20.0	19.9	19.6	19.5	18.9	18.9	18.4	18.2	18.2	17.6	17.6	17.1	16.8	16.3
2016	25.7	27.2	20.8	19.4	20.4	22.0	18.7	15.2	17.6	17.4	18.3	18.2	18.7	17.3	15.0	14.9	16.7	17.5	17.3	14.8	16.2	15.7	19.6
%	ME	CH	PL	AL	CZ	BG	SM	EE	UA	MK	HU	RO	MD	MT	SK	LI	BA	AZ	LU	AD	UK	EHEA	
2021	16.0	16.0	15.4	15.3	15.0	15.0	14.0	13.9	13.6	13.3	12.7	12.4	11.7	11.1	11.0	10.1	10.0	6.3	4.5	2.8	:	16.9	
2016	16.4	14.2	16.1	:	14.5	16.2	8.0	14.8	12.7	11.4	12.5	11.2	12.5	11.0	11.6	8.2	12.2	5.2	4.6	2.8	13.6	15.9	

Source: Eurostat, UOE and additional collection for the other EHEA countries.

**Notes:**

Countries are arranged by the share of enrolment rates for students aged 18-34 for 2021.

EHEA: Refers to the EHEA median calculated based on countries with available data for both reference years.

The EHEA enrolment rate median increased from 15.9% (2016) to 16.9% (2021). The EHEA average enrolment rate in tertiary education, based on available data for 43 countries for both reference years, raised from 17.3% (2016) to 19.9% (2021). The EHEA countries showed different trends regarding the tertiary education enrolment rates. 32 of 42 countries with available data for both time-points registered an increase of the enrolment rates in 2021. In 20 countries the enrolment rates increased and were above the EHEA median while 12 countries registered an increase but were below the EHEA median. Greece and Türkiye continued to be the countries with the highest enrolment rates also in 2020/2021 and registered high increases between the two time-points (respectively 6 and 3.8 percentage points). San Marino also registered a very high increase of nearly 6 percentage points but remained below the EHEA median also in 2021. The increase in the enrolment rates in Georgia (about 5 percentage points increase), Portugal and Cyprus (3.5 percentage points increase) placed them above the EHEA median for 2021 while in 2016 their enrolment rates were below the EHEA median for 2016. Among the countries with available data for both time-points, 10 countries registered a decrease with Lithuania noting the highest decline of 3.3 percentage points. The lowest enrolment rates (below 5%) were recorded in Luxembourg and Andorra. However, the data for these two countries does not reveal an accurate picture as most students aged 18-34 studied abroad.

More than a third (12 of 42 countries with available data), showed a decrease in the total population aged 18-34 but registered an increase in the student population and hence an increase in the share of people aged 18-34 enrolled in higher education programmes. This was the case of Greece, Georgia, and Spain, which were among the countries registering high increases in the enrolment rates between 2016 and 2021. Denmark registered an increase of the total population aged 18-34 but a decrease in the student population within this age group and subsequently registered a decrease of the enrolment rate. Türkiye, Germany, France, and Italy were the countries with the largest total population (above 10 million) and the largest student population (above 1 500 million) in this age group for both time-points. However, while Türkiye registered a strong increase (3.8 percentage points) in the enrolment rate, the other countries showed an increase of below 3 percentage points with Germany registering the lowest increase of 1.6 percentage points among this group of countries.

Data in Figure 1.3 also show that 16 countries registered decreases both of the total and the student populations aged 18-34. In eight countries <sup>(2)</sup>, despite the decreases in both the total population aged 18-34 and the total student population within this age group, there was a slight increase of the enrolment rates. Conversely, in the remaining eight <sup>(3)</sup> countries the decrease in both the total and the student populations aged 18-34 lead to a decline of the enrolment rates.

The fluctuations in the enrolment rates could be the product of a number of different factors, such as: policy and institutional reforms creating conditions for increased interest to engage in tertiary education studies, strengthened institutional capacity to absorb and sustain a higher number of students in tertiary education; a time-lagged effect of changes in the student cohort size for this age group; changes in the labour market leading to an increased interest in higher education studies. In addition, it is clear that the COVID-19 pandemic had no negative impact in 2020/2021 on the demand for higher education, as enrolment rates in most EHEA countries continued to grow.

---

<sup>(2)</sup> Croatia, Czechia, Hungary, Latvia, North Macedonia, Romania, Serbia, Ukraine.

<sup>(3)</sup> Bosnia and Herzegovina, Bulgaria, Estonia, Lithuania, Moldova, Montenegro, Poland, Slovakia.

## 1.2. Statistical data on access and participation

This sub-section presents statistical data on higher education students related to the following characteristics: the impact of parental education on higher education participation, gender balance, participation of migrant and mature students in higher education, and data on part-time students.

### 1.2.1. Access and participation

Central to the social dimension of the Bologna Process is the aim that the student body should reflect the diversity of the population, and that the background of students should not have an impact on their access to and participation in higher education. Given the diversity of socio-economic and cultural realities across the EHEA, as well as the responsibility for managing education and higher education systems that lies with public authorities, each country decides which characteristics to consider when comparing the composition of the student body with the total population. The societal groups which are identified as under-represented in higher education may therefore also differ between countries.

Nevertheless, some common themes are inevitable across countries: low socio-economic background (in the form of low income or the low educational background of parents), gender, immigrant status and disability are often agreed as main aspects of disadvantage. Such characteristics are often central to inclusion policies <sup>(4)</sup> as well as lifelong learning strategies for adjustment with individual and labour market needs, 'where higher education institutions play a central role in transferring knowledge and strengthening regional development, including by the continuous development of competences and reinforcement of knowledge alliances' <sup>(5)</sup>. Mature students are specifically targeted in many countries, as students from under-represented groups that may be encouraged to enter higher education with a delay or solicited to engage in continuing education in the context of life-long learning strategies.

#### Parental background

The educational background of parents is one of the most important factors influencing the chances of learners to participate in higher education. Previous editions of the BPIR have observed that students with parents with tertiary educational attainment are most-likely to engage in higher education study programmes (European Commission / EACEA / Eurydice, 2020).

Figure 1.4 depicts first-cycle new entrants with parents of high educational attainment, and the corresponding proportion of people with high educational attainment (ISCED 5-8) in the hypothetical parents' cohort. The figure presents the situation in 2021 <sup>(6)</sup>. Due to changes in the methodology for data collection in 2021, break in series makes the comparison with previous years not feasible. The definition of level of education of parents has also changed. For more details, see the Glossary and methodological notes.

---

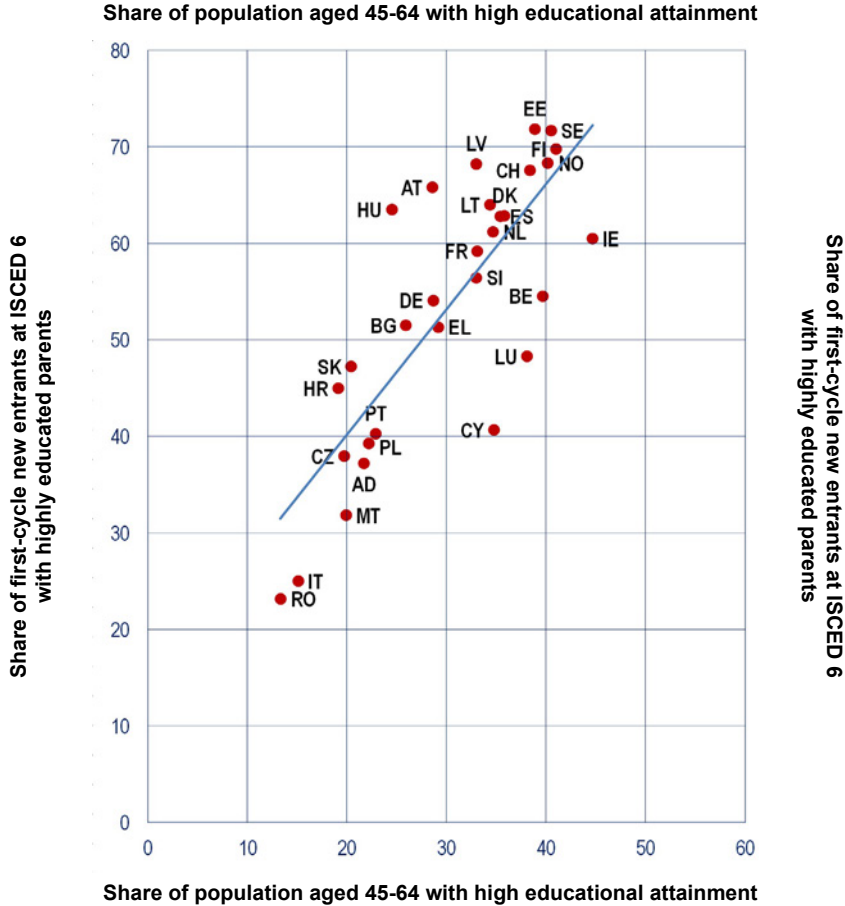
<sup>(4)</sup> [EURASHE's statement for the European Higher Education Area ministers' conference in Rome 2020.](#)

<sup>(5)</sup> [Bucharest Communiqué 2012](#), p. 2.

<sup>(6)</sup> Due to changes in the methodology for data collection in 2021, comparison with previous years is not feasible. For more details, see the Glossary and methodological notes.



**Figure 1.4: Relationship between the educational background of first-cycle new entrants (ISCED 6) and the educational attainment of their parents' cohort (population aged 45-64), 2020/2021**



	RO	IT	MT	AD	CZ	PL	PT	CY	HR	SK	LU	EL	BG	DE	BE
<b>New entrants</b>	23.2	25.1	31.9	37.3	38.0	39.3	40.4	40.7	45.1	47.3	48.4	51.4	51.6	54.2	54.6
<b>Hypothetical Parents cohort</b>	13.3	15.1	19.9	21.7	19.7	22.2	22.9	34.8	19.1	20.4	37.4	29.2	25.9	28.7	39.7
	SI	FR	IE	NL	ES	DK	HU	LT	AT	CH	LV	NO	FI	SE	EE
<b>New entrants</b>	56.5	59.3	60.6	61.3	62.9	63.0	63.6	64.1	65.9	67.7	68.3	68.4	69.9	71.8	71.9
<b>Hypothetical Parents cohort</b>	33.0	33.1	43.3	34.3	35.4	35.8	24.5	34.4	28.7	38.4	33.0	40.2	41.0	40.5	38.8

Source: Eurostat, EU-LFS, custom extraction and additional collection for the other EHEA countries.

**Notes:**

- Break in series for 2021.
- For definitions see the Glossary and methodological notes.
- Countries are arranged in ascending order according to the share of new entrants.

The graph shows the relationship between the share of first-cycle news entrants (ISCED 6), with highly educated parents, indicated on the Y axis, and the share of the population aged 45-64 with high educational attainment, displayed on the X axis. As seen from the scatterplot, there is a very clear linear relationship, around 0.8. The countries clustering close around the trend line denote a balance between the share of new entrants with parents with high educational attainment and the share of highly educated population. In 2021, in 17 of 30 countries with available data (56%) the share of new entrants was higher than 50% and the corresponding share of parents with a high educational attainment level was around a third of the population or in some cases even higher. Bulgaria and Hungary had also very high shares of new entrants (above 50%) with parents' cohort aged 45-64 accounting for a fourth of the total population. For example, in Finland, Sweden and Estonia the share of new entrants was about 70% with corresponding share of population aged 45-64 with high education attainment around 40%. On the other end, in Romania the share of new entrants was 23.2% with corresponding share of population with high educational attainment of 13.3%.

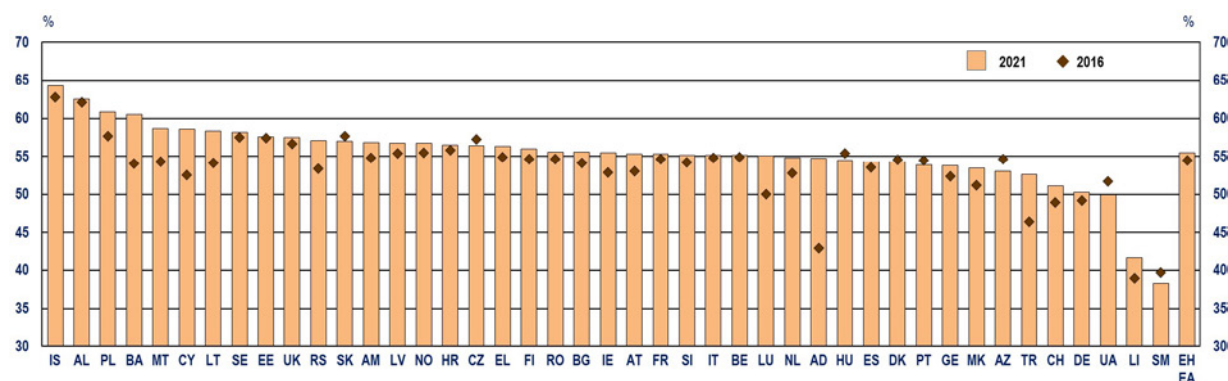
The analysis shows that the educational background of parents is still a robust predictor of whether young people are likely to participate in higher education.

## Gender balance

Equal opportunities for men and women to participate in higher education is a central concern of the social dimension within the Bologna Process. It is important to consider not only trends regarding overall numbers, but also gender distribution in different fields of study.

Figure 1.5 shows the percentage of women among new entrants in tertiary education in 2016 and 2021. As the figure demonstrates, in 2016, the share of female entrants was high (50% and above) in 37 out of 43 (86%) of the countries. In 2021 female students were in a majority in every EHEA country (40 out of 43 with available data) except Ukraine, Liechtenstein, and San Marino.

Figure 1.5: Share of women among new entrants in tertiary education (ISCED 5-8), 2015/2016 and 2020/2021



%	IS	AL	PL	BA	MT	CY	LT	SE	EE	UK	RS	SK	AM	LV	NO	HR	CZ	EL	FI	RO	BG	IE
2021	64.3	62.5	60.9	60.5	58.7	58.6	58.4	58.2	57.6	57.5	57.1	57.0	56.8	56.7	56.7	56.5	56.4	56.3	55.9	55.6	55.5	55.4
2016	62.8	62.1	57.7	54.1	54.3	52.5	54.1	57.5	57.4	56.6	53.4	57.7	54.8	55.4	55.5	55.8	57.2	54.9	54.6	54.7	54.1	52.9
%	AT	FR	SI	IT	BE	LU	NL	AD	HU	ES	DK	PT	GE	MK	AZ	TR	CH	DE	UA	LI	SM	EHEA
2021	55.3	55.3	55.2	55.2	55.2	55.0	54.8	54.8	54.5	54.3	54.3	53.9	53.8	53.5	53.1	52.6	51.1	50.2	49.9	41.6	38.3	55.4
2016	53.1	54.7	54.2	54.8	54.9	50.0	52.8	42.9	55.4	53.5	54.6	54.5	52.4	51.2	54.6	46.4	48.9	49.2	51.7	38.9	39.7	54.5

Source: Eurostat, UOE, OECD and additional collection for the other EHEA countries (extract 26 January 2024)

### Notes:

Countries are arranged in descending order by the share of women new entrants for 2021.

EHEA: Refers to the EHEA median calculated based on countries with available data for both reference years.

The share of women among new entrants in 2021 was the highest in Iceland, Albania, Poland, and Bosnia and Herzegovina – above 60% in all four countries.

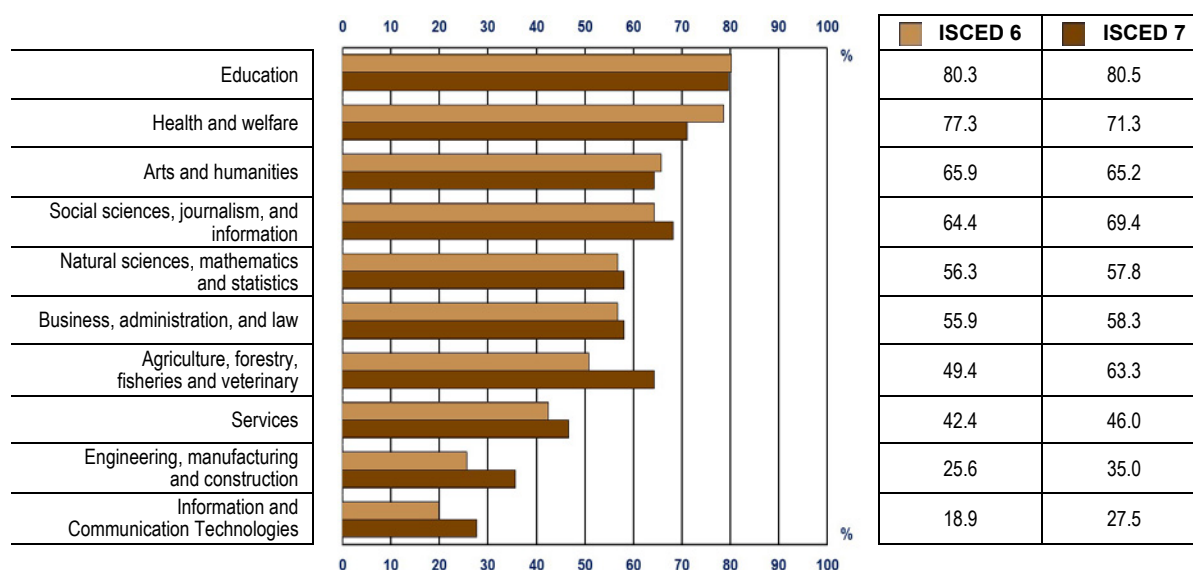
In Germany, Switzerland, Türkiye, and Andorra where the male entrants were a majority in 2016, the female participation increased to a level above 50% in 2021. As the figure demonstrates, looking at the change compared to 2016, the EHEA median slightly increased (55.4% in 2021 compared to 54.5% in 2016). This indicates that the trend for men to be under-represented in higher education has slightly grown during this five-year period.

The highest increases of female new entrants' share were observed in Andorra (11.9 percentage points), followed by Bosnia and Herzegovina (6.4 percentage points), Türkiye (6.2 percentage points), and Cyprus (6.1 percentage points). The highest decrease was registered in Ukraine (-1.8 percentage points) and San Marino (-1.4 percentage points).

While the overall change in the share of female and male students' participation is an important consideration, a clearer picture emerges through analysis of gender shares in different study fields.

Figure 1.6 depicts the median share of women among enrolled students in the first and second cycle by field of education in 2020/2021.

**Figure 1.6: Median percentage of women among enrolled students in Bologna structures by field of education and level of Bologna structure (ISCED 6 and 7), 2021**



Source: Eurostat, UOE and additional collection for the other EHEA countries.

**Notes:**

Fields are arranged in descending order by the median share of women at ISCED 6 level.

The median value is derived as the median of the percentage of women enrolled in Bologna structures across all EHEA countries for which data are available per ISCED level.

The country coverage varies across different study fields (see the Glossary and methodological notes).

In 2021, the median share of women varied between the fields and the different education cycles. The gender distribution among the selected fields of study should be observed in the context of the total enrolment rates in these fields. Across EHEA countries, for both education cycles, the highest median share was registered in the field of ‘Education’ (above 80%), followed by the field of ‘Health and welfare’ (above 70%). The ‘Education’ and ‘Health and welfare’ fields show the most important gender gap with both fields registering female participation of above 70% at ISCED°6 and ISCED 7 levels. In another four education fields, female representation is above 50% at both education levels. The lowest participation was registered in the field of ‘Information and communication technology’ as well as ‘Engineering’ at both ISCED levels. In these fields the difference (around nine percentage points) between the two education cycles was much more important compared to the other fields (except for the field of ‘Agriculture’ where the difference is close to 14 percentage points). In these two fields female participation was significantly higher in the second cycle than in the first cycle. In 2021 in 8 out of 10 fields, the percentage of women was higher in the second cycle. The share was almost equal in ‘Arts and humanities’. Only in ‘Health and welfare’, the median share was substantially lower in the second cycle (71.3%) than in the first (77.3%) – despite still being very high. Considering this analysis with relation to gender distribution among the selected fields in EHEA countries, women participation was the strongest in ‘Education’ and ‘Health and welfare’. In contrast, the male participation was considerably stronger (around 70% median share, both levels considered) in ‘Information and communication’ and ‘Engineering’ studies’ fields. Compared to 2016/2017, the trends are similar. However, in the field of ‘Social sciences’ and ‘Business administration’ the female median share at ISCED 7 increased while the median share at ISCED 6 decreased.

## Migrant status

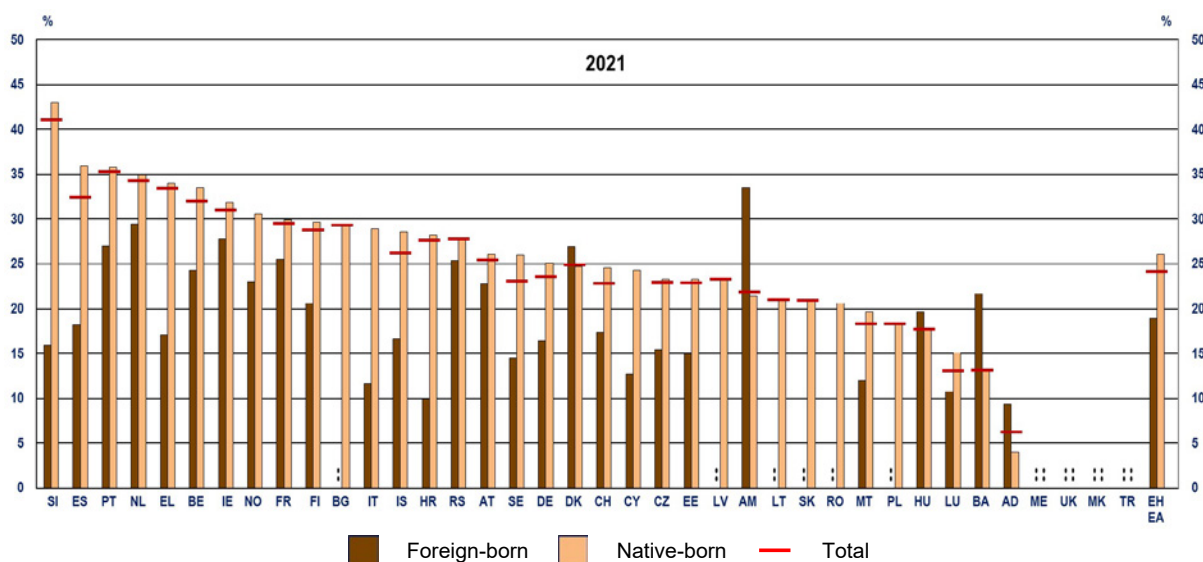
Having a migrant background is also an important factor influencing the chances of learners accessing higher education, especially if it coincides with low parental education. Immigrants and children of immigrants might lack the sufficient cultural, economic, and social capital, which have important effects on educational success (see e.g., Griga and Hadjar, 2014).

It is difficult to gather comparable and representative information on the participation of migrant students in higher education. Eurostat data presented in Figure 1.7 uses the country of birth as the criterion defining migrants, and this has two major limitations. Firstly, the group of foreign-born students includes not only migrants who become students, but also students who moved to the country for the purposes of study, i.e., mobile students. Not only does the concept of ‘foreign born’ mix groups with very different characteristics, but when numbers of mobile students are substantial, as they are in several countries, the picture is distorted.

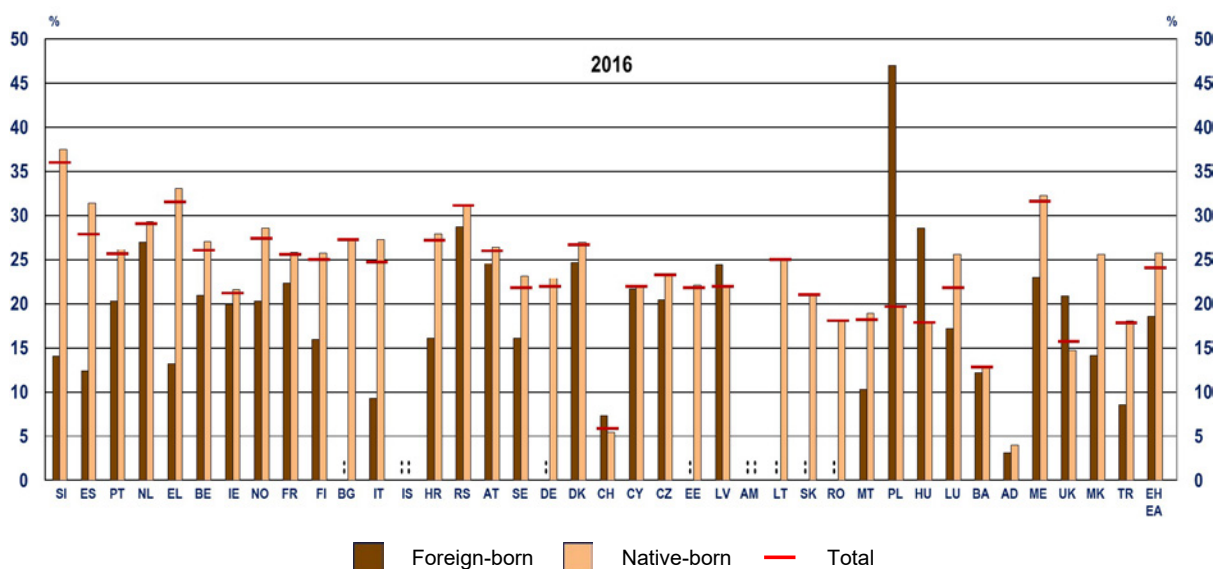
The second limitation of this data are that children of immigrants born in the country (often referred to as ‘second-generation immigrants’) are excluded. Also, series report a break in 2021 due to changes in the methodology for data collection. For these reasons, data must be interpreted with caution (7).

Figure 1.7 presents the participation rates in tertiary education of students aged 18 to 29 as a percentage of the respective total population based on their migration status, showing the situation in 2016 and 2021. The graph shows the participation of native-born 18–29-year-olds as a proportion of the total native-born population in this age group. Similarly, the following graph shows the foreign-born population thus provides the participation of the 18–29-year-olds compared to the total foreign-born population in this age group. This enables clear comparison between the two groups.

**Figure 1.7: Participation rates in tertiary education among people aged 18 to 29, foreign-born, native-born and total population, 2016 and 2021**



(7) For more details, see the Glossary and methodological notes.



2021

%	SI	ES	PT	NL	EL	BE	IE	NO	FR	FI	BG	IT	IS	HR	RS	AT	SE	DE	DK	CH
<b>Native-born (2021)</b>	43.0	36.0	35.8	35.0	34.0	33.5	31.9	30.6	29.9	29.7	29.2	28.9	28.6	28.2	27.9	26.1	26.0	25.1	24.7	24.6
<b>Foreign-born (2021)</b>	15.9	18.2	27.0	29.5	17.0	24.3	27.8	23.0	25.5	20.6	:	11.6	16.6	10.0	25.4	22.8	14.5	16.5	26.9	17.4
<b>Total (2021)</b>	41.1	32.4	35.3	34.3	33.4	32.0	31.0	:	29.6	28.8	29.4	:	26.3	27.7	27.8	25.5	23.1	23.6	24.9	22.9
%	CY	CZ	EE	LV	AM	LT	SK	RO	MT	PL	HU	LU	BA	AD	ME	UK	MK	TR	EHEA	
<b>Native-born (2021)</b>	24.3	23.3	23.3	23.2	21.4	21.2	20.9	20.6	19.7	18.4	17.7	15.1	13.0	4.0	:	:	:	:	26.1	
<b>Foreign-born (2021)</b>	12.7	15.4	15.0	:	33.5	:	:	:	12.0	:	19.7	10.8	21.7	9.3	:	:	:	:	18.9	
<b>Total (2021)</b>	:	23.0	23.0	23.3	21.9	21.0	21.0	:	18.3	18.4	17.8	13.1	13.2	6.3	:	:	:	:	24.2	

2016

%	SI	ES	PT	NL	EL	BE	IE	NO	FR	FI	BG	IT	IS	HR	RS	AT	SE	DE	DK	CH
<b>Native-born (2016)</b>	37.4	31.4	26.2	29.3	33.1	27.0	21.6	28.5	25.8	25.7	27.1	27.2	:	28.0	31.3	26.4	23.1	22.9	27.0	5.5
<b>Foreign-born (2016)</b>	14.1	12.4	20.3	27.0	13.2	20.9	20.0	20.3	22.3	16.0	:	9.3	:	16.1	28.7	24.6	16.1	:	24.7	7.4
<b>Total (2016)</b>	36.0	27.9	25.7	29.1	31.6	26.1	21.3	27.4	25.6	25.1	27.3	24.8	:	27.2	31.2	26.1	21.9	22.0	26.7	5.9
%	CY	CZ	EE	LV	AM	LT	SK	RO	MT	PL	HU	LU	BA	AD	ME	UK	MK	TR	EHEA	
<b>Native-born (2016)</b>	22.1	23.4	22.1	21.9	:	25.1	20.9	18.1	18.9	19.6	17.7	25.6	12.9	4.0	32.2	14.7	25.6	18.1	25.7	
<b>Foreign-born (2016)</b>	21.7	20.4	:	24.4	:	:	:	:	10.4	47.0	28.6	17.2	12.2	3.1	23.0	20.9	14.1	8.6	18.6	
<b>Total (2016)</b>	22.0	23.4	21.9	22.0	:	25.1	21.0	18.1	18.3	19.7	18.0	21.8	12.9	:	31.7	15.8	:	17.8	24.1	

Source: Eurostat, EU-LFS, custom extraction, and additional collection for the other EHEA countries.

EHEA: Refers to the EHEA median, which was calculated based on countries with available data.

### Notes:

Countries are arranged in descending order by the share of native-born population in 2021.

EHEA: refers to the EHEA median calculated based on countries with available data for both reference years.

2021: break in series. For more details see the Glossary and methodological notes.

Across EHEA countries, the native-born student population was 17 times more numerous than the foreign-born student population. The EHEA median for the native-born participation of young adults in tertiary education increased to 26.1% in 2021, while the median share of the foreign-born population increased to 18.9%. In most of the countries with available data, the level of participation was lower for foreign-born students, except for Hungary, Denmark, Bosnia and Herzegovina, Andorra, and Armenia where the foreign participation was slightly higher. In a fifth of the countries in both time-points the native-born student population was by 10 percentage points larger than the foreign-born student population.

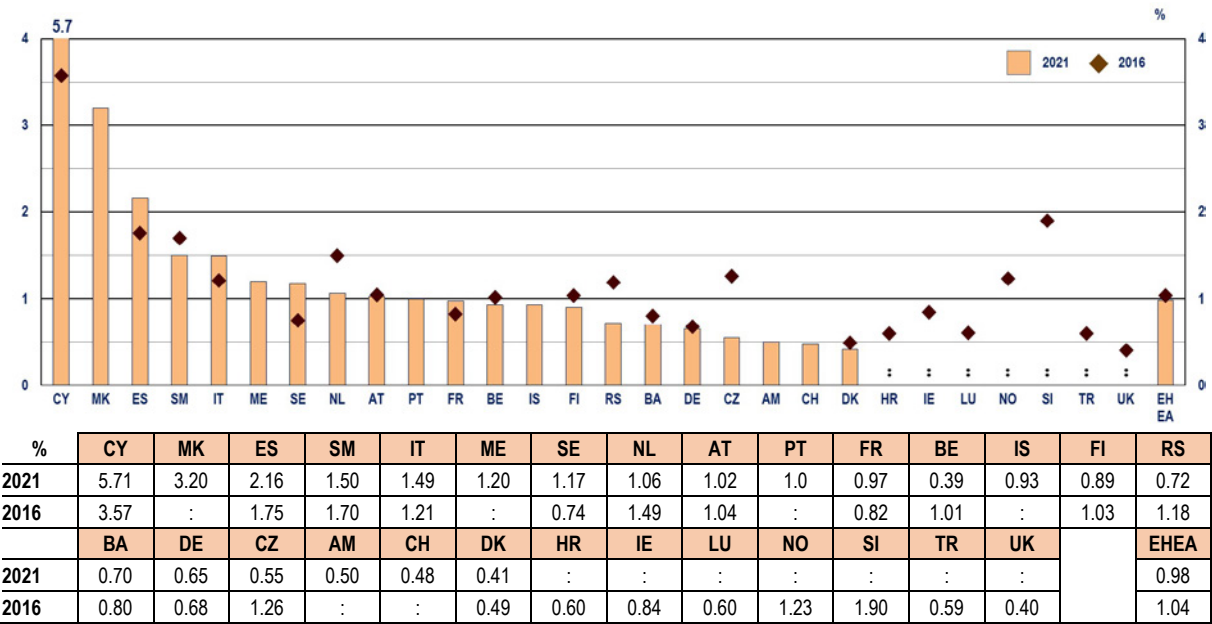
In 2021 disparities continued to be more evident in southern Mediterranean countries where the native-born participation rates were twice as high than those of foreign-born students (Italy, Greece, and Spain). In Hungary and Switzerland, the participation rates of foreign-born students in 2016 were higher than those of native-born students. Hungary maintained the same trend despite the decrease of the foreign-born population in 2021. Conversely, Switzerland inverted the trend as both populations

increased but the native-born population had a more pronounced evolution and outnumbered by 7 percentage points the foreign-born student population share in 2021. Given the methodological problem in some countries of distinguishing between foreign born and mobile students, the negative impact of the COVID-19 pandemic on student mobility flows may be part of the explanation for the decreased number of foreign-born students shown in the figure.

Indicators looking at differences in the chances of students attaining higher education by migrant background have similar limitations as Figure 1.7. Data are not available by 'migrant background' as such. Eurostat data are limited to making differences between the foreign-born and the native-born. The indicator looks at the resident population with tertiary attainment, irrespective of the country of graduation. This means that it includes foreign-born young people who arrived in a given country after obtaining a tertiary degree. In addition, it is still not possible to evaluate the chances of second-generation immigrants since they are classified among the native-born population.

Nevertheless, it is still interesting to examine the odds ratios of the native-born over the foreign-born to obtain a higher education degree. On Figure 1.8, when an odds ratio is higher than 1, it means that the native-born population have higher chances to attain higher education; when it is below 1, then the foreign-born population have greater odds to do so.

**Figure 1.8: Tertiary education attainment of 25 to 34-year-olds by country of birth: odds ratio of native-born over foreign-born population to complete tertiary education, 2016 and 2021**



Source: Eurostat, EU-LFS, custom extraction, and additional collection for the other EHEA countries. EHEA: Refers to the EHEA median, which was calculated based on countries with available data for both reference years.

**Notes:**

Countries are arranged in descending order by the odds ratio values in 2021. EHEA: refers to the EHEA median calculated based on countries with available data for both reference years. 2021: break in series (see Glossary and methodological note)

In 2021 the EHEA median of the odds ratio indicates an increase of tertiary education attainment of foreign-born population. Figure 1.8 reveals that in 2021 the biggest differences between the native-born and the foreign-born population in their chances to attain higher education existed in Cyprus, where the probability that native-born achieve higher education degree was five times higher compared to foreign-born. Foreign-born young people also had lower chances to attain higher education in North Macedonia, Spain, San Marino, Italy, Montenegro, and Sweden. In the Netherlands, and Austria the imbalance was not large and slightly above 1 indicating little prevalence of odds for native-born population, while in France the foreign-born population had slightly lower attainment chances. In Portugal the attainment odds ratio indicated balanced chances for the two groups. At the other end of the scale, the native-born population had much lower odds to complete higher education than the foreign-born in Denmark and Switzerland where the odds were below 0.5.

When looking at changes between 2016 and 2021 in the odds ratios, the most substantial decreases for the native-born (indicating increases in the relative chances of the foreign-born population) took place in nine countries. In Czechia, while in 2016 the native-born population had higher odds to attain higher education, the situation reversed in 2021. The opposite trend was observed in Sweden, where an increase of the native-born population reversed the odds in 2021. In Cyprus, Spain and Italy, the native-born odds ratio increased further, which increased the gap between native-born and foreign-born.

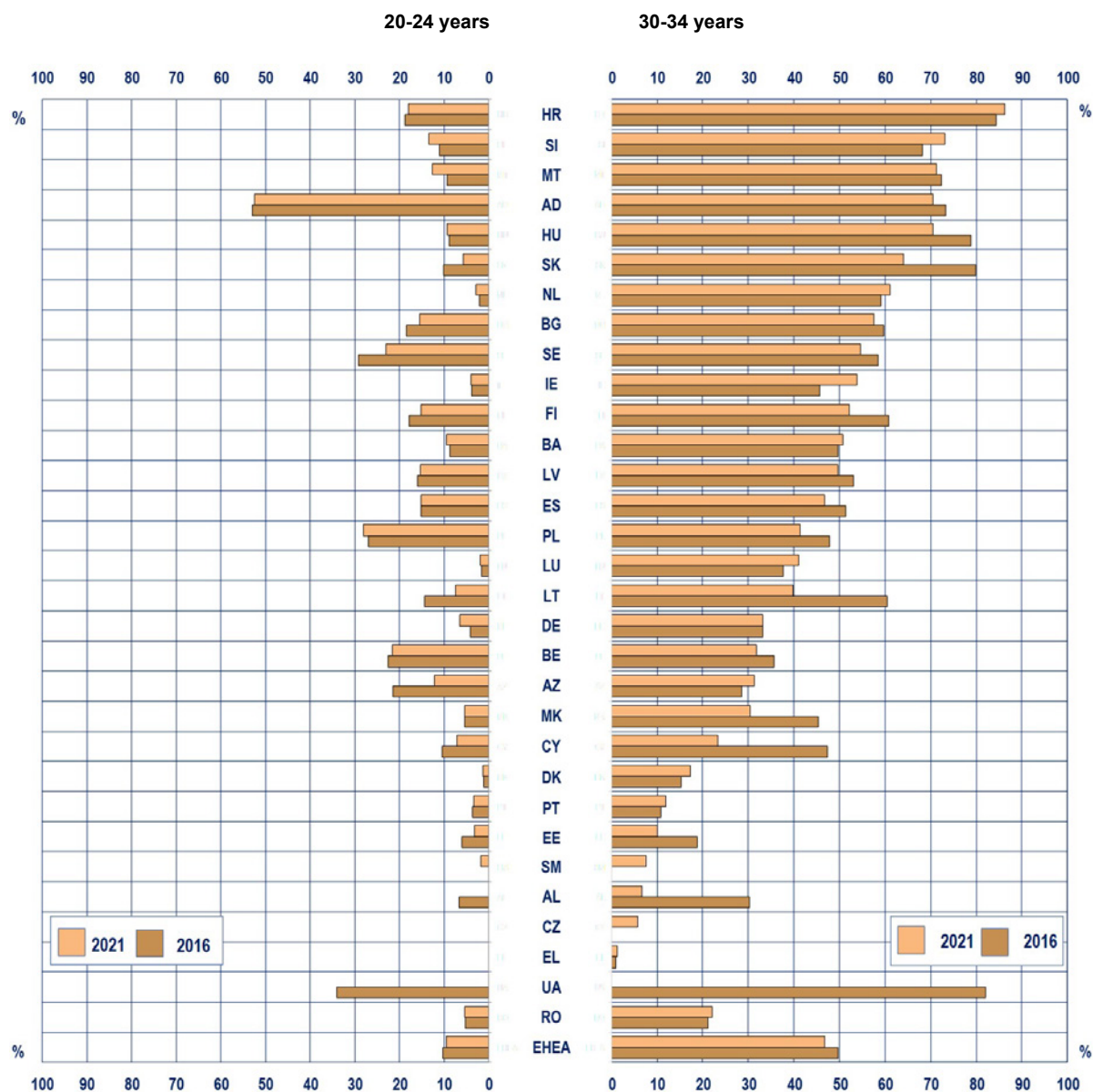
### Part-time students

The social dimension of higher education is also informed by the availability of part-time studies in a higher education system. Socio-economic constraints may influence the opportunity to access full-time study. For example, people willing to follow higher education studies may have to be in full-time employment during their studies. Part-time study proposes more flexible attendance time-schedule and have a lower cost. Therefore, part-time study could be a more feasible option for people who have more limited financial means or people who are willing to continue their education but are already engaged in employment.

Figure 1.9 shows the percentage of students enrolled as part-timers among students aged 20 to 24 and those aged 30 to 34.



Figure 1.9: Students enrolled as part-timers in tertiary education by country and age (%), 2016 and 2021



		%	HR	SI	MT	AD	HU	SK	NL	BG	SE	IE	FI	BA	LV	ES	PL	LU
Y20-24	2021	18.0	13.4	12.7	52.5	9.4	5.7	2.8	15.4	23.1	3.9	15.2	9.5	15.3	15.1	28.1	1.9	
	2016	18.8	11.1	9.3	52.9	8.9	10.1	2.0	18.5	29.2	3.8	17.8	8.6	15.9	15.2	26.9	1.6	
Y30-34	2021	86.3	73.2	71.2	70.5	70.5	64.0	61.4	57.5	54.6	53.9	52.2	50.7	49.7	46.8	41.4	41.0	
	2016	84.3	68.2	72.4	73.2	78.8	79.9	59.1	59.7	58.4	45.7	60.7	49.7	53.0	51.4	47.8	37.7	
		%	LT	DE	BE	AZ	MK	CY	RO	DK	PT	EE	SM	AL	CZ	EL	UA	EHEA
Y20-24	2021	7.5	6.5	21.6	12.1	5.4	7.2	5.5	1.2	3.3	3.1	1.7	:	:	:	:	9.4	
	2016	14.3	4.1	22.6	21.4	5.4	10.4	5.3	1.1	3.7	6.0	:	6.6	:	:	34.0	10.2	
Y30-34	2021	39.8	33.2	31.9	31.4	30.3	23.4	22.1	17.4	11.9	10.1	7.6	6.6	5.7	1.2	:	46.8	
	2016	60.5	33.2	35.6	28.6	45.4	47.3	21.1	15.3	10.8	18.8	:	30.2	:	1.0	82.0	49.7	

Source: Eurostat, UOE custom extraction and additional collection for the other EHEA countries.

**Notes:**

Countries are arranged in descending order by the participation of mature students (30-34 years old) in part-time studies in 2021. EHEA: refer to the EHEA median based on the countries with available data.



The EHEA median for both age groups slightly decreased between the two time points. However, the share of part-timers aged 30-34 remained significantly bigger compared to the younger group. In 2016 in 14 of 29 countries with available data, the part-time student population aged 30-34 represented more than half of the total student population in this age group. In 2021 12 out of 30 countries with available data the part-timers' population was more than half of the student population aged 30-34. Data show that the countries register different patterns in the evolution of the part-time student populations in both age groups. There was, however, a common reality that students aged 30-34 had a higher likelihood of enrolling in part-time studies.

In 2021, the share of part-time students in the age group 30-34 varied between 86% in Croatia to 1.2% in Greece. The shares of the younger part-timers ranged between 52.5% in Andorra and 1.7% in San Marino. In 12 of 30 countries, part-time students in the older age group represented more than half of the total number of students of the same age group. At the other end, four countries had shares of below 10%. Observing the younger age group, only Andorra had a part-time student population of more than half the total student population in this age group and 15 countries registered a share of below 10%. Seven countries had rates of part-time students aged 20-24 below 5%.

The distribution of part-time students' shares among the respective student populations varied significantly across EHEA countries. In 2021, the total 20–24-year-old student population in the Netherlands was 8 times bigger than the total population of the older age group while the number of younger part-time students was more than twice smaller. Conversely, in Belgium the part-time student population aged 20-24 was almost 9 times bigger than the part-time student population aged 30-34, and the total population of students aged 20-24 was 13 times bigger than the population of the older group. For both time points, in the two countries, the share of part-time students in the older age group was higher compared to the share of their counterparts in the younger age group, however the gap between the two part-timers age groups in the Netherlands was more significant.

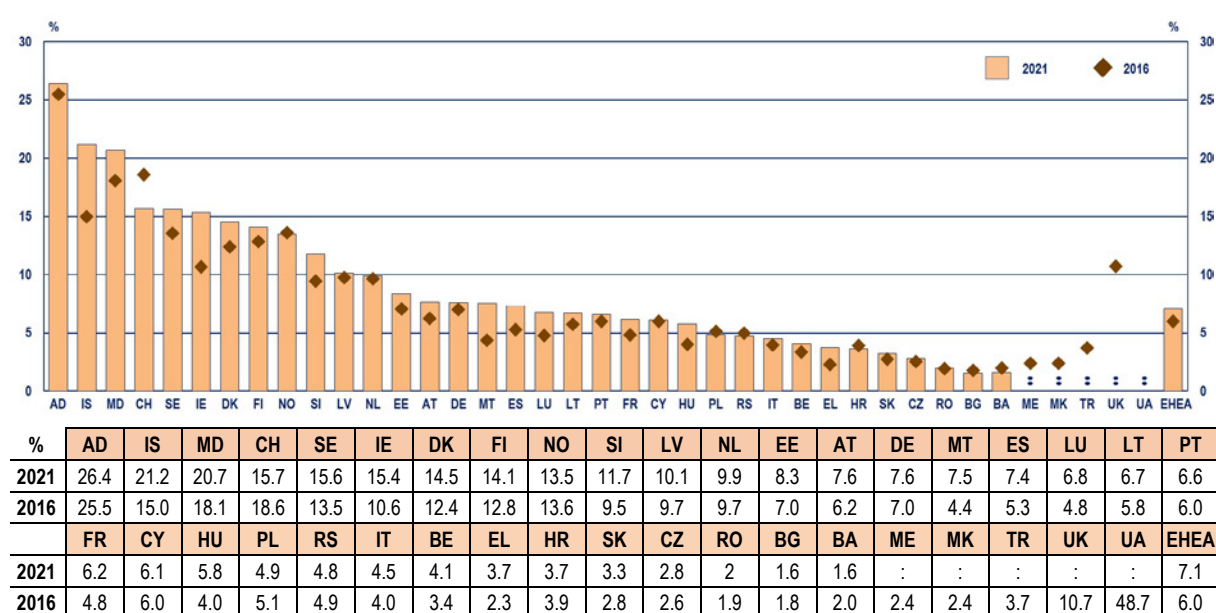
Comparing the two time-points for the countries with available data, the total student population of the older age group (30-34) showed a considerably higher increase (34%) compared to the younger age group (4.4%). The part-time student population aged 20-24 showed a considerable decrease (26.7%), while the older part-timers' population remained almost the same. In seven of the eight countries where both part-time students' age groups registered an increase, the growth of the older age group was more important. Between the two time points, the share of part-time students in the older age group increased the most in Ireland (8.2 percentage points) followed by Slovenia (5 percentage points). Decreases of part-time students in this age-group occurred in 16 countries across the EHEA with Albania, Cyprus and Lithuania registering a decrease of more than 20 percentage points. For the age group 20-24, the highest increase was noted in Malta (3.4 percentage points), followed by Germany and Slovenia (more than 2 percentage points). 14 countries registered a decrease of the share of younger part-timers aged 20-24. The most pronounced decreases were observed in Azerbaijan (more than 9 percentage points), Lithuania and Sweden (more than 6 percentage points), Slovakia (more than 4 percentage points).

## Mature students

An important aspect of the social dimension is that higher education should be open to non-traditional learners who missed the opportunity to enter higher education when leaving secondary education. The number of over 30-year-old students in the higher education population can be influenced by different factors. It may indicate a delayed entry into higher education studies after completion of secondary education or be the result of an extended study duration period, which has traditionally been the case in the Nordic countries, for example. The introduction of policies supporting adults' participation in higher education and the completion rates might also have an impact on the size of mature students' share. Recently introduced policies might have not yet provided for a significant change in the share of the mature students' population. Small share of mature students may also indicate low completion rates.

Figure 1.10 examines the proportion of 'mature' students in tertiary education who are aged 30 years or older in 2016 and 2021.

**Figure 1.10: Adults (30-64) who attained their tertiary education degree during adulthood (aged 30-64) as a percentage of all adults (30-64) 2016-2021**



Source: Eurostat, EU-LFS, custom extraction, and additional collection for the other EHEA countries. EHEA: refers to the EHEA median calculated based on countries with available data for both reference years.

### Notes:

Countries are arranged in descending order by the share of adults who attained tertiary education degree in 2021. 2021: break in series (see the Glossary and methodological notes).

The number of adult graduates continued to grow between 2016 and 2021. The EHEA median share for adults aged 30-64 attaining their tertiary degree in adulthood increased from 6% in 2016 to 7.1% in 2021. In 2021, 6 of 34 countries with available data registered the highest shares (above 15%). At the opposite end, 11 countries registered shares of mature adults who attained tertiary education below 5%. Overall, the Scandinavian countries registered high proportion of mature students in both time-points, which indicates that adult graduates constitute a substantial share of the total graduates' population in these countries. In 2021, the total mature graduates' population in the EHEA countries accounted for 6.7% of the total population aged 30-64.

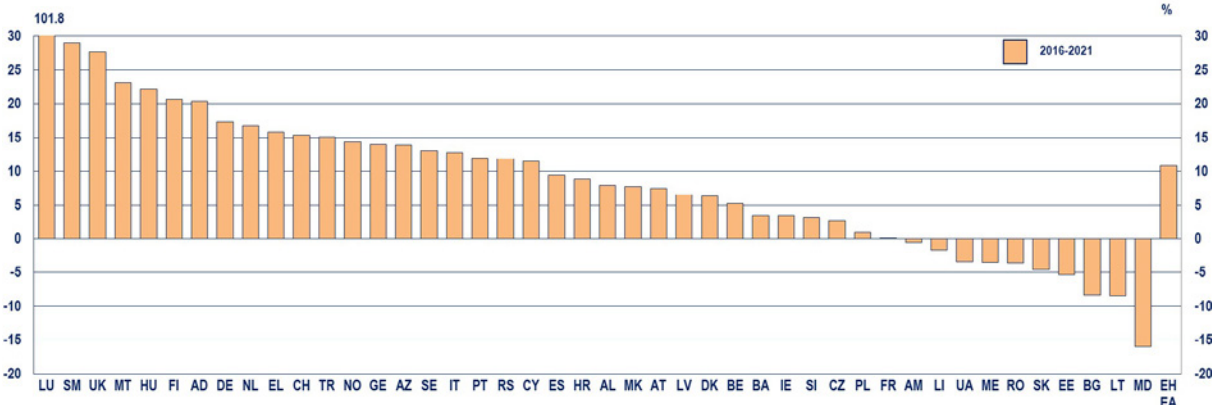
The evolution between 2016 and 2021 evidenced that there is clearly an upward trend – in 27 of 34 countries with available data the share of mature students increased while the number of countries registering a share of adult graduates below 5% decreased. Iceland noted the highest growth (6.2 percentage points) followed by Ireland (4.7 percentage points) and Malta (3.1 percentage points). Conversely, eight countries noted a decrease in the share of mature students, with Switzerland, despite being among the countries with the highest rates for both time-points, showing the largest decline of

2.9 percentage points. Comparing the two time points, the lowest shares (below 5%) continued to be registered in Central and South-East Europe. Recent policy changes or low completion rates may be an explanation for the reported low participation rates.

### 1.3. Academic staff

Section 1.1 showed the ways in which student enrolments have developed between 2016 and 2021 in the framework of the Bologna Process. This section focuses on the corresponding trends about academic staff. Figure 1.11 presents the percentage change in the number of academic staff between 2016 and 2021.

Figure 1.11: Percentage change in the total number of academic staff in 2016 and 2021



2016-2021

	LU	SM	UK	MT	HU	FI	AD	DE	NL	EL	CH	TR	NO	GE	AZ	SE	IT	PT	RS	CY	ES	HR	AL
%	101.8	29.0	27.6	23.2	22.1	20.7	20.4	17.4	16.8	15.8	15.4	15.1	14.3	13.9	13.9	13.0	12.8	12.0	11.8	11.5	9.4	8.8	7.9
	MK	AT	LV	DK	BE	BA	IE	SI	CZ	PL	FR	AM	LI	UA	ME	RO	SK	EE	BG	LT	MD	EHEA	
%	7.7	7.5	6.6	6.4	5.3	3.4	3.4	3.1	2.7	0.9	0.0	-0.6	-1.7	-3.4	-3.5	-3.6	-4.6	-5.3	-8.4	-8.4	-16.0	10.9	

Source: Eurostat, UOE and additional collection for the other EHEA countries. OECD for UK data (2021).

**Notes:**

Countries are arranged in descending order by the percentage change in the number of academic staff between 2016 and 2021. EHEA: refers to the percentage change of the total academic staff across the countries with available data for both reference years.

The total number of academic staff increased from 1.9 million in 2016 to 2.2 million in 2021. The median value for number of academic staff across EHEA countries in 2021 was 20 031 while in 2016 the median was lower (18 296). Among the seven countries with big cohort of academic staff (above 100°000) in 2021, the United Kingdom, Germany and Türkiye registered above 15% increase of the total academic staff, followed by Italy and Spain with respectively 12.8% and 9.4% increase. France maintained the level of 2016, while Ukraine registered a decrease. Small education systems with smaller number of academic staff (below 2 500) registered increases of more than 20% with Luxembourg reaching 101.8%, while Montenegro registered a decrease. Overall, in 2021, more than half (33 of 44) of the countries with available data registered an increase in the number of their academic staff. Among the 10 countries which recorded a decrease, the largest decrease was registered in Moldova (-16%), while in the remaining nine countries the decrease was below -°10%.

Changes in the number of academic staff during the period did not necessarily match changes in the number of students enrolling in tertiary education (see Figure 1.2). In more than half of the countries with available data across EHEA, both the student enrolments, and the academic staff increased between 2016 and 2021. It is noteworthy that in half of the countries in this group the increase in the number of students was higher compared to the increase in the number of academic staff. In 10 of

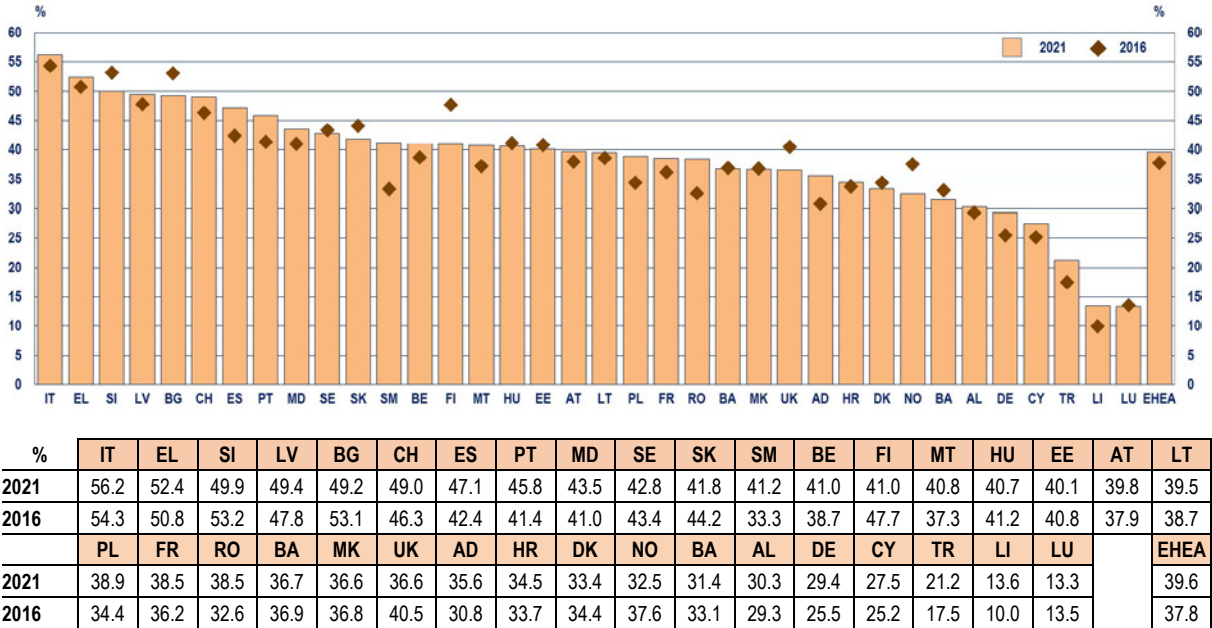
45 countries with available data the decrease in the number of student enrolments was accompanied by an increase in the number of academic staff. Interestingly, among the 25 countries with student population above 200 000 (ISCED 5-8) in 2021, more nearly half registered a more important increase in the number of student enrolments compared to the increase of the academic staff. In this group, among the 12 countries with student population above 500 000, more than half registered more important increase of the number of students with France registering significantly larger student enrolment increase (13%) and a very modest increase in the academic staff (0.03%). Conversely, Poland registered -°15% decrease of the number of student enrolments and 0.9% increase of academic staff. Among the seven countries with the largest increase of academic staff (above 20%), only Hungary registered a decrease in the student enrolments (-2.7%), while all the other countries noted an increase. Among the 10 countries which registered a decline in the number of academic staff in 2021, all countries except Liechtenstein and Romania noted a decrease in the student enrolment rates as well. Lithuania and Moldova registered a decrease of more than 21% in the number of student enrolments in 2021 also noting the largest decline in the number of academic staff, while Bosnia and Herzegovina which registered the highest decrease in the student enrolments (-22.7%) registered a slight increase in the number of academic staff (3.4%).

Examining the proportion of total academic staff per total student population, it is observed that in Luxembourg, being among the countries with the smallest total student population in 2021 (below 1°000) the academic staff increased the most, while the increase of the number of student enrolments was moderate (10.2%). In this country the number of academic staff per 1°000 students was higher in 2021 than in 2016. Conversely, in Greece, which was among the countries with the largest student population (above 500°000), the increase of academic staff was significantly lower (15.8%), but the student enrolments increased more (18.9%), compared to Luxembourg, hence the proportion of academic staff per 1°000 students, was lower in 2021. France which had a very small (0.03%) increase of academic staff but had one of the largest student populations and registered an important increase of student enrolments (13.3%), noted a slight decrease of the availability of academic staff per 1°000 students in 2021. Interestingly, in Lithuania, which was among the countries registering the largest decrease in academic staff (-°8.4%) and registered the second high decrease of student enrolments (-°21.6%) noted a higher proportion of academic staff per 1°000 students in 2021.

Age is an important characteristic of academic staff, and particularly relevant in looking to system-level planning. It is an indicator for the preparedness of the education systems to ensure sufficient human capacity to renovate itself in the future.

Figure 1.12 presents the share of academic staff aged 50 and over for 2016 and 2021. This category is the most significant to consider as it represents the staff closest to the age of retirement.

**Figure 1.12: Percentage of academic staff aged 50 or over, 2016 and 2021**



Source: Eurostat, UOE and additional collection for the other EHEA countries. OECD for UK data (2021).

**Notes:**

Countries are arranged in descending order according to the percentage of academic staff aged 50 or over in 2021. EHEA: refers to the EHEA median, which was calculated based on countries with available data for both reference years.

Between 2016 and 2021 an increase of the share of academic staff over 50 years of age was observed in 22 out of 36 countries with available data. The EHEA median for academic staff over 50 years of age increased by 1.8 percentage points. This clearly indicates an ageing trend in academic staff in many countries.

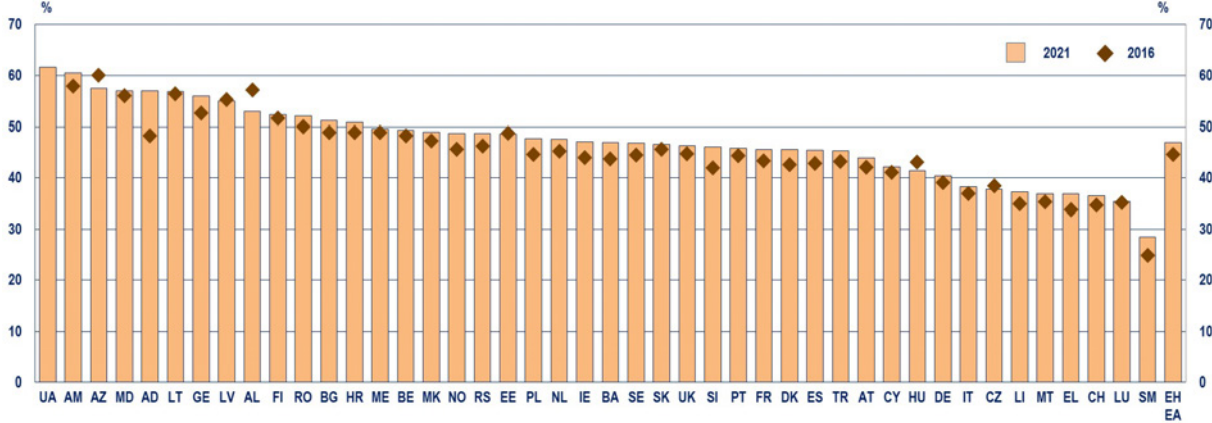
In 2021, 17 of 36 countries registered a share of more than 40% of academic staff over 50 years of age. In two countries the academic staff over 50 years of age accounted for more than half of the total academic staff population, while in 2016 four countries had more than half of the academic staff aged 50 years and more. While in Slovenia and Bulgaria, the rates slightly decreased to below 50% in 2021, in Italy and Greece, the share of the staff over 50 increased further compared to 2016. Greece, Italy, and Slovenia were the countries with the lowest share of academic staff below 35 years of age (below 10%). In 2021, Türkiye and Luxembourg were among the countries which registered the lowest shares (respectively 21.2% and 13.3%) of academic staff over 50 years of age in 2021. In Türkiye, which was among the countries with the largest total academic staff population (above 150°000), the group of 35 to 39 years of age had the largest share (44%). Luxembourg was among the countries with the smallest total academic staff population (below 2°000), most of which (53%) was under 35 years of age. In both countries the staff under 35 decreased between 2016 and 2021 while the staff between 35 and 39 increased.

Among the countries with the largest academic staff population in 2021, Germany had the largest number of academic staff (472 418). In Germany the academic staff below 35 years of age had the largest share (40%). In the United Kingdom and France, the academic staff in the 35°-°39 age group was the largest, while the share of academic staff below 35 years of age was smaller (below 20%) compared to the share of the academic staff of over 50 years of age (above 30%).

The results from this analysis show clear tendency of ageing among the academic staff which may consist of a potential risk to human capacity renewal of the EHEA education systems.

Achieving an equitable gender distribution is also an important system-level consideration. Figure 1.13 portrays the gender distribution among academic staff showing the evolution of the share of female staff between 2016 and 2021.

**Figure 1.13: Percentage of female academic staff, 2016 and 2021**



%	UA	AM	AZ	MD	AD	LT	GE	LV	AL	FI	RO	BG	HR	ME	BE	MK	NO	RS	EE	PL	NL	IE	BA
2021	61.7	60.6	57.6	57.1	57.1	56.9	56.0	55.0	53.0	52.4	52.2	51.2	50.9	49.6	49.3	49.0	48.8	48.7	48.6	47.7	47.6	47.1	47.0
2016	:	58.0	60.1	56.0	48.3	56.5	52.6	55.3	57.3	51.7	50.0	48.9	48.9	48.9	48.3	47.3	45.7	46.3	48.8	44.6	45.2	44.0	43.7
%	SE	SK	UK	SI	PT	FR	DK	ES	TR	AT	CY	HU	DE	IT	CZ	LI	MT	EL	CH	LU	SM	EHEA	
2021	46.8	46.6	46.4	46.1	45.8	45.6	45.6	45.4	45.3	44.0	42.2	41.5	40.4	38.3	37.9	37.3	37.0	37.0	36.5	35.5	28.4	47.0	
2016	44.5	45.7	44.8	42.0	44.5	43.4	42.6	42.9	43.3	42.1	41.2	43.2	39.1	37.0	38.4	35.0	35.4	33.8	34.7	35.3	24.9	44.6	

Source: Eurostat, UOE and additional collection for the other EHEA countries and OECD for UK data (2021).

**Notes:**

Countries are arranged in descending order by the percentage of female academic staff (2021). EHEA: refers to the EHEA median calculated based on countries with available data for both reference years.

In 2021, the EHEA median of the female academic staff was 47% and increased compared to 2016. Across countries, there were large variations. In all the countries below the median the female academic staff was more than a third of the total academic staff, except San Marino, which noted the lowest share (28.4%). The countries with the largest academic staff populations (above 100 000), Germany, the United Kingdom, Türkiye, Spain, France, and Italy registered female participation below the EHEA median while Ukraine had the highest share of female academic staff (61.7%) of all EHEA countries with available data. Among the countries with the smallest academic staff cohort, Andorra with total academic staff of 177 registered important female participation (57%), while Luxembourg and San Marino registered rates by more than 10 percentage points lower than the EHEA median.

Compared to 2016, in most countries (37 out of the 43 with available data) the share of female academic staff increased registering rises between 0.2 percentage points in Luxembourg to 8.8 percentage points in Andorra. The largest decrease (4.3 percentage points) was observed in Albania, followed by Azerbaijan (2.5 percentage points).

Despite the slight increase of the median share, female academic staff remains slightly underrepresented across EHEA countries.

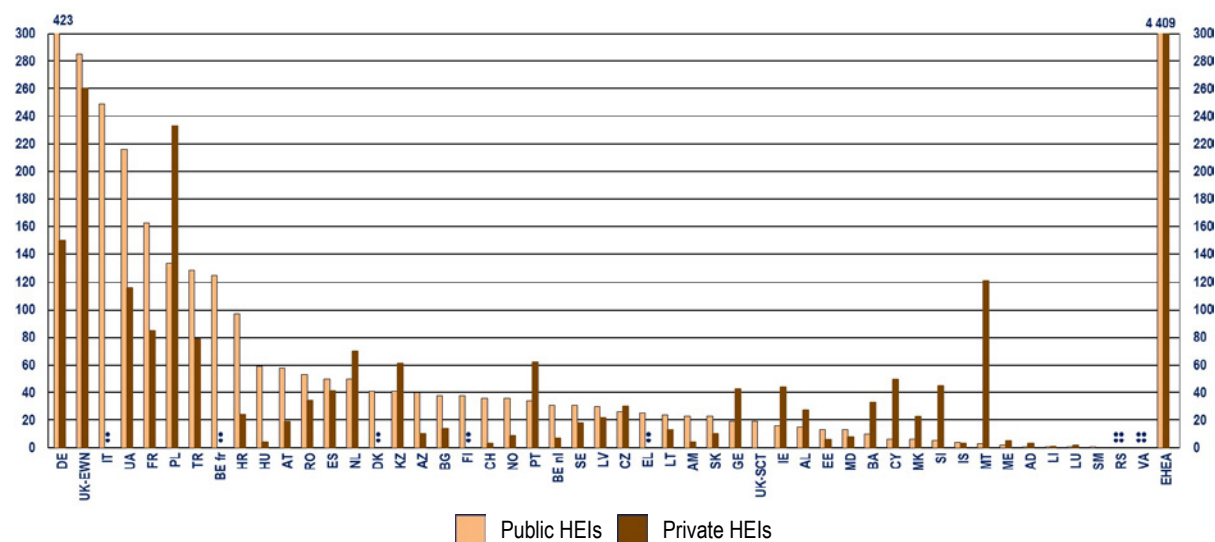


## 1.4. Higher education institutions

The analysis of the higher education institutions' landscape provides for a more informed understanding of the developments in the higher education sector and the evolution in student and staff populations.

Figure 1.14 shows the number of public and private higher education institutions reported for the academic year 2022.

**Figure 1.14: Number of higher education institutions (HEIs) in the EHEA, 2022**



	DE	UK-EWN	IT	UA	FR	PL	TR	BE fr	HR	HU	AT	RO	ES	NL	DK	KZ	AZ
Public	423	285	249	216	163	133	129	125	97	59	58	53	50	50	41	41	40
Private	150	260	:	116	85	233	79	:	24	4	19	34	41	70	:	61	10
	BG	FI	CH	NO	PT	BE nl	SE	LV	CZ	EL	LT	AM	SK	GE	UK-SCT	IE	AL
Public	38	38	36	36	34	31	31	30	26	25	24	23	23	19	19	16	15
Private	14	:	3	9	62	7	18	22	30	:	13	4	10	43	:	44	27
	EE	MD	BA	CY	MK	SI	IS	MT	ME	AD	LI	LU	SM	RS	VA	EHEA	
Public	13	13	10	6	6	5	4	3	2	1	1	1	1	:	:	2617	
Private	6	8	33	50	23	45	3	121	5	3	1	2	:	:	:	1792	

Source: BFUG data collection.

### Notes:

Countries are arranged in descending order by the number of public higher education institutions (2022).

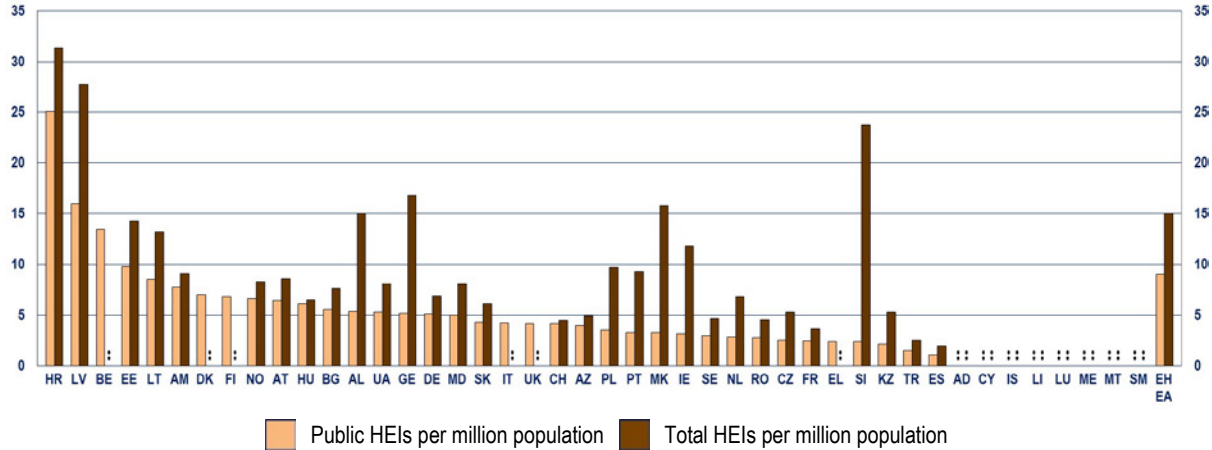
EHEA: the value in the graph indicates the total number of higher education institutions.

In total, the number of higher education institutions in EHEA countries with available data increased from 3 537 in 2018/2019 <sup>(8)</sup> to 4 409 in 2022. The public higher education institutions grew to 2 617 while private higher education institutions increased their number to 1 792. However, different developments were observed during the period. In 14 of 34 education systems with available data, the number of public higher education institutions increased, with significant growth observed in the United Kingdom (England, Wales, and Northern Ireland) (+125), Germany (+110), and France (+95). Decrease was observed in nine countries but was less important in terms of number compared to the level of increase observed. The number of private higher education institutions increased in 13 countries and decreased in 15 with larger decrease observed in France. In 14 countries the number of public higher education institutions remained unchanged or increased while the number of private higher institutions declined. The opposite trend was observed in five countries.

<sup>(8)</sup> Bologna Process Implementation Report, 2020.

Another way of looking at the number of institutions is to see how many of them there are in proportion to the overall population. Figure 1.15 shows the number of institutions per million inhabitants, indicating separately the number of public higher education institutions per million population and the total number of public and private higher education institutions per million population. This is a rather crude measure, as it does not consider the size of the institutions, but nevertheless it gives a more contextualised picture of the situation regarding higher education institutions in EHEA.

**Figure 1.15: Number of higher education institutions (HEIs), public and total per million population (MP) in the EHEA, 2022/2023**



	HR	LV	BE	EE	LT	AM	DK	FI	NO	AT	HU	BG	AL	UA	GE	DE	MD	SK	IT	UK	CH	AZ	PL
Public/MP	25	16	13	10	9	8	7	7	7	6	6	6	5	5	5	5	5	4	4	4	4	4	4
Total/MP	31	28	:	14	13	9	:	:	8	9	7	8	15	8	17	7	8	6	:	:	5	5	10
	PT	MK	IE	SE	NL	RO	CZ	FR	EL	SI	KZ	TR	ES	AD	CY	IS	LI	LU	ME	MT	SM		EHEA
Public/MP	3	3	3	3	3	3	2	2	2	2	2	2	1	:	:	:	:	:	:	:	:	:	9
Total/MP	9	16	12	5	7	5	5	4	:	24	5	2	2	:	:	:	:	:	:	:	:	:	15

Source: Own calculation based on Eurostat and BFUG data collection

**Notes:**

Countries are arranged in descending order by the number of public higher education institutions per million population (2022). The total number includes public and private higher education institutions. EHEA: median calculated based on countries with available data. Countries with population below 1 million are not presented.

The main trend observed is that the most populous countries (more than 40 million population), are positioned below the median for total number of higher education institutions per million population (15), even if they have the highest total number of institutions. Germany, Spain, Türkiye, and France had a lower total number of higher education institutions per million population (7 and below). When observing the number of public higher education institutions within the same group of countries, Germany, Ukraine, Italy, the United Kingdom<sup>(9)</sup>, France and Türkiye had a number of public higher education institutions per million population lower to the EHEA median. Interestingly, in more populous countries with large number of students (Türkiye, Germany, the United Kingdom, France, Spain), the flows of incoming students<sup>(10)</sup> was also high (see Figure 6.6). The median number of students per institution in this group of countries is 240<sup>2</sup>35. This finding may be indicative of the size of the higher education institutions and the higher education systems’ capacity to respond to a higher demand for access to tertiary education.

<sup>(9)</sup> United Kingdom: data on total population relevant to year 2020.

<sup>(10)</sup> Data for reference year 2020/2021.



## 1.5. Expenditure on higher education

European higher education institutions are funded predominantly from public sources. This section compares public expenditure on higher education in the EHEA based on Eurostat indicators: public expenditure as a percentage of GDP, and total public and private expenditure per student in purchasing power standard (PPS). Alone, none of the indicators presented below can provide a sufficient basis for comparing EHEA countries; but taken together they provide a broad overview of similarities and differences between them.

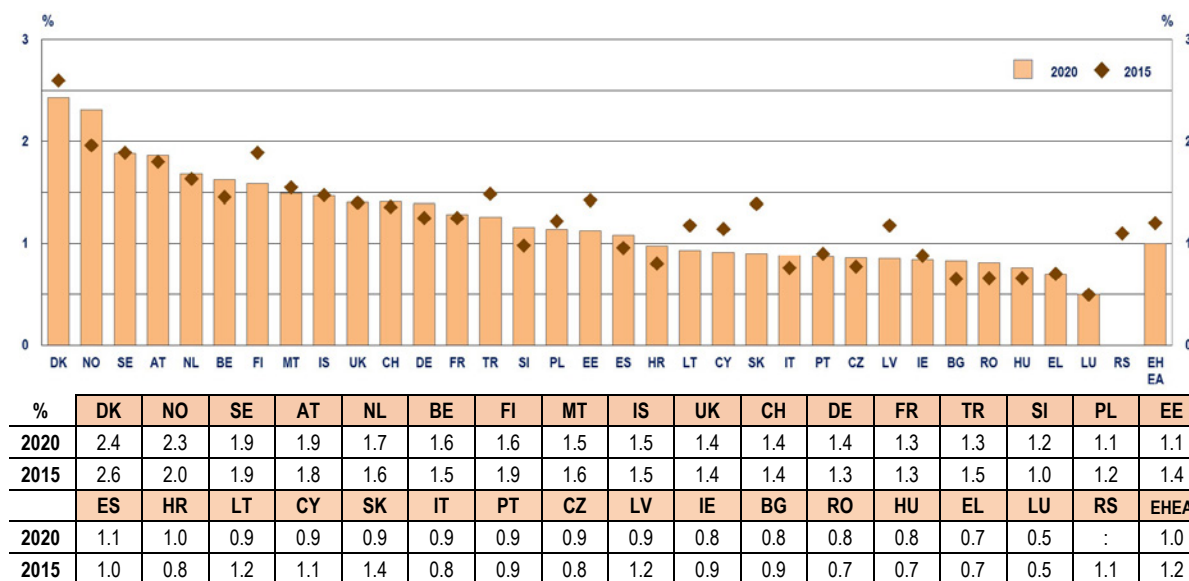
Annual public expenditure on tertiary education as a percentage of GDP provides a measure of a government's commitment to supporting higher education and is useful when comparing countries of different economic sizes. Public expenditure on tertiary education covers expenditure from all levels of government combined and refers to direct funding on higher education as well as transfers to private households and firms.

The former includes expenditure that is directly related to instruction and research such as faculty and staff salaries, research grants, university and institutions' buildings, teaching materials, laboratory equipment, etc. The latter includes funding for entities that administer higher education (e.g., ministries or departments of education), that provide ancillary services (i.e., services provided by educational institutions that are peripheral to the main educational mission), and entities that perform educational research, curriculum development and educational policy analysis.

Transfers and payments to private entities include public subsidies to households and students as well as payments to other non-educational private entities (including scholarships and grants, public loans to students, specific public subsidies in cash or in kind for transport, medical expenses, books, and other materials, etc.). However, annual public expenditure does not include tuition fees that are not covered by scholarships, grants, or loans, and that are directly paid by households.

Figure 1.16 shows the annual public expenditure on tertiary education as a % of GDP (including Research and Development) in 2015 and 2020.

**Figure 1.16: Annual public expenditure on tertiary education as a % of GDP (including R&D), 2015 and 2020**



Source: Eurostat, UOE and additional collection for the other EHEA countries.

**Notes:**

Countries are arranged in descending order by the annual public expenditure on tertiary education as a % of GDP, 2020. EHEA: refers to the EHEA median calculated based on countries with available data for both reference years.

In 2020, the median public spending on tertiary education relative to GDP accounted for 1% across the EHEA, which indicates a slight decrease compared to 2015 (1.2%). In 2020 the level of expenditure in tertiary education ranged between 2.4% in Denmark and 0.5% in Luxembourg. The public investment in higher education in the Scandinavian countries remained the highest across EHEA. In 2020, Denmark and Norway were the only countries in the EHEA where public investment in higher education was above 2% of GDP. In 2020 the countries with higher level of public investment (above 1.5%) registered also high enrolment rates of 18–34-year-olds <sup>(1)</sup>, above 15%, with only Malta having enrolment rates below this share. However, countries with high enrolment rates in 2020, such as Türkiye (30%), Spain (21.4%), France (19.4%), and Germany (17.7%) registered public spending below 1.5%, while Greece with 29.9% enrolment rate had public spending of below 1%.

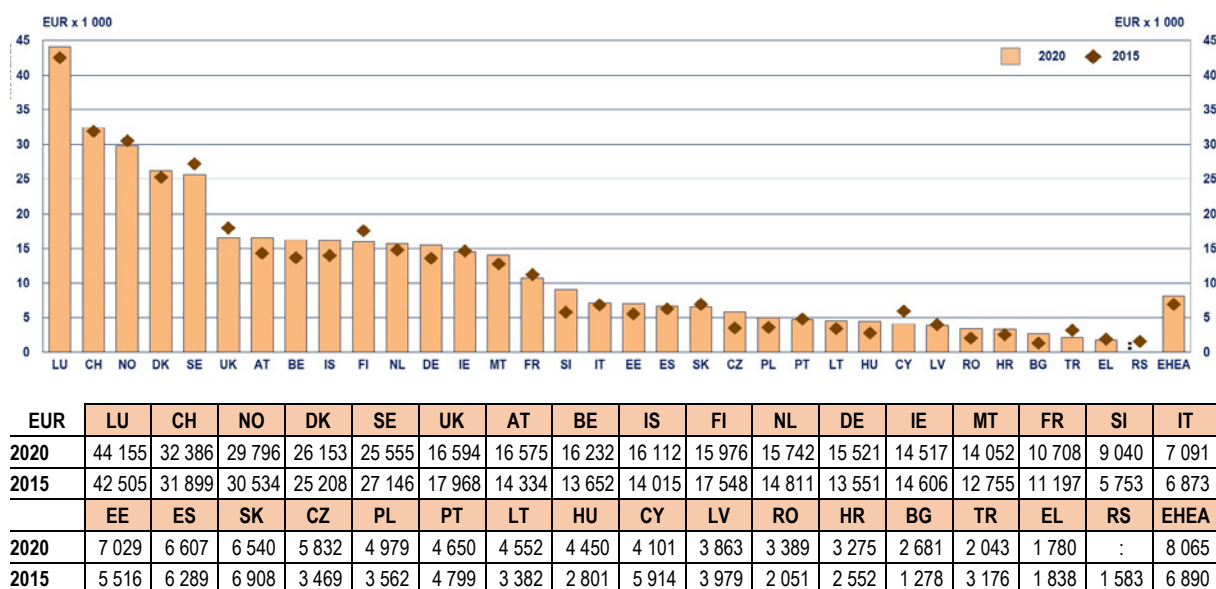
When analysing the evolution of the share of public expenditure directed to tertiary education as a percentage of GDP between 2015 and 2020, decreases were recorded in 12 of 32 countries with available data. Increases were observed in 12 of the countries with data available, while in 8 of the countries there was no change. The highest increase was registered in Norway (0.3 percentage points).

Cross-country comparisons of the levels of expenditure on tertiary education cannot be made directly due to the different size of countries' student population. In order to account for a country's size of student population, the average expenditure per student is used.

<sup>(1)</sup> Source: Eurostat.

Figure 1.17 shows the public and private expenditure on tertiary education per full-time equivalent student in 2015 and 2020.

**Figure 1.17: Annual public expenditure on public and private tertiary institutions per full-time equivalent student in euro, 2015-2020**



Source: Eurostat, UOE and additional collection for the other EHEA countries.

**Notes:**

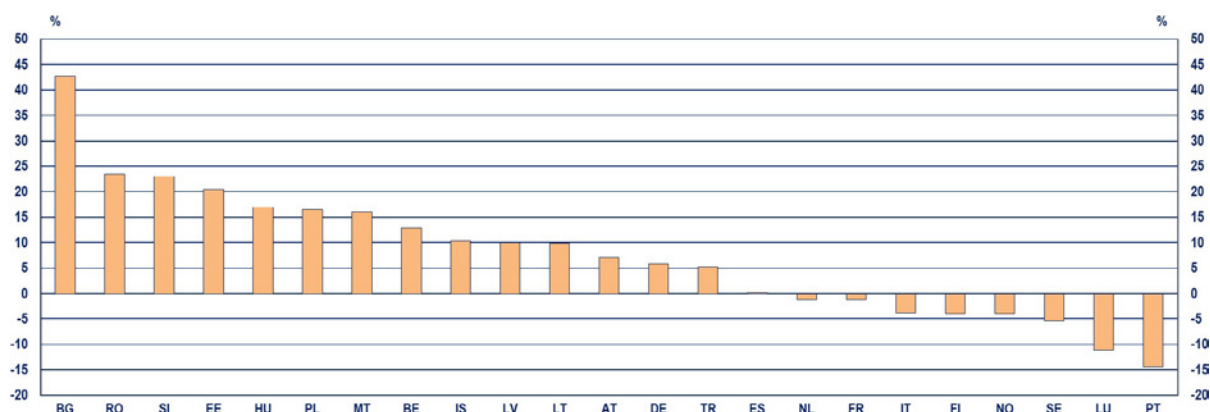
Countries are arranged in descending order by the annual public expenditure per FTE student in euro (2020). EHEA: refers to the EHEA median calculated based on countries with available data for both reference years.

The median spending per student (full-time equivalent) across EHEA increased from EUR 6 890 per student in 2015 to EUR 8 065 in 2020. The highest spending country in 2020 was Luxembourg (EUR 44 155) followed by Switzerland, and the Scandinavian countries (except Finland) with expenditure above EUR 25 000 per student. 17 of 32 countries spent less than EUR°10 000 per student with 11 of them (34% of all countries with available data) investing less than EUR°5 000 per student.

Most of the countries (21 of 32 countries with available data for both time-points) increased their spending per full-time equivalent student. The largest increase (110%) was registered in Bulgaria. Five countries increased their spending with more than EUR 2 000, while in nine the investment per student raised by more than EUR 1 000. Conversely, five countries showed decrease by more than EUR 1 000 with Cyprus and Türkiye registering the largest decrease of more than 30%. It is noteworthy that Norway, Sweden, and Finland, while remaining among the countries with high expenditure per full-time student in 2020 (above EUR°15°000), registered a decrease in their spending compared to 2015, with Finland and Sweden showing decrease by more than EUR 1 500. The five countries with the highest spending per full-time equivalent student in 2020 (except Luxembourg) registered also high enrolment rates which in the Scandinavian countries reached above 15%, with Denmark registering 20.6%. Cyprus, on the other end, had a high enrolment rate (18.6%) but spending per full-time equivalent student of below EUR°5°000.

Figure 1.18 provides a more precise comparison across countries as the measure of spending is adjusted in terms of the differences in price levels across the EHEA while considering the size of the student population in a country through the provision of the financial spending of a country per full-time student. In addition to public expenditure, it also takes private expenditure into account to show an overall financial investment in higher education at national level.

**Figure 1.18: Percentage change in the annual public and private expenditure on public and private tertiary education institutions in PPS per full-time equivalent student between 2015 and 2020**



%	CZ	BG	RO	SI	EE	HU	PL	MT	BE	IS	LV	LT	EL	AT	DE
2015-2020	47.0	42.7	23.5	23.0	20.4	17.0	16.4	16.0	12.9	10.4	9.9	9.8	8.8	7.1	5.9
%	TR	DK	ES	NL	FR	UK	IT	FI	NO	SE	HR	LU	CY	PT	
2015-2020	5.3	4.6	0.2	-1.3	-1.3	-3.5	-3.8	-4.1	-4.1	-5.4	-8.1	-11.1	-12.2	-14.4	

Source: Eurostat, UOE and additional collection for the other EHEA countries.

**Notes:**

Countries are arranged in descending order by the percentage change in the annual public and private expenditure in PPS per FTE.

Between 2015 and 2020, most of the countries (18 of 29 countries with available data) registered a percentage increase of their spending on tertiary education institutions. Czechia<sup>(12)</sup> showed the highest increase (47%) in its spending on higher education institutions per full-time equivalent student, followed by Bulgaria (42.7%) and Romania (23.5%). Important increases of more than 20% were registered in Slovenia (23%), and Estonia (20.4%). The smallest increase of below 1% took place in Spain.

Across EHEA countries, the annual EHEA median of (public and private) expenditure on tertiary education institutions in 2020 was PPS<sup>11</sup> 367 per full-time equivalent student and increased compared to the median registered in 2015 (PPS<sup>9</sup> 568). However, the evolution of the expenditure in individual countries differed significantly. Luxembourg had the highest level of expenditure, PPS 31 684. Sweden, Malta, and Denmark spent more than PPS 15 000 per full-time student, while in 10 of 24 countries with available data the spending was below PPS 10 000. The highest spending country in 2020 invested five times more than the lowest spending country. In comparison, in 2015 the least investing country spent 13 times less than the country with the highest investment. This observation may indicate a trend of diminishing the divergencies in expenditure for tertiary education among EHEA countries.

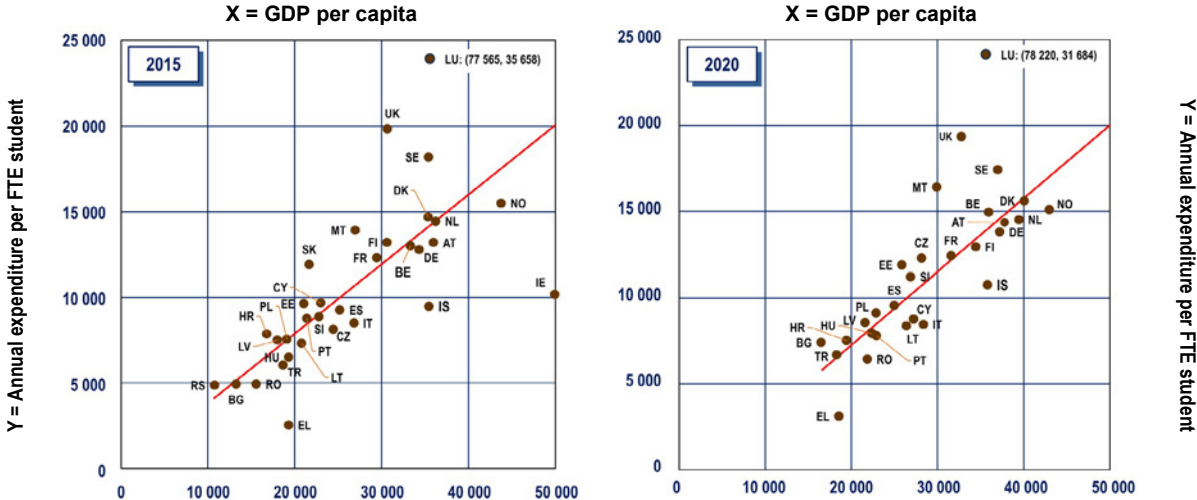
The analysis of the changes in expenditure devoted to tertiary education institutions per full-time student against the student population in tertiary education provided some interesting findings. Among the countries which registered an increase of more than 20% in 2020, all except Slovenia had enrolment rates below the EHEA median (16.7%). This may indicate that the increase in value in these countries may be due to the decrease in the student population. However, it could also mean that the increase in investment might require a longer period of implementation before increased enrolment rates are visible. In Luxembourg, the student enrolment rate (4.4%), despite the high level of investment, remained among the lowest in EHEA in 2020. However, many students from Luxembourg enrol in higher education institutions abroad.

<sup>(12)</sup> Czechia: data for 2019 instead of 2020.

To further review the intensity of investment in tertiary education, the next section undertakes a comparative analysis between the expenditure per full-time student and the size of the economy taking into account the population size. This perspective avoids problems of different student populations as percentages of the total population, as is the case when considering the ratio of the government expenditure on education to GDP. For higher education, cross-country comparison is more complex as enrolment rates vary in greater proportions (see Figure 1.3): countries where the enrolment rate is low could show higher expenditure per full-time equivalent students than countries with higher enrolment rates. Dividing the GDP per capita by the expenditure per full-time equivalent student provides a more harmonised and comparable measure of the intensity of the expenditure on education.

Figure 1.19 shows the annual public and private expenditure on public and private education institutions in tertiary education, per full-time equivalent student in PPS relative to the GDP per capita in PPS for the years 2015 and 2020.

**Figure 1.19: Annual public and private expenditure on public and private education institutions in tertiary education, per full-time equivalent student in PPS relative to the GDP per capita in PPS, 2015 and 2020**



%	2015	2020	%	2015	2020	%	2015	2020	%	2015	2020
AT	36.9	37.9	EL	13.9	14.2	IT	32.1	29.2	PT	41.7	33.2
BE	39.4	41.3	ES	37.2	37.6	LT	35.9	31.0	RO	32.5	28.6
BG	38.2	43.5	FI	43.5	37.2	LU	46.0	40.5	SE	51.7	46.9
CY	42.5	29.5	FR	42.2	38.9	LV	42.4	38.7	SI	39.5	41.2
CZ	33.7	41.4	HR	47.5	35.1	MT	52.0	54.5	SK	55.5	:
DE	37.6	36.8	HU	34.3	34.6	NL	40.2	36.6	UK	64.9	58.8
DK	40.9	38.8	IE	20.6	:	NO	35.7	35.0	RS	46.4	:
EE	46.3	45.3	IS	27.1	29.7	PL	40.2	39.0	TR	33.1	35.4

Source: Eurostat, UOE and additional collection for the other EHEA countries.

**Notes:**

Country details are references in the Glossary and methodological notes.

Data shows a positive relationship between the size of the economy considering its population (expressed through GDP per capita) and the expenditure on education per full-time student (as expressed through the annual public and private expenditure on educational institutions per full-time equivalent). The positive correlation between the expenditure per full-time equivalent student and GDP per capita indicates that countries with higher GDP invest more per student, regardless of the size of the economy and the size of education sector.

However, this correlation does not imply a direct causal relationship between the two variables in the short term. Indeed, public expenditure (i.e., a major part of total expenditure on tertiary education) involves long-term commitments (e.g., capital expenditure or staff salaries) and cannot be adjusted rapidly to unexpected changes in economic conditions. On the other hand, fluctuations in the number of students are the result of multi-cohorts' behaviours and their attitudes towards tertiary education.

Throughout 2015 and 2020, countries providing relatively high expenditure (more than PPS 15 000) on tertiary education institutions per full-time student and having a high GDP per capita (more than PPS 30 000) were Norway, Sweden, Denmark, Luxembourg, and the United Kingdom, while there was lower expenditure (less than PPS 10 000) on tertiary education institutions and lower GDP per capita (less than PPS 20 000) in Greece, Bulgaria, Croatia, and Türkiye.

The tables in Figure 1.19 show the ratio of the expenditure (annual and private) on higher education institutions per student to GDP per capita, showing how much of the GDP per capita is spent on each student. This can be seen as a measure of public and private investment in higher education. It reveals that countries with different sizes of economy and annual expenditure per student may make a similar relative financial effort towards investment in tertiary education. For example, in 2020, Malta spent 55% of their GDP per capita on each tertiary student, which was slightly higher of the respective share spent by Sweden (47), in which the GDP per capita and annual expenditure per student were higher.

The fluctuations in the intensity of the investment over time can be observed through combining two measures. Firstly, the total (public and private) expenditure on tertiary education per student and secondly the GDP per capita. A constant ratio across time signifies that both investment per student and GDP per capita increased or decreased at the rate, indicating that expenditure in education is given the same priority over time. It is important to note that this measure of expenditure includes both public and private spending, so it is impossible to tell from this particular indicator how public expenditure reacts to changes in the GDP per capita.

Of the 29 countries for which data are available for the reference years analysed, the ratio of public and private expenditure per full-time equivalent student and GDP per capita decreased in 18 countries. This finding indicates that in these countries public and private investment in higher education declined relative to the country's size of economy. Between 2015 and 2020, 12 countries registered a decrease in expenditure while the GDP per capita grew. The ratio of these countries registered a decrease. Luxembourg is part of this group of countries, but it should be acknowledged that in the interpretation of data concerning the investment in education the GDP per capita ratio only considers residents in this country. In eight countries, the expenditure remained stable (fluctuations below PPS 1°000) while the GDP per capita registered an increase between the two time-points of more than PPS 2°000. The ratio of the countries in this group has also registered a decrease. Within this group of countries Lithuania registered slight increase in the expenditure while the GDP per capita marked one of the highest increases (by PPS 5°590), however the ratio between expenditure and GDP per capita decreased by almost 5 percentage points. In 15 countries the expenditure increased together with an increase in the level of GDP per capita. In this group of countries eight countries registered an increase of the ratio while the remaining seven had a decrease. 13 countries registered a more intensive pace of GDP growth compared to the level of increase in the expenditure per full-time student. In this group, despite the growth of expenditure and GDP per capita, slightly more than half of the countries registered a decrease in their ratio of expenditure per full-time equivalent student and GDP per capita. Eight countries with GDP growth above PPS 2°000, registering expenditure increase of less than PPS°2°000, registered a ratio decrease.



## 1.6. Conclusions

Despite the large diversity in education systems' developments the EHEA total student population continued to grow. In 2021 there were about 32.9 million tertiary education students enrolled in the EHEA. Türkiye and Germany, accounted for about 35% of the EHEA total student population. Along with the student population increase, the EHEA median of enrolment rates, raised to 16.9% with first cycle studies showing the highest student enrolments (58.8%). Policy and institutional reforms, socio-economic conditions or specific labour market development have played a role in the evolution of the enrolment rates in EHEA countries. The educational background of parents and the family's economic conditions are factors that strongly influence the likelihood of young learners to engage in and successfully complete higher education studies. In 62% of the countries the new entrants with highly educated parents were a majority and the corresponding share of population with high educational attainment level was around a third of the population or higher, indicating strong correlation between the participation in higher education and the educational attainment of parents.

Ensuring access, participation, equal opportunities, and high education attainment are paramount goals in the Bologna process. In 2021 the EHEA median share of female entrants increased to 55.4%. In 8 of 10 selected education fields, women outnumbered men, and reached above 70% at both bachelor's and master's education levels in 'Education' and 'Health and welfare' fields. The number of adult graduates (30-64) also continued to grow indicating adequate policies to support mature students. Part-time student population aged 30-34 increased and continued to have bigger share than the part-timers aged 20-24, confirming the higher likelihood for older students to engage in part-time studies. In 2021, despite the diversity of the country context across EHEA, the number of countries where foreign-born and native-born students had similar chances for successful completion of studies in higher education has increased.

The EHEA total academic staff increased by 11% in 2021. The evolution in the number of academic staff did not necessarily match the student enrolments' evolution. In nearly half of the countries across EHEA the increase of the student enrolments was more important than the increase in the number of academic staff. The EHEA median share of academic staff over 50 years of age grew, while the median share of academic staff below 35 of age decreased, indicating tendency of ageing among the academic staff, and raising concern about the human capacity renewal in EHEA education systems. The EHEA median of female academic staff increased to 47% and registered steady growth. The number of higher education institutions increased over the period. The most populous countries registered rate of institutions per million population below the EHEA median, despite having the bigger number of higher education institutions.

In 2020, the median public spending on tertiary education relative to GDP accounted for 1%, and slightly decreased compared to 2015. The percentage of public spending as a share of GDP in 2020 varied, with highest rates registered in Scandinavian countries. In 2020 the median EHEA annual (public and private) spending per full-time tertiary education student increased and was PPS 11 367. Richer countries tend to invest more per student, regardless of the size of the education sector. However, in more than half of the countries, the public and private investment in higher education declined relative to the country's size of economy. The countries which registered continuous high level of spending per full-time equivalent student between 2015 and 2020 also registered high enrolment rates indicating that investment, especially in the long run provides for increased interest to follow higher education studies. Reduction of the gap between high and low spending countries in tertiary education across EHEA was also observed.





## Getting in touch with the EU

### IN PERSON

All over Europe there are hundreds of local EU information centres. You can find the address of the centre nearest to you at: [europa.eu/contact](http://europa.eu/contact)

### ON THE PHONE OR BY EMAIL

Europe Direct is a service that answers your questions about the European Union. You can contact this service:

- by freephone: 00 800 6 7 8 9 10 11 (certain operators may charge for these calls),
- at the following standard number: +32 22999696, or
- by electronic mail via: [europa.eu/contact](http://europa.eu/contact)

## Finding information about the EU

### ONLINE

Information in all the official languages of the European Union is available on the Europa website: [europa.eu](http://europa.eu)

### EU PUBLICATIONS

You can download or order free and priced EU publications from EU Bookshop at: <http://bookshop.europa.eu>.

Multiple copies of free publications may be obtained by contacting Europe Direct or your local information centre (see <http://europa.eu/contact>).

### EU LAW AND RELATED DOCUMENTS

For access to legal information from the EU, including all EU law since 1951 in all the official language versions, go to EUR-Lex at: <https://eur-lex.europa.eu>

### OPEN DATA FROM THE EU

The EU Open Data Portal (<http://data.europa.eu/euodp/en/data>) provides access to datasets from the EU.

Data can be downloaded and reused for free, for both commercial and non-commercial purposes.

