The European Higher Education Area in 2018

Bologna Process
Implementation Report
The Bologna Process has brought us a long way towards achieving the goals for European higher education set two decades ago. This third edition of the Bologna Process Implementation Report provides clear evidence of change in the higher education landscape. It shows where progress has been made, but also points to the gaps that need to be filled if we are to strengthen European higher education cooperation on the basis of quality and mutual trust.

Higher education has been evolving rapidly to respond to fast changing demands. Overall in Europe, we are becoming better educated, as more students have the opportunity to develop the high-level skills and knowledge that our societies require. Thanks to the Bologna Process and the Erasmus+ programme, students have become more mobile, and can benefit from study and employment opportunities abroad. Yet we also face challenges in this changing environment: How do we recognise and reward good teaching as well as good research? How do we ensure that young people from disadvantaged backgrounds can access and successfully complete higher education? How do we remove burdensome recognition procedures to ensure that students and graduates can be mobile? And how do we increase the relevance of higher education programmes for a labour market that is in a state of permanent transformation? The Bologna Process provides a space for countries to discuss these challenges, and this dialogue remains critical.

Twenty years ago four countries signed the Sorbonne Declaration, initiating a wave of coordinated higher education reform through the Bologna Process. Now ministers from 48 European countries will gather in Paris to take stock of our current situation, and to discuss the path forward. This geographical evolution illustrates the impact the Bologna Process has had – and it highlights Europe’s potential to set high standards for modern and relevant educational provision. The Bologna Process has not only inspired change within European higher education, but also across other world regions. This is important to recognise, as today, more than ever, Europeans have to embrace an increasingly complex and inter-connected global reality.

We should of course be proud of our achievements. But we must not be complacent. We need to redouble our efforts to bring Europe’s higher education institutions, researchers and students even closer together. The technical goals of the Bologna Process – converging degree structures, shared standards for quality assurance and common recognition practice – were never ends in themselves. Rather they were the preconditions for ensuring that we understand and trust each other’s higher education provision, enabling us to work together in a more seamless way. This is what our young people demand, this is what our economies require and this is what our societies need.

The European Commission’s role is to support, but also to drive positive change. And this is why we have been working on proposals to create a European Education Area by 2025. Our ambition is to
enable EU Member States to intensify and accelerate their cooperation in areas such as mobility, multilingualism, innovation and mutual recognition of diplomas, and thus also to provide inspiration to non-EU countries to follow. Our vision for 2025 is of a Europe in which learning, studying and doing research will not be hampered by borders and in which people have a strong sense of their identity as Europeans.

Where the Bologna Process has provided stable foundations, we must now build on them. Yet where the foundations are still not stable, we must secure them. The Commission's actions will aim both at working jointly with the EU Member States towards the European Education Area and at strengthening the Bologna process with all partner countries.

Tibor Navracsics
Commissioner for Education, Culture, Youth and Sport
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EXECUTIVE SUMMARY

The Bologna Process Implementation Report provides a wide-ranging and detailed picture of how the European Higher Education Area (EHEA) has been moving forward since the Yerevan Conference in 2015. This has not been a period of radical change. Instead, for most countries, the recent years have focused on consolidating the implementation of reforms.

The Bologna Follow Up Group has identified three key commitments that underpin the EHEA. These commitments concern the implementation of the three-cycle degree structure, recognition of qualifications and quality assurance. They can be considered as the foundations of the EHEA: if these foundations are not in place, further European higher education cooperation is undermined.

In addition to the implementation of these commitments, the priorities of the Bologna Process as set out in the Yerevan Communiqué are learning and teaching, social inclusion and employability – all topics addressed centrally in this report. In Yerevan, ministers also pledged to continue to foster mobility and internationalisation, and called for attention to the values of the EHEA.

Three-cycle degree structures

Implementation of the Bologna three-cycle degree commitments is improving, with most countries having made the necessary reforms in line with Bologna guidelines. The main Bologna tools – ECTS, Diploma Supplement and national qualifications frameworks – are also well implemented in most countries. Nevertheless, there remains a minority of countries where this is not the case. These countries still need to implement further reforms to ensure that their degree programmes are coherent with those in other EHEA countries.

The dominant European model is now a clearly structured three-cycle degree system. However, although Bologna commitments have mostly been met, there remain significant differences in degree structures across the EHEA as a whole.

In around half of the EHEA countries, the majority of first-cycle graduates continue to study in a second-cycle programme while in a quarter of countries it is less than 25% that move directly into the second cycle. This may suggest significant differences in labour market recognition of first-cycle qualifications across the EHEA.

Alongside the three main cycles, around half of all EHEA countries offer short-cycle higher education programmes. These programmes are usually vocational, offered at ISCED 5 level, and most often have a workload of 120 ECTS. In around half of the countries with such programmes, learning achievements can be fully recognised within first-cycle studies in the same field, while in the other half recognition is less substantial. Comparing short-cycle higher education programmes across the EHEA is further complicated by the existence in many countries of 'short-cycle tertiary education' programmes, which are not recognised within the national higher education systems.

Most EHEA countries also offer other programmes outside the three-cycle-degree structure. 'Integrated' or 'long' programmes of at least five years duration leading directly to a second-cycle degree exist in most EHEA countries, usually in regulated professional fields. They involve fewer than 5% of students in some countries, but more than 20% in others. In around a quarter of EHEA countries, there are also other programmes outside the main three-cycle degree framework.

There has been good progress since 2015 in the implementation of the Diploma Supplement. Indeed, most EHEA countries now comply with all the commonly agreed principles. The Diploma Supplement
is also commonly issued after short-cycle higher education programmes, but is far from being the norm in the third cycle.

Good progress can also be observed in the implementation of national qualifications frameworks (NQFs). Most countries have established a national qualifications framework for higher education, self-certified it to the Framework for Qualifications of the European Higher Education Area (QF-EHEA) and it is used by national authorities in public policy. In most countries, NQFs for higher education are integrated into NQFs for lifelong learning, which suggests widespread efforts in using NQFs for coordinating qualifications across sectors and levels of education.

Although many countries have now completed their NQF, there remain a few where development is slow or not moving. These countries are missing the opportunity to increase the transparency of their qualifications system both within and outside the country.

**Recognition of qualifications**

Formal compliance with most aspects of the Lisbon Recognition Convention (LRC) at national level is well established across the EHEA, as the content of national legislation and regulations is generally coherent with the international legal framework. However, work still needs to be done to ensure that appropriate procedures are established and followed for recognition of qualifications of refugees, displaced persons and persons in a refugee-like situation as specified in Article VII of the LRC.

Nevertheless recognition problems are reported to be still prevalent. This could be because higher education institutions, who are usually responsible for recognition decisions for academic purposes, may not always follow all the required principles of good recognition practice.

With regard to the goal of securing more 'automatic recognition' – understood as system-level recognition for the purposes of further academic study – considerable effort is still required to agree on a common understanding of the concept, and to make it a reality.

**Quality assurance**

Quality assurance continues to be an area of dynamic development in European higher education. The requirement for higher education institutions to develop and publish quality assurance strategies and evaluation reports is becoming increasingly established, while external quality assurance is almost always undertaken by independent agencies working in line with the Standards and Guidelines for European Quality Assurance (ESG). Indeed the adoption and integration of the ESG in national practice has been widely addressed and achieved.

Nevertheless, there are still areas where attention is needed. Some countries still need to take action to ensure that students are fully involved in all quality assurance processes as equal partners. It is also worth noting that improvement-oriented models of external quality assurance are far less prevalent in the EHEA than supervisory models. Higher education institutions in many countries are also restricted to using national quality assurance agencies to fulfil their external quality assurance obligations, rather than benefitting from the work of other suitable EQAR-registered European agencies. In addition, the European Approach to the Quality Assurance of Joint Programmes, although adopted in Yerevan, has hardly been implemented. Indeed it is not yet permitted by national legislation in many countries, and in particular in those where programme accreditation is required. These are precisely the countries where the European Approach to the Quality Assurance of Joint Programmes potentially offers the greatest potential benefit as a more appropriate, effective and efficient form of quality assurance.
Learning and teaching

Improving learning and teaching is among the most fundamental objectives of the Bologna Process. Strategies to achieve this objective are now quite widespread across the EHEA, both at national level and within higher education institutions. Steering commonly promotes the development of international opportunities, academic staff development and measures to improve teaching. Digitally enabled teaching and learning is also increasingly addressed strategically at national and institutional levels.

In most countries ECTS has been integrated as both a credit accumulation and transfer system, with learning outcomes and student workload increasingly used as the basis for credit allocation. This provides common foundations for the understanding of European higher education programmes. However, there is a need to ensure that the 2015 ECTS Users Guide adopted by ministers is the basis for correct implementation of the system. To this end, around a third of the countries could take action to encourage quality assurance processes to pay attention to this issue.

Higher education teachers are the key players in enabling students’ learning, and appropriate training in teaching skills both before being employed and throughout careers is an essential pre-requisite for a high quality system. Yet, regulations rarely require academics to hold a teaching qualification, and the development of teaching skills is often left to ad hoc measures.

Opening higher education

Social dimension challenges have accompanied the Bologna Process throughout its existence. Yet, disadvantaged learners still face access barriers to higher education: students from low and medium-educated families are strongly under-represented, and are more likely to enter higher education with a delay; gender imbalances, if improving slightly, still persist and remain marked in some discipline areas with significant implications for the labour market and society; and life-long learning is not a reality for learners in many countries.

In addition to barriers to access, disadvantaged students also face difficulties in completing higher education, dropping out in higher proportions. Despite evidence of these trends over a number of years, and commitments re-iterated in several ministerial communiqués, only a few countries have introduced measures in recent years to improve the conditions for under-represented groups to access and complete higher education.

Employability

Employment of recent graduates has improved as countries recover from the economic crisis. Nevertheless, graduate unemployment remains a significant problem in some parts of Europe, as not all countries have recovered to the same extent and at the same speed. There is also a gender aspect to employment issues, as in some countries women face more difficulties than men in finding employment after graduation.

Systematic efforts to improve the relationship between higher education and the labour market still need to be better developed and implemented. Action could include using labour market forecasts, involving employers in curriculum planning and higher education governance, providing incentives to include work placements in higher education programmes, improving career guidance services, as well as encouraging student mobility.
Internationalisation

The trend for internationalisation is growing across the EHEA. However, mobility flows and the level of engagement in internationalisation activities vary considerably from country to country. There has been a significant increase in the use of targets to support and monitor progress in student mobility with only one quarter of all countries now having no targets for either incoming or outgoing student mobility.

There continue to be substantial differences between countries with regard to portability of domestic student financial support. Only around one-third of EHEA countries enable domestic financial support to be portable for credit and degree mobility. Moreover there is almost no support facilitating the mobility of students from under-represented groups in the majority of countries. Staff mobility targets are also reported by almost half of all EHEA countries, but often refer only to a general objective of increasing the numbers of mobile staff.

Values

The Yerevan Communiqué emphasises shared values as the foundation of a renewed vision of the European Higher Education Area. Specifically, the ministers highlight academic freedom and autonomy of higher education institutions, while EHEA values also include student and other stakeholder participation in the democratic governance and management of higher education.

While concerns have been raised about violations of values in some EHEA countries, it is difficult to find causal explanations related to the different systems of higher education governance in operation across the EHEA. There is nevertheless a continuing need to discuss the values that unite higher education systems, and to be vigilant that robust legal protection is in place – including defining and limiting the role of governments in the organisation and management of higher education institutions.
INTRODUCTION

The Bologna Process

The Bologna Declaration was signed in 1999 by ministers responsible for higher education from 29 European countries. However, its origins lie a year further back in the Sorbonne Conference and Declaration of 1998. These events and texts set in motion a European cooperation process that has radically changed higher education. Reforms have affected countries within and beyond Europe, and the number of official signatory countries has risen to 48, with Belarus the most recent state to join in 2015.

The chart below outlines the main milestones and commitments of the ministerial conferences within the Bologna Process up to 2015. It illustrates that several main themes can be followed throughout the process – mobility of students and staff, a common degree system, the social dimension, lifelong learning, a European system of credits, quality assurance and the development of Europe as an attractive knowledge region. Learning and teaching was added as an explicit priority in the Yerevan Communiqué.

The Yerevan Communiqué sets out a streamlined and updated policy agenda focusing on four key policy areas: implementation of key commitments; learning and teaching; employability; and social inclusion. These goals and objectives are all addressed in the report, and the combined analysis across the seven chapters aims to present a picture of the current reality of the European Higher Education Area (EHEA).

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Report outline

This report has been prepared for the European Ministerial Conference in Paris, France, on 24-25 May 2018. It provides a snapshot of the state of implementation of the Bologna Process from various perspectives using data collected mostly in the first half of 2017. It provides both qualitative information and statistical data, and covers all main aspects of higher education reforms aiming at a well-functioning EHEA.

The report is a successor to the two Bologna Process Implementation Reports (2012 and 2015) and has been developed through collaboration between the Bologna Follow-up Group (BFUG) and Eurostat, Eurostudent and Eurydice. For the first time, it also includes some indicators collected by the European Students Union (ESU), the European University Association (EUA), and the European Quality Assurance Register for higher education (EQAR).

The development of the report has been overseen by the Bologna Follow-up Group (BFUG), and specifically by a working group established to guide all aspects of the reporting process. The group was co-chaired by Tone Flood Strøm (Norway), Andrejs Rauhvargers (Latvia) and David Crosier (Eurydice). Close collaboration was also established with all BFUG advisory and working groups.

Qualitative information was gathered through two extensive questionnaires (an Excel questionnaire and an on-line questionnaire) addressed to BFUG members. These were submitted, after consultation with all relevant national actors, by the Bologna representatives in all 48 countries between March and December 2017. For the United Kingdom and Belgium, two responses each were submitted. The United Kingdom (England, Wales and Northern Ireland) is therefore treated as a separate higher education system to that of Scotland, while the Flemish and French Communities of Belgium are also considered as distinct higher education systems. However where statistical data is combined for Belgium and the United Kingdom in Eurostat's database, it is presented in a combined form in this report.

The qualitative data is based mainly on official information about legislation, regulations and national policies, and in some cases country representatives are asked to report on their perception of specific aspects of higher education reality. The data refers to higher education institutions that are directly or indirectly administered by a public education authority, which means public and publicly-subsidised private higher education institutions.

With regard to statistical data, the European Union's Education, Audiovisual and Culture Executive Agency (EACEA), working through a consortium led by Sogeti, Luxembourg, undertook a specific data collection in 2017 for the EHEA countries that are not part of regular Eurostat data gathering exercises.

The report draws upon a number of additional data sources. Eurostudent data is provided by the Eurostudent VI survey and focuses on the social and economic conditions of student life in Europe. The reference year for the data is 2016/17, and the report covers 28 of the 48 EHEA countries.

Information from the European University Association’s Trends 2018 report is used substantially in Chapter 2 on learning and teaching. This report provides an institutional perspective on higher education developments in Europe. The reference year for this survey is 2017, and it involves 303 higher education institutions from 43 of the EHEA systems.

Certain indicators throughout the report are provided by the European Student Union (ESU) member organisations. This data was collected through an online survey to European student unions in the second half of 2017, and will also be used in ESU’s 2018 edition of Bologna with Student Eyes.
The European Quality Assurance Register (EQAR) also hosted a short survey on cross border higher education quality assurance, and the responses to this questionnaire are used for the report's information on cross border quality assurance.

The reference year 2016/17 is applicable for qualitative data throughout the report, as well as for Eurostudent indicators. Eurostat statistical indicators generally use 2015 as the most recent reference year, with other years shown where relevant to provide a picture of trends.

The report is divided into seven thematic chapters, with a structure that aims to maintain coherence with the previous Bologna Process Implementation Reports, but also to reflect the most recent political priorities set in Yerevan in 2015. Each chapter has an introduction presenting the relevance of the topic in the Bologna Process, the commitments made in the Yerevan Communiqué, and the main findings of the 2015 Bologna Process Implementation Report, where relevant. The chapter then presents information through comparative indicators whose purpose is to describe the state of implementation in all countries from various perspectives. The text explains main developments, highlights issues regarding implementation, and provides examples of practice that may be of general interest.

The majority of indicators were developed for the 2012 Bologna Process Implementation Report, were updated in 2015 and have again been updated in this report, sometimes with substantial modification. A number of new indicators have also been developed, particularly to investigate more recent policy priorities.

Among the indicators presented in the report are 13 'scorecard indicators' that are designed to track country progress in implementing Bologna Process policy commitments. These scorecard indicators were already used in the 2015 edition of the Bologna Process Implementation Report to cover all but one of the issues assessed, although in some cases there have been significant revisions to the indicators for this edition. The new scorecard indicator in this report focuses on system level (automatic) recognition for academic purposes.
CHAPTER 7:
INTERNATIONALISATION AND MOBILITY

The Yerevan Communiqué

The Yerevan Communiqué, adopted at the EHEA Ministerial Conference in 2015, referred to internationalisation and mobility as powerful means to enhance mutual understanding and to foster the employability of graduates (117). Ministers noted that higher education institutions and academics are becoming increasingly active in an international context and cooperate in joint teaching and research programmes. The Communiqué highlighted key actions that EHEA countries have agreed to pursue to improve mobility opportunities for students with a disadvantaged background, including students and staff from conflict areas, and to promote the mobility of teacher education students (118). Finally, taking into account the guidelines of the Working group on mobility and internationalisation (119), EHEA countries made commitments to promote staff mobility and the portability of grants and loans (120).

The 2015 Bologna Implementation Report

The 2015 Bologna Process Implementation Report (European Commission/EACEA/Eurydice, 2015) emphasised that EHEA countries present very different situations with regard to internationalisation and mobility, especially when looking at mobility flows and the level of engagement in internationalisation activities. Although most national authorities did encourage the internationalisation of higher education through their steering documents, more than half of the countries lacked a national internationalisation strategy and had not adopted quantitative targets for different forms of mobility.

The report noted that although the trend for internationalisation is growing, lack of funding as well as inflexible national legal frameworks may hinder development in some countries. Overall, still only a minority of students benefit from mobility and the participation of under-represented groups needs greater attention. The portability of financial student support is one important measure to address this concern, but only a minority of countries ensure full portability for their students.

Moreover the findings of the report pointed to the fact that it was not yet possible to estimate whether the EHEA collective target of 20 % mobility by 2020 could be reached or not, as comprehensive and harmonised data collection is not yet fully in place. Data limitations pose even more significant challenges in evaluating the situation for staff mobility. There is no agreed operational definition of staff mobility, which would be necessary to be able to set proper quantitative targets and collect data on participation rates.

The 2015 Bologna Process Implementation Report concluded that for both student and staff mobility it will be essential to focus not only on numbers, but also on the quality of mobility. This implies investing in information services, monitoring the mobility experience, ensuring that recognition and evaluation processes operate fairly, and improving monitoring of the impact of measures to remove obstacles to mobility and to balance mobility flows.

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(118) Ibid, p. 3.
Chapter outline

Section 1 reviews various policies for the internationalisation of higher education at both central and institutional level. It tracks progress in comparison with the 2015 Bologna Process Implementation Report concerning strategies, budget and incentives for internationalisation, the share of institutions that participate in joint programmes and award joint degrees, as well as legal obstacles for the award of joint degrees. Section 2 focuses on student mobility by bringing together statistical information on mobility flows and information on national policies to support mobility such as target setting for outgoing and incoming mobility and requirements for mobility periods. It also includes the two scorecard indicators on portability of grants and loans and financial mobility support for disadvantaged students. Section 3 is devoted to issues related to staff mobility such as targets for incoming and outgoing staff mobility.

7.1. Policies for internationalisation

In recent years a growing number of terms have been used to define the internationalisation of higher education (de Wit, 2011). One distinction that is made is between ‘internationalisation at home and abroad’, although both aspects are seen as inter-related in various ways. In the first case, the aim is to develop an international awareness through the curriculum at the home institution. In the second case, the focus is on cross-border mobility of people, projects and programmes (Knight, 2008). In this chapter, the term internationalisation is understood to include a number of aspects that are centred around but not limited to international cooperation and mobility (121).

Although in many European countries the main responsibility for internationalisation activities lies with the higher education institutions themselves, the framework and strategic direction are often set at central level. Through the 2012 Mobility Strategy, EHEA countries were encouraged to ‘develop and implement their own internationalisation and mobility strategies’ (122). In addition, the 2013 ‘European higher education in the world’ communication encouraged EU member states to develop ‘comprehensive internationalisation strategies’ (European Commission 2013, p. 3) and the 2017 communication ‘Strengthening European Identity through Education and Culture’ called for further actions to boost mobility and facilitate cross-border cooperation (European Commission 2017b, pp. 4-5).

National strategies for internationalisation can vary greatly across countries. Generally they represent an official policy document that has been developed by the central authorities to achieve the overall goal of supporting internationalisation. Although the level of detail regarding internationalisation policies in such documents can vary greatly, they are expected to identify qualitative and quantitative objectives, describe processes, authorities and people in charge, identify funding sources and make recommendations.

Figure 7.1 provides an overview of the situation regarding the adoption of national strategies for internationalisation across the EHEA. This policy area continues to be very dynamic and has registered a steady progress since the 2015 reporting exercise. Thirty two countries have an active strategy for the internationalisation of higher education. In comparison with the situation that was recorded in 2015 there is a clear increase, with 16 new countries reporting that they have such a strategy in place. In France, for instance, the national STRANES strategy for higher education was adopted in autumn 2015. It involves a clear international dimension setting quantitative benchmarks by 2025 for doubling inbound and outgoing mobility, strongly encouraging Master students to go abroad, broadening international education programmes including the development of Massive Open Online Courses (MOOCs), improving students’ foreign-language skills, and improving the organisation of international cooperation projects.

(121) The European Commission supports tools such as the European Tertiary Education Register (ETER) (https://www.eter-project.com/) and U-Multirank (https://www.umultirank.org) which provide information on internationalisation and mobility.

Internationalisation strategies operate in a multiannual timeframe and are being periodically revised and updated. Currently the strategy in the former Yugoslav Republic of Macedonia is under preparation, while Moldova plans to develop specific strategic documents with the help of funding from the Erasmus+ Programme.

Internationalisation strategies are usually adopted by the responsible ministry. In the Netherlands, the Minister of Education sends to Parliament a letter on the government’s vision on the international dimension of higher education. In some countries, important provisions to facilitate international cooperation and mobility have been included in the laws on higher education. In Iceland, internationalisation has been mainstreamed in the general five year fiscal policy of the government, and is operating under the National Budget Law.

**Engagement at institutional level**

Through the 2012 Mobility Strategy, ministers encouraged higher education institutions ‘to adopt and implement their own strategy for their internationalisation and for the promotion of mobility in accordance with their respective profile and involving the stakeholders (students, early stage researchers, teachers and other staff)’ (123). This section therefore focuses on internationalisation at institutional level using data provided through the BFUG questionnaire. Most of the information is based on estimations and perceptions held by national authorities. This is due to the fact that only half of all countries monitor one or more of the three aspects that will be discussed below, i.e. the number of higher education institutions that have adopted an internationalisation strategy, participate in joint programmes and/or award joint degrees. When central level monitoring takes place, it is usually done on an annual basis by the respective Ministry or by the higher education accreditation and evaluation bodies or similar organisations.

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Countries were asked to estimate the percentage of their higher education institutions that have adopted an internationalisation strategy. As mentioned earlier, the concept of 'internationalisation strategy' is broad and countries may interpret it differently, and Figure 7.2 shows that quite different realities coexist in the EHEA.

Figure 7.2: Estimated percentage of higher education institutions that have adopted an internationalisation strategy, 2016/17

Thirty three of the EHEA countries estimate that more than half of their higher education institutions have adopted internationalisation strategies. Among these, 11 countries report that all higher education institutions have an internationalisation strategy. No country estimates that none of their higher education institutions have adopted such a strategy. In comparison with the 2015 Bologna Process Implementation Report, we observe a considerable increase in the number of countries in the top two categories (76-100 % of institutions): from 13 to 27 countries.

Countries report that data for these estimates include statistics about the proportion of institutions who have the Erasmus Charter for Higher Education (ECHE) (which means that they have formulated Erasmus Policy Statements or a form of internationalisation strategy focusing mainly on the European dimension of their international activity), various national reports and surveys, and in some cases the performance agreements between the government and the higher education institutions.

Ten systems (Andorra, Estonia, Finland, Iceland, Italy, Kazakhstan, Liechtenstein, Norway, Spain and the United Kingdom – Scotland) report that in addition to the existence of a national strategy for internationalisation (see Figure 7.1), all their higher education institutions have also adopted internationalisation strategies (see Figure 7.2).

Beyond the existence of a strategic document on internationalisation, higher education institutions have an increasing choice of instruments or activities to engage in the internationalisation process (e.g. joint programmes and joint degrees, campuses abroad, massive open online courses (MOOCs)). Nevertheless, the development of these instruments greatly depends on factors such as the available resources at institutional level. In some countries, national legal frameworks as well as institutional regulations can also hinder the development of these internationalisation instruments.
Budget and incentives for internationalisation

Confirming one of the findings of the 2015 Bologna Implementation Report, most countries report that they have specific budgets for funding internationalisation activities in higher education. For instance in Slovenia, the Action Plan Strategy for the Internationalisation of Slovenian higher education 2016-2018, has set 25 objectives and over 50 concrete measures with a total budget of 57 million euros. These measures range from mobility grants to information campaigns, orientation days, Slovenian language and culture courses and preparation modules for foreign students and higher education teachers.

It appears that central level funding is mostly allocated specifically for mobility. Apart from Erasmus+ and other EU-funded programmes, a number of countries operate national, regional and bilateral programmes for the mobility of students and staff. In particular, well established regional programmes in Central and Eastern Europe and in the Nordic region, as well as national schemes in, for instance, Germany, the Netherlands and the United Kingdom continue to play a significant role in supporting mobility.

France and Hungary have provided details of policy actions in this domain. In France, besides Erasmus+ supported grants, the Ministry for Europe and Foreign affairs offers a range of grants for incoming students which in 2016 concerned around 1,000 mobility periods, for a total cost of more than 43 million euros. For outgoing student mobility, the Ministry for Higher Education, Research and Innovation supports EHEA-portable need-based grants for around 700,000 students with a budget envelope of about 2 billion euros. In Hungary, to achieve the student mobility targets the government is financing a Stipendium Hungaricum scholarship programme for foreign students with a budget of nearly HUF 7 billion (22 million euros) in 2016, and HUF 14 billion (almost 45 million euros) in 2017. Outward student mobility is supported by the Campus Mundi excellence scholarship programme co-financed by the European Social Fund and the Hungarian government with a budget of HUF 9.2 billion (29 million euros) for five years.

Non-financial incentives for internationalisation have been reported by Austria, Estonia, France, the Netherlands, Poland, Slovakia, Slovenia and Russia. Examples of such measures include favourable regulatory frameworks for the accreditation of joint degree programmes, credit transfer and accumulation and the offer of study programmes in English, as well as specialised web-portals, promotion campaigns, support in immigration procedures, welcome services for incoming students. In several countries (Austria, Ireland, Finland, Norway, Poland and Romania) performance indicators on internationalisation activities are used as one of the criteria for the allocation of government funding to higher education institutions.

Joint programmes and joint degrees

Joint programmes refer to inter-institutional arrangements among two or more higher education institutions that lead ideally to a joint degree (but also currently to double and multiple degrees). Parts of joint programmes undertaken by students at partner institutions are recognised automatically by the other partner institutions. A joint degree is a single document awarded to students who successfully complete a joint programme, and it should be recognised as equivalent to national qualifications by the appropriate (national or, if applicable, regional) authorities of at least the countries participating in the programme.

Joint programmes and degrees have long been recognised as a key element in facilitating internationalisation in higher education institutions. Thus from the early Ministerial declarations in the Bologna Process onwards, there have been commitments to develop further these instruments – particularly in light of the launch of the Erasmus Mundus programme in 2004.
While the challenges to higher education institutions in developing cross-border joint programmes have been quite wide-ranging, one of the main issues for governments has been to create a legal environment where joint programmes can be established and recognised without undue problems. Although the vast majority of countries have now amended their legislation to take on board joint programmes and joint degrees, regulatory issues continue to be on the agenda.

Figure 7.3 illustrates the fact that in Azerbaijan, Belarus and Croatia it is not legally possible for higher education institutions to award joint degrees. In Switzerland this possibility is not explicitly stated in the legislation, but Swiss higher education institutions, which enjoy a large autonomy, can award joint degrees. Elsewhere, as for instance in Ireland, Sweden or the United Kingdom (Scotland), the legal framework has been established as early as the 1990s with subsequent updates in the following two decades. More generally, it appears that in a number of countries a lot of ambiguity remains which is due to the lack of a clear legal basis and/or additional regulations to operationalise the concept. For instance, as noted in Chapter 4 (Figure 4.12), twenty two systems report that the European Approach to quality assurance of joint programmes is not permitted by their legislative framework.

Figure 7.3: Legal possibility for HEIs to award joint degrees, 2016/17

Similarly to the findings from the 2012 and 2015 reporting exercises, countries continue to estimate a higher number of higher education institutions participating in joint programmes than those actually issuing joint degrees (see Figures 7.4 and 7.5).

According to these estimations, in the majority of countries, less than 25% of higher education institutions participate in joint programmes and less than 5% award joint degrees with marked differences of the extent to which countries are engaged in these actions. The uncertain legal situation continues to play a role in keeping the take up of joint degrees at a relatively low level.
When comparing with the data in the 2015 Bologna report, we can observe a slight increase in the number of countries that estimate that more than half of their institutions participate in joint programmes, but even so this group (13 countries) continues to be a minority. Among the countries in this group, Italy, Luxembourg and the former Yugoslav Republic of Macedonia estimate that between 76 and 100 percent of their institutions participate in joint programmes. On the other hand, Liechtenstein and Montenegro consider that no institutions are engaged in such activities.

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Source: BFUG data collection.
Similarly, there has been an increase in the top two categories (above 7.5%) of the share of institutions that award joint degrees. Five countries (Andorra, Azerbaijan, Belarus, Liechtenstein and Montenegro – as compared to eight countries in the 2015 Bologna report) consider that no institutions award joint degrees, while several others are unable to provide estimates. On the other hand, although in Croatia the award of joint degrees is not regulated by law (see Figure 7.3), a minority of institutions manage to solve the practical problems that arise from the uncertain legal situation and deliver a joint degree.

However, a group of several systems (Austria, Finland, France, Italy, Luxembourg, the former Yugoslav Republic of Macedonia, Iceland, Norway, Sweden and the United Kingdom – Scotland) estimate consistently high shares of institutions that both participate in joint programmes (see Figure 7.4) and award joint degrees (see Figure 7.5). Five of these systems (Finland, Iceland, Italy, Norway and the United Kingdom – Scotland) also report that they have a national strategy for internationalisation and estimate that all their higher education institutions have adopted similar documents (see Figures 7.1 and 7.2). In Italy, for instance, the Triannual Strategic Framework for the university system, allocating 50 million euros per year, includes indicators on the progress made by universities in the offer of ‘international’ degree programmes. These programmes are either taught in English, lead to a joint/double degree, are funded within the Erasmus+ joint master initiative, or at least 20% of their students experience an outward mobility (at least 12 ECTS). The support of the central authorities includes financial incentives for institutions that increase the offer of international programmes, regulatory measures to facilitate the accreditation of international programmes and promotion of these programmes on the portal that presents all degrees in Italy.

Overall however, when asked whether there are central level actions for the support of the development of joint degree programmes, only half of the countries respond that they provide some support, either as part of a central strategy for internationalisation, or as a specific central action or support (see Figure 7.6).

**Figure 7.6: Central level actions to support the development of joint degree programmes, 2016/17**

![Map showing central level actions to support joint degree programmes](source: BFUG data collection.)
7.2. Student Mobility

7.2.1. Establishing targets for student mobility

The EHEA mobility target adopted in 2009 in Leuven-Louvain la Neuve states that at least 20% of those graduating in the EHEA should have had a study or training period abroad by 2020 (124). It is a common benchmark which only describes outward mobility and takes into account the total number of graduates in the EHEA (125). Given that countries have different starting points and have diverse situations regarding mobility, the EHEA ministers also agreed, through the 2012 Mobility Strategy, adopted in Bucharest, that countries should develop and implement their own internationalisation and mobility strategies with their own ‘measurable and realistic mobility targets’ (126).

Outward mobility targets

Figure 7.7 shows that, at national level, the majority of countries (35 systems) have adopted national targets for outward student mobility. These targets could be qualitative or quantitative and they are either part of a national strategic document or exist as a specific central action to support mobility. In comparison with the 2015 Bologna report, where only 20 systems reported that they had clear targets for outward student mobility (127), we observe a significant increase in the use of target setting to support and monitor progress in mobility.

Figure 7.7: Mobility targets for outgoing students, 2016/17

![Map showing mobility targets for outgoing students, 2016/17](image)

Source: BFUG data collection.

Notes:
Outward targets include either degree-, credit- or both degree and credit mobility.

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(125) The 2012 Mobility Strategy was more specific: ‘We include in our mobility targets the periods spent abroad corresponding to at least 15 ECTS credit points or three months within any of the three cycles (credit mobility) as well as stays in which a degree is obtained abroad (degree mobility)’.


(127) Ideally, a ‘clear target’ should be either quantitative or qualitative and associated with a timeline or a year when the target should be reached.
Countries have set up a variety of targets that use a number of definitions for the target groups and express objectives in different numerical components. Some countries (the Netherlands (only outgoing credit mobility), Norway and Serbia) have adopted the EHEA target of 20% of outgoing mobility by 2020. In Hungary the objective is to increase the share of students who study or undertake a work placement abroad for a minimum of three months (or 15 ECTS) to 20% in 2023. Others concentrate on Erasmus+ mobility. Austria, for instance, has set up numerical targets of 100,000 Erasmus+ mobility periods by 2018 and 120,000 by 2020. In Finland the performance agreements between the government and the higher education institutions set mobility targets for each institution.

Inward mobility targets

In terms of mobility targets for incoming students, Figure 7.8 shows that 29 systems have adopted targets in this area, either as part of a central strategy or as a specific central action. Although this number is less than for outgoing student mobility, it nevertheless represents a majority of all EHEA countries, which points to another positive change since the Bologna 2015 report.

Figure 7.8: Mobility targets for incoming students, 2016/17

Source: BFUG data collection.

Several countries (Georgia, Kazakhstan and Montenegro) report that a strategic objective at national level is to ensure the quality of stay of foreign students and to increase their share in the total number of students. In Hungary, the objective is to increase the number of foreign students from 23,000 (2013) to 40,000 (2023), whereas in Estonia and Serbia the share of foreign students should reach 10% by 2020.

Overall, even when quantitative mobility targets for outward or incoming student mobility have been defined at national level, these targets are often based on various categories of students and mobility periods. It is thus difficult to monitor progress across countries and over time.

Moreover, one quarter of all systems (Armenia, Belgium – French Community, Bulgaria, Denmark, the Holy See, Iceland, Liechtenstein, the former Yugoslav Republic of Macedonia, Malta, Slovakia, Sweden and the United Kingdom) have not established targets for either type of student mobility.
**Mobility windows**

Beyond the establishment of mobility targets, the Bologna questionnaire looked at other actions that central authorities could take to achieve an increase in student mobility flows. Some of these actions – encouraging higher education institutions to offer compulsory mobility periods, or to embed so-called mobility windows in the curriculum – may be difficult to distinguish, but the questionnaire attempted to separate different types of action.

One way through which public authorities can support enhanced mobility is to establish requirements for higher education institutions to provide mobility opportunities to students. Figure 7.9 reviews the existence of formal requirements for higher education institutions to establish a mobility period as part of a study programme. In the vast majority of EHEA countries no such requirements exist. In 11 systems compulsory mobility periods are integrated in some study programmes or institutions.

In Luxembourg for instance, according to article 3 of the Law of the University of Luxembourg, all Bachelor students have a compulsory mobility period of six months. In Austria, some universities have compulsory mobility periods in some of their programmes (e.g. International Business) and in other countries this applies only for the joint degree programmes. Only in Germany are all higher education institutions legally required to offer the opportunity of a mobility period for students in all study programmes and this requirement is included in the Common structural guidelines of the Länder.

![Figure 7.9: Requirements for HEIs to provide a mobility period for students, 2016/17](image)

Source: BFUG data collection.

Mobility windows, which represent a period of time reserved for international student mobility that is embedded into the curriculum, but may not be mandatory (ACA 2013, p.12) appear to be more commonly supported by central authorities. Thus several countries (Denmark, Hungary, the former Yugoslav Republic of Macedonia, Ireland and Norway) which do not require mobility periods, note that they offer mobility windows for some or all (Ireland) programmes. In addition, in some cases (Finland, the Netherlands, Romania and Switzerland) individual institutions or programmes include compulsory periods or mobility windows as part of their programmes, despite the absence of system-wide requirements.
7.2.2. Statistical information on student mobility flows

This section provides data and analysis on student mobility flows, building on indicators available in the 2015 Bologna Process Implementation Report. Specific terms have been developed to describe the different forms of student mobility. Firstly, **degree mobility**, the long-term form of mobility, is the physical crossing of a national border to enrol in a tertiary level degree programme in the country of destination. Students are enrolled as regular students in any semester/term of a degree programme taught in the country of destination, which is different from their country of origin (128) with the intention of graduating from the programme in the country of destination. **Credit mobility** is the short-term form of mobility. It is defined as temporary tertiary education and/or a study-related traineeship abroad within the framework of enrolment in a tertiary education programme at a 'home institution' for the purpose of gaining academic credits (i.e. credits that will be recognised at the home institution).

The best known example of a mobility programme in the EHEA is the Erasmus+ programme, which was set up in 1987. It has an indicative financial envelope of €16.3 billion for the period 2014-2020 and is expected to support 4 million people to study, train or teach in Europe, and beyond, between 2014 and 2020. In 2016 Erasmus+ supported 725 000 mobilities and funded close to 21 000 projects. Overall, 79 000 organisations have benefitted from the Erasmus+ programme in 2016 (European Commission, 2017c).

There is also a distinction to be made regarding the direction of mobility flows. **Incoming mobility** takes the perspective of the country of destination – the country to which the student moves to study. The incoming mobility rate may be considered as an indicator of the country's attractiveness, relative to the size of its tertiary education system. **Outward mobility** takes the perspective of the country of origin – the country from which the student moves. While for many students this will be identical to the country of the student's nationality, it is more accurate to consider the country of permanent/prior residence or prior education for data collection purposes. The outward mobility rate may be considered as an indicator of a pro-active policy for students to acquire international experience (particularly for credit mobility). However, it may also be an indicator of possible insufficiencies in the education system of the country of origin (particularly for degree mobility).

Finally, the **country of origin** is defined as the country of prior education i.e. the country where the upper secondary diploma was obtained. Therefore, nationals who have obtained their upper secondary diploma abroad and come back to the home country for tertiary education are also considered mobile. If the information on the country of upper secondary diploma is not available, the country of prior residence can be used as a proxy. Citizenship is the least preferred option as a proxy of country of origin, because this is an administrative category and there are differences in its use in different countries, which are not related to country of residence.

It should be emphasised that the use of multiple definitions when identifying and reporting mobile students in the EHEA continues to hinder the comparability of the data across countries and over time. Twenty countries in the EHEA still use the foreign citizenship/nationality as a proxy for actual mobile students. The main problem with using citizenship in this way is that it conflates genuine mobile students with those who may have moved to the destination country earlier, for example during school education. As a result, for these countries the statistical indicators on mobility flows are only an estimation of mobility. In these cases, the indicators provide an estimation of the foreign student population in the total student population rather than an indication of incoming learning mobility.

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(128) The country of origin is defined as the country of prior education i.e. the country where upper secondary diploma was obtained. If the information on country of prior education is not available, the country of prior residence can be used as a proxy, as well as citizenship.
Since comprehensive data on credit mobility is not yet available – apart from the data collected by the Erasmus+ programme (European Commission, 2017c) – this section will focus on information on degree mobility. However, extensive data on credit mobility is currently being collected in the EU framework and it should be available in 2018 (European Commission, 2017d).

This section looks at three aspects of student mobility flows: inward degree mobility, outward degree mobility and mobility balance. Throughout the analysis, degree mobility flows from outside the EHEA to the EHEA; degree mobility flows from inside the EHEA to outside the EHEA and, finally, degree mobility flows within the EHEA are examined separately. For the inward mobility from countries outside the EHEA information from all declaring countries in the world was considered. For the outward mobility towards countries outside the EHEA only the questionnaires from Australia, Canada, Japan, New Zealand and the United States, were considered due to issues with data availability and quality. For the EHEA country coverage, see the Glossary and Methodological Notes.

**Inward degree mobility**

Figure 7.10 shows the percentage of mobile students coming from inside and outside the EHEA to individual EHEA countries. It compares the share of mobile students with the total student population in the EHEA destination country (see Chapter 1 for student population). The purpose of this indicator is to present an estimation of the attractiveness of each EHEA country for degree students who originate from another EHEA country or outside the EHEA area. The indicator measures the incoming mobility flow from the rest of the EHEA and the rest of the world to each EHEA member. All declaring countries outside the EHEA are considered for the indicators on inward mobility.

![Figure 7.10: Incoming degree mobility rate – tertiary education mobile students from the EHEA and from outside the EHEA studying in the country as a percentage of the total number of students enrolled, by country of destination, 2014/15](image)

(*): the former Yugoslav Republic of Macedonia

Apart from Luxembourg and Andorra who host very high shares of international students, the United Kingdom, Cyprus, Switzerland and Austria also show high shares of degree seeking incoming mobile students (above 15 %). The origin of these international students differs by country of destination. Austria and Switzerland are hosting mostly students from EHEA countries (88 % and 74 %), while
Cyprus and the United Kingdom are attracting the highest shares of students from outside the EHEA (46% and 67%), compared to the other EHEA countries. The countries with the lowest share of incoming international students are Croatia, Kazakhstan and Albania (with less than 2%).

Overall, in the majority of countries the share of mobile students from inside the EHEA is higher compared to the ones coming from outside the EHEA. However, the reverse is true for the United Kingdom, Ireland, France, Portugal, Ukraine and Finland, as well as Belarus, Russia, Kazakhstan and Moldova, where the share of students from outside the EHEA is double or more the share of students coming from another EHEA country.

Although the analysis of mobility trends between the 2015 and 2018 Bologna Process Implementation Reports is impacted by the change of the definition of mobile student for the countries participating in the UOE data collection that took place from 2013 reference year (129), some comparisons with the data reported in the 2015 Bologna Process Implementation Report are provided below. The weighted average share of international students from outside the EHEA increased from 2.27 to 3.59 since 2011/12. The weighted average share of international students from inside the EHEA also increased from 2.1% to 2.8%, with increases in most countries, with the exception of Portugal which registers a decrease of around 50%.

Figure 7.11 presents complementary information to the previous figure, showing the number of incoming mobile students. Overall, almost 2 million mobile students are studying in the EHEA. 56% or 1,109,203 are entering the EHEA for the purpose of studying and 44% or 869,701 are students from countries within the EHEA studying in another EHEA country.

The United Kingdom, with more than 287,000 and 143,000 incoming degree students from outside and inside the EHEA respectively attracts the largest share of mobile students. This represents 22% of all internationally mobile students, 26% of all incoming students outside the EHEA and 16% of the mobile students within the EHEA.

France and Germany are also receiving high numbers of students, in total 12% and 11% of all mobile students in the EHEA. France and Germany also host 17% and 12% of the incoming mobile students from outside the EHEA. Together the United Kingdom, France and Germany cover 55% of the incoming mobile students from outside the EHEA and around one third of all mobile students from within the EHEA. Russia also hosts significant numbers of incoming mobile students that represent around 11% per cent of all mobile students and 14% of the incoming mobile students from outside the EHEA. In terms of intra-EHEA mobility, Russia, Austria and the Netherlands also host sizable communities of mobile students.

These distribution patterns are very similar to the ones registered in the 2015 Bologna Process Implementation Report. One important new trend is the increase of non-EHEA students, which has at least doubled in 16 countries, and significantly declined in only four countries (Poland, Lithuania, Bulgaria and Cyprus).

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(129) This change of the definition of mobile student was not reflected in the 2015 Bologna Process Implementation Report, which had a reference year 2011/12. Before 2013, the UOE data collection defined mobile students as foreign students (non-citizens of the country in which they study) who have crossed a national border and moved to another country to study. Starting from 2013, reference year the UOE definition is based on the country of origin understood as the country where the upper secondary diploma was awarded (or the best national estimate) and not the country of citizenship.
Figure 7.11: Number of incoming degree tertiary education mobile students from inside and outside the EHEA, by country of destination, 2014/15

<table>
<thead>
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</thead>
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Source: Eurostat, UOE and additional collection for the other EHEA countries.

Outward degree mobility

Figure 7.12 presents the number of outward degree mobile students inside and outside the EHEA. In total, around 810 000 students from EHEA countries are studying abroad. When looking at absolute numbers, the big EHEA countries like Germany, France, Ukraine and Italy show the highest numbers of outgoing mobile students. Some medium size countries like Greece and Slovakia also have significant numbers of outwardly mobile students, especially inside the EHEA.

Similarly to data for the previous two Bologna reporting exercises, Figure 7.12 shows that Germany sends the highest number of students for a degree in another EHEA country. Indeed, nearly 102 800 students (a similar number in 2011/12 and 76 717 in 2008/09) move from Germany to study in another EHEA country, representing 12.3 % of the total number of EHEA students being abroad within the EHEA.

Figure 7.12: Number of outward degree tertiary education students inside and outside the EHEA by country of origin, 2014/15

<table>
<thead>
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<th>Inside EHEA</th>
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| Source: Eurostat, UOE and additional collection for the other EHEA countries.

(*): the former Yugoslav Republic of Macedonia
The country distribution of outgoing mobility flows within the EHEA is more diverse than the one leaving the EHEA. The top 8 countries cover half of the total outward mobility flow. Germany accounts for 12.3%, Ukraine 7.7%, France 7.5% and Italy 6.5% of the outward mobile students within the EHEA.

The largest numbers of students moving to non-EHEA countries originate from France and the United Kingdom – with 20% and 12% they represent almost a third of all outward mobile students leaving the EHEA, whereas Italy and Spain, account for 5.4% and 5.2% respectively. In total, the top 6 countries cover almost two thirds of all outward mobility flows of the EHEA countries.

Figure 7.13 shows the number of graduates who have graduated abroad in another EHEA country as a percentage of the total number of graduates of the same country of origin. More than seven out of ten graduates in Luxembourg and Liechtenstein, and more than five in Cyprus, have received their tertiary education abroad. The lowest shares of less than 1% is found in the United Kingdom, Russia, Turkey and Poland where only a very small share of the graduates completed degrees outside their country of origin.

Figure 7.13: Outward degree mobility rate – mobile tertiary education graduates within the EHEA as a percentage of all graduates of the same country of origin, by country of origin, 2014/15

(*) the former Yugoslav Republic of Macedonia

Source: Eurostat, UOE and additional collection for the other EHEA countries.
Figure 7.14 presents information about some of the characteristics of degree mobile graduates. Data on education level, sex and country of origin shows that among first-cycle graduates (ISCED 6), Luxembourg has again one of the highest shares of international graduates (21%), followed by the United Kingdom (17 %), Austria (15 %) and Cyprus (14 %). The lowest shares of international graduates are in Croatia, Turkey, and Spain (below 1 %). The share of females among these international graduates is above 50 % in most of the countries, except in Turkey, Serbia, Bulgaria, the former Yugoslav Republic of Macedonia, Cyprus and Finland.

For second-cycle graduates (ISCED 7), similar countries are to be found amongst those with the highest shares of 20 % or above: Luxembourg, the United Kingdom, Austria, Netherlands, but also Switzerland. At this level, the number of countries who report a majority of female incoming mobile students is lower. In 12 countries, the gender distribution is equal or in favour of male incoming mobile students.

At doctoral level (ISCED 8), there are only five countries that report more than 50 % or more of their incoming mobile students are female.

In most countries, the share of international graduates increases as ISCED levels rise, reaching in ISCED 8 almost 90 % incoming mobile graduates in Luxembourg, 54 % in Switzerland and 43 % in the United Kingdom.

**Figure 7.14: Share of degree mobile graduates from abroad by education level, sex and country of origin, 2014/15**

<table>
<thead>
<tr>
<th>ISCED 6</th>
<th>LU</th>
<th>UK</th>
<th>AT</th>
<th>CY</th>
<th>NL</th>
<th>CZ</th>
<th>BE</th>
<th>CH</th>
<th>DK</th>
<th>IE</th>
<th>FI</th>
<th>SK (**)</th>
<th>IT</th>
<th>RS</th>
<th>DE</th>
<th>EE</th>
<th>BG</th>
<th>HU</th>
<th>NO</th>
<th>RO</th>
<th>LV</th>
<th>SE</th>
<th>PT</th>
<th>SI</th>
<th>MT</th>
<th>LT</th>
<th>PL</th>
<th>ES</th>
<th>TR</th>
<th>HR</th>
</tr>
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<tbody>
<tr>
<td>Total</td>
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<td>16.9</td>
<td>15.3</td>
<td>14.2</td>
<td>9.9</td>
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<td>DK</td>
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<td>SK (**)</td>
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<td>EE</td>
<td>BG</td>
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<td>LV</td>
<td>SE</td>
<td>PT</td>
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<td>MT</td>
<td>LT</td>
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<td>6.8</td>
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<td>1.7</td>
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<td>1.1</td>
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</tbody>
</table>

(*): the former Yugoslav Republic of Macedonia

Source: Eurostat, UOE and additional collection for the other EHEA countries.
Figure 7.15 shows the share of tertiary students enrolled for a degree abroad, distinguishing between the EHEA and non-EHEA countries. It links the outward mobile students of a country to the total population of students with the same country of origin. It thus measures the mobility of a population that has the same country of origin (i.e. the same prior education or the same usual residence or the same citizenship). As mentioned above, the results provided by this figure should be considered with caution since countries do not all use the same criterion to define the mobile population. For instance, the fact that some citizens of the United Kingdom permanently live in countries of the Commonwealth could lead to an over-estimation of outward flows if these countries use the citizenship criterion to report enrolment by country of origin. In addition, outward mobility is counted only towards the EHEA countries for which data is available and a few selected non-EHEA countries i.e. Australia, Canada, Japan, New Zealand and the United States. This leads to an underestimation of the outgoing mobile students to non-EHEA counties and influences the findings, since these are not the main destination countries of all students.

Figure 7.15 shows that almost 9 out of 10 students originating from Andorra and 7 out of 10 from Luxembourg study outside their country of origin and almost all of them do so in the EHEA. Similar to the last 2015 Bologna Process Implementation report Cyprus, Slovakia, Moldova and Iceland also show quite high shares of outgoing mobile students. In this group, while mobile students from the first three countries are mostly staying within the EHEA, the Icelandic students show a more pronounced orientation towards non-EHEA countries. In fact, Iceland sends 2.4 % of their student population to non-EHEA countries, which corresponds to 18 % of all outgoing mobile students (see Figure 7.12).

In the majority of reporting countries the share of outgoing students staying within the EHEA is above 80 %. Around a quarter of outgoing mobile students from France and Denmark are leaving the EHEA for their studies. In Sweden this affects around a third and in the United Kingdom around half of their outgoing student population. However, this is also related to the outward countries covered in this indicator (see note above).

Figure 7.15: Share of tertiary students enrolled abroad (degree mobility), by country of origin, 2014/15

Source: Eurostat, UOE and additional collection for the other EHEA countries.
In addition to the comparison between outward degree mobility inside and outside the EHEA (see Figure 7.15), the outward mobile student rate to non-EHEA countries alone can also be considered (see Figure 7.16). Apart from Iceland, two other Nordic countries, Norway and Sweden, show the highest shares. Cyprus also has a high value of 1%. However, when looking at the share of students originating from Cyprus who study in other EHEA countries (28%), this one per cent does not have such an impact (96% of all outgoing students from Cyprus stay within the EHEA).

**Figure 7.16: Outward degree mobility rate – tertiary education students studying abroad outside the EHEA as a percentage of the total number of students of the same country of origin, 2014/15**

<table>
<thead>
<tr>
<th>Country</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>AT</td>
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</tr>
<tr>
<td>IS</td>
<td>2.33</td>
</tr>
<tr>
<td>NO</td>
<td>1.94</td>
</tr>
<tr>
<td>SE</td>
<td>1.78</td>
</tr>
<tr>
<td>CY</td>
<td>1.71</td>
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<tr>
<td>FR</td>
<td>0.69</td>
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<tr>
<td>LU</td>
<td>0.61</td>
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<tr>
<td>CH</td>
<td>0.54</td>
</tr>
<tr>
<td>UK</td>
<td>0.51</td>
</tr>
<tr>
<td>IE</td>
<td>0.49</td>
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<tr>
<td>AD</td>
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</tr>
<tr>
<td>FY</td>
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<tr>
<td>EE</td>
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<tr>
<td>RS</td>
<td>0.41</td>
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<td>DK</td>
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<td>AL</td>
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<td>GE</td>
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<td>LV</td>
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<td>HR</td>
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<td>DE</td>
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<tr>
<td>TR</td>
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</tbody>
</table>

(*) the former Yugoslav Republic of Macedonia

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

The trend in the United Kingdom shows a different pattern: this country has high rates of incoming students from inside and outside the EHEA (see Figure 7.10), but very low rates of outgoing students overall: indeed less than 2% of British students study abroad. The share of outgoing students to non-EHEA countries, however, is relatively high (0.7% is the 8th highest share in the EHEA), but with only 0.8% of the student population studying in other EHEA countries, the overall share remains very low.

**Mobility balance**

The aspiration for more balanced mobility was reinforced in the Bucharest Communiqué (130) and the 2012 Mobility Strategy, in which EHEA ministers asked for more balanced mobility (especially for degree mobility), ‘since it has a sustained effect on the host and home countries, can facilitate capacity building and cooperation and may lead to brain gain on the one side and to brain drain on the other’ (131). That being said, it may be worth pointing out that there is no definition of ‘balanced mobility’ at European level (132).

The concept of balanced mobility has various aspects. For example, assuming that mobility is desirable, balanced mobility at low levels of mobility (low incoming and low outward mobility rates) may be perceived as less positive than balanced mobility at high levels (high incoming and high

---

(132) The Working Group on Mobility (2009-2012) tried to elaborate an appropriate definition of ‘balanced mobility’ without reaching a final conclusion. Nevertheless, several main ideas were put forward, such as: ‘Even if there are specific imbalances, mobility itself is good and therefore should not be restrained’ and ‘Only awareness and capacity building in the home countries can sustainably reduce brain drain’.
outward mobility rates). Balanced or imbalanced mobility may also hide geographical disparities, as only two areas are considered: the EHEA (see Figure 7.17) and a selected group of non-EHEA countries (see Figure 7.18).

Figures 7.17 and 7.18 aim to identify ‘net importing countries’ (ratio greater than 1 – the country receives more mobile students than it sends), ‘net exporting countries’ (ratio below 1 – the country sends abroad more students than it hosts) and countries experiencing balanced mobility (ratio equal to 1).

Figure 7.17 shows that most EHEA countries are net exporters of students towards other EHEA countries (ratio below 1 – more outgoing than incoming students). In total, 11 countries are net importers of students with the rest of the EHEA (ratio above 1 – more incoming than outgoing students). These net importers are mostly Western or Central European countries (the United Kingdom, Denmark, the Netherlands, Austria, Switzerland, the Czech Republic, Belgium, Poland, Hungary, and Spain) and Russia. The United Kingdom has the most imbalanced rate of incoming and outgoing students within the EHEA. Similar to the previous Bologna Process reporting exercises they report nine times more incoming mobile students than outgoing ones (from EHEA countries, to EHEA countries respectively). Similar patterns as in the last round can be observed also for Denmark, the Netherlands, Austria, Switzerland, the Czech Republic and Belgium; these countries also have very imbalanced mobility flows and are strong net importing countries by a factor of 2.5 or higher.

The top net exporting countries are situated in the Balkans or Eastern Europe (Moldova, Croatia and Albania), but also Andorra has a very high share of outward mobile students.

In comparison with the 2015 Bologna Process Implementation Report, several countries (France, Portugal, the United Kingdom, Italy and Hungary) register a significant decrease of the within EHEA incoming/outgoing ratio. On the other hand, an increase of more than factor 2 is observed in Armenia, Cyprus, Estonia, Lithuania, Latvia, the former Yugoslav Republic of Macedonia and Poland. These countries have a higher imbalance towards incoming students than reported for 2011/12 (133).

Figure 7.17: Mobility balance: Incoming/outgoing tertiary students ratio within the EHEA, 2014/15

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<th>Country</th>
<th>Ratio</th>
</tr>
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<td>Source: Eurostat, UOE and additional collection for the other EHEA countries.</td>
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(133) At least partially, some of these trends might be influenced by the change of the definition of mobile student (see above).
Figure 7.18 aims to show whether the situation changes when mobility outside the EHEA in selected countries (134) is also taken into account. Indeed a significant rise in the number of net importing countries can be observed. In total, 17 countries report substantially more incoming mobile students than outgoing (by at least factor 1.5). In addition to the eleven counties already mentioned above (see Figure 7.17), Finland, France, Germany, Italy, Portugal and Sweden are clear net importing countries. Kazakhstan, Ireland and Latvia have a balanced incoming/outgoing ratio.

On the other side of the spectrum, the inclusion of non-EHEA countries does not change the picture significantly. Andorra, Croatia, Moldova and Azerbaijan, as well as Albania, are still among the highest imbalanced net exporting countries, even when taking the non-EHEA countries into account.

Again, the incoming/outgoing ratio outside the EHEA (Figure 7.18) suffers from under-coverage as only a selection of non-EHEA countries are considered in the indicators on outward mobility. This under-coverage has a differentiated impact on countries. Countries with privileged linguistic, cultural and historical links with some areas of the world, or specific regional agreements are likely to be more impacted by the geographical under-coverage of the data.

Figure 7.18: Mobility balance: Incoming/outgoing tertiary students ratio within and outside the EHEA, 2014/15

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ØP = EHEA weighted average

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

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(134) Australia, Canada, Japan, New Zealand and the United States.
Figure 7.19 gives more information on the mobility balance. It shows a strong relation between the mobility balance (X axis) (135) and the outward mobility rate (Y axis) (136): the higher the importing balance (on the X axis), the lesser the outward mobility rate (on the Y axis).

**Figure 7.19: Balance as a measure of the attractiveness of the education system of the country at tertiary education level (mobility flows within and outside EHEA), 2014/15**

\[ X = \text{Absolute balance incoming-outgoing} \]

\[ Y = \text{Outward degree mobility rate (\%)} \]

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

**Notes:**

Countries more to the right have a high imbalance towards incoming mobility, while countries more to the left have a high imbalance towards outward mobility and countries closer to the middle are more balanced.

Countries up in the chart have high levels of outward mobility and countries down in the chart have lower levels of outward mobility.

Negative balance means that outward mobility is higher than inward mobility. Positive balance means that inward mobility is higher than outward mobility.

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(135) The X axis is the same balance concept as shown above, but computed on a different scale for graphical readability purpose. Indeed, in order to avoid a scale ranging to more than 10 units while most countries are below 1 (incoming/outgoing ratios, see Figure 7.17), the absolute difference (incoming – outgoing students) is computed and then divided by the total number of incoming students (when the balance is positive) or by the total number of outgoing students (in case of negative balance). This results in a smoother continuum, more readable when plotted.

(136) Both axes include mobility flows within and outside the EHEA.
There are interesting differences within the group of net importers and exporters respectively. The United Kingdom, Denmark and the Netherlands are very imbalanced importing countries, with very low shares of outgoing mobile students (measured against all students originated from these countries), whereas Switzerland and Austria keep their outward mobility rates significantly higher.

Among countries with highly imbalanced outgoing mobility flows (Croatia, Albania, Azerbaijan, Moldova and Andorra) even bigger differences in the outward mobility rates are evident.

The balance of mobility flows can be shown also in terms of the share of the top three countries for inward and outward mobility.

The indicator on the top three countries of origin (see Figure 7.20) computes the number of mobile tertiary students enrolled in a given country from the top three countries of origin, as a percentage of all mobile students enrolled in the country. A high percentage means that the top three countries provide most of the incoming students in the country. Similarly to other indicators, the restriction of the geographical coverage to some countries outside the EHEA (see list above) is a clear limitation, especially for those countries that receive students from countries that are not in the selection.

Andorra, the former Yugoslav Republic of Macedonia, Serbia, Bosnia and Herzegovina and Moldova show the least diverse incoming mobile student body – above 80% of the incoming students are from the respective top three countries of origin. In the great majority of these cases, the top three countries of origin are also neighbouring countries. More generally, geographical proximity, the share of common languages of instruction or historical legacies may not be negligible in determining the origin of incoming students in some countries.

Incoming mobile students in Germany and Norway appear to have the most diverse geographical background. Less than a quarter of the incoming mobile students in these countries are covered when looking at the three most common countries of origin. Apart from the Swedish students in Norway, the biggest inward mobility flows in these countries come from China and Russia, as well as India for Germany. Indeed countries with high shares of incoming students from non-EHEA countries generally show more diversity regarding the countries of origin.

**Figure 7.20: Student mobility flows: Top three countries of ORIGIN (INWARD) in %, 2014/15**

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*Source: Eurostat, UOE and additional collection for the other EHEA countries.*
The indicator on the top three countries of destination (see Figure 7.21) computes the number of mobile tertiary students of a given country of origin enrolled in the top three destinations, as a percentage of all mobile tertiary students of that country. The variety of destinations is impacted by factors similar to the previous indicator. At national level, the various measures aimed at fostering student mobility also have an impact on the diversity, since they usually prioritise particular geographical regions, sub-geographical areas or specific countries for privileged cooperation.

Looking at the outward diversity, Andorra and Liechtenstein show the least diverse mobility patterns. More than 95% of outgoing students of these countries study in only three countries of destination. For Andorra these countries are Spain, France and Portugal and for Liechtenstein, these countries are Switzerland, Austria, and Germany. Mobile students from Serbia, Russia, the former Yugoslav Republic of Macedonia, Turkey, Italy, Greece and the United Kingdom make more diverse choices – the top three destinations covering a maximum of 47% of all outgoing mobile students.

In comparison with the 2015 Bologna Process Implementation Report, some changes in these two indicators can be seen. Regarding inwards diversity, almost all countries have become more diverse and have reduced the share of the students from the top three countries amongst their incoming students. Regarding outwards diversity, there is no clear trend towards more or less diversity.

Figure 7.21: Student mobility flows: Top three countries of DESTINATION (OUTWARD) in %, 2014/15

(*) The former Yugoslav Republic of Macedonia

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Source: Eurostat, UOE and additional collection for the other EHEA countries.
The data presented in Figure 7.22 points to a negative correlation between high outward mobility rates and diversity of countries of destination. Students from countries with high outward mobility rates show also a high concentration on only three destinations. The other way round, students from countries with rather low outgoing mobility rates seem to be more diverse in their choice of destinations.

Figure 7.22: Outward mobility versus diversity of destination countries (mobility flows within and outside the EHEA) 2014/15

(*): the former Yugoslav Republic of Macedonia
Source: Eurostat, UOE and additional collection for the other EHEA countries.

### 7.2.3. Policy factors that influence student mobility

#### Obstacles to student mobility

Statistical data that have been presented in this chapter show that relatively limited numbers of students are mobile in proportion to the EHEA student population. This situation may partly be explained by the fact that many obstacles continue to prevent a number of students from being mobile.

Both the Bucharest Communiqué and the Mobility Strategy stress the importance of removing existing obstacles to mobility. The 2015 Bologna Process Implementation Report analysed data on the perceptions of national authorities and students on the most important obstacles to student mobility. Countries and students both ranked financial issues as the main obstacle to mobility. They also gave a similar priority to study/curriculum organisation and language-related barriers. Students’ personal situation was another significant obstacle cited by students themselves, while country answers gave more weight to issues related to recognition and information provision.

The Eurostudent VI survey includes updated information about student perceptions of obstacles to mobility and reveals that, similar to the Eurostudent V survey the ‘additional financial burden’ remains the main obstacle to mobility, followed by the ‘separation from partner, children and friends’ and the
Fig. 7.23 presents Eurostudent information on credits (ECTS, certificates) that students have gained abroad after being temporarily enrolled abroad and returning to their home institution (credit mobility) \(^{(137)}\).

As with the data presented in the 2015 reporting exercise, it appears that full recognition of credits is a common practice in the majority of countries where data is available. Large differences nevertheless emerge between countries. For instance in Hungary, 31\% of students who have been enrolled abroad have seen their credits gained abroad recognised, while in Finland, this was the case for 77\% of students \(^{(138)}\). The share of students who do not get any recognition of credits seems to be relatively high in some countries analysed (Serbia and Hungary).

Figure 7.23: Recognition of credits gained during (most recent) enrolment abroad – Share of students who have been enrolled abroad (in %), 2015/16

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Source: Eurostudent.

**Portability of grants and loans**

Countries in the EHEA implement a range of measures to foster mobility and tackle obstacles preventing it (European Commission/EACEA/Eurydice, 2016b). Some obstacles such as the reorganisation of programmes and strengthening of information provision can perhaps be addressed more easily than others. On the other hand, funding, improving language skills, recognition and legal issues might be more difficult to tackle as they require either increased financial means or further dialogue and coordination among various stakeholders at institutional, national or European levels.

\(^{(137)}\) For the use of the European Credit Transfer and Accumulation System (ECTS) in the context of student mobility, see Chapter 2, Section 2.2.

\(^{(138)}\) The data for Germany is not comparable with the other countries because there are fewer response options and therefore no distinction between ‘full’ and ‘partial’ recognition possible.
As the lack of funding seems to continue to be the most important barrier to student mobility (DZHW 2018, p. 219; European Commission/EACEA/Eurydice 2015, pp. 244-248), it would be important to address this issue as a priority.

One important aspect of mobility funding is the possibility for students to take domestic grants and/or loans to another EHEA system. This possibility – that is referred to as ‘portability’ – should ideally apply to both short-term study visits in the framework of a home-country programme (credit mobility) and entire-degree courses (degree mobility). The indicators that follow start by examining portability of public grants and publicly-subsidised loans (see Figures 7.24 and 7.25). These two aspects are then brought together in Scorecard indicator n°12 on portability (see Figure 7.26).

Figure 7.24 shows the main characteristics of portability in the case of grants. It distinguishes between portability for credit and degree mobility. It also provides details on portability restrictions, meaning additional requirements that students and/or the chosen study programme abroad need to fulfil for the grant to be portable. Such restrictions include, for example, the definition of countries where students can take their grants (e.g. portability within the European Economic Area only) or limits on the time spent abroad. The most severe restriction is when students can only take their grants abroad to study if no equivalent programme is available in the home country. Since this means that portability is allowed only in exceptional cases, countries applying this condition are represented in the same way as those having ‘no portability’.

**Figure 7.24: Portability of public grants, first and second cycle, 2016/17**

![Map of Europe showing portability of public grants](image)

**Source:** BFUG data collection.

**Notes:**

The figure covers domestic public grants, i.e. different types of grants issued by public authorities in the home country. It excludes public grants dedicated specifically to mobility.

The figure indicates that the most restrictive policies in terms of grant portability are found in Albania, Azerbaijan, Belarus, Bosnia and Herzegovina, Bulgaria, the former Yugoslav Republic of Macedonia, Georgia, Romania, Serbia, Turkey and Ukraine. In general, students from these countries cannot use their domestic grants when studying abroad, be it for a short period of time (credit mobility) or a longer period (degree mobility). The French Community of Belgium and Moldova also appear in the same
category, as grants are portable only in the case of programmes for which no equivalent exists in the home system.

In around one-third of all EHEA systems, portability of grants is limited to credit mobility, i.e. when students move abroad for a short period of time (e.g. a semester or an academic year) in the framework of their home-country programme. Some of these systems apply portability restrictions (Armenia, Greece, Kazakhstan, Latvia, Lithuania, Malta, Portugal, Spain and the United Kingdom – England, Wales and Northern Ireland), limiting, in particular, the portability of grants to programme exchanges within recognised schemes such as Erasmus (e.g. Greece, Latvia, Lithuania, Portugal and Spain).

In 18 EHEA systems, grants are portable for short mobility periods (credit mobility) as well as for longer periods, i.e. when the student intends to get a full degree abroad. Eight of these systems apply portability restrictions (Austria, Denmark, France, Germany, Ireland, the Netherlands, Norway and the United Kingdom – Scotland). For example, Germany limits degree portability of grants to the EU countries and to Switzerland, whereas the United Kingdom (Scotland) applies even stricter criteria, limiting its pilot degree portability scheme to a small number of selected higher education institutions in the EU. Ireland provides a further example of portability restrictions, limiting credit portability to mobility explicitly required by home programmes and degree portability to the EU countries.

Figure 7.25 examines whether publicly-subsidised loans are portable and, if yes, whether there are any portability-related restrictions. Information is structured along the same lines as was in the case of grants, so that the figure distinguishes between portability for credit and degree mobility, and identifies countries with portability restrictions.

**Figure 7.25: Portability of publicly-subsidised loans, first and second cycle, 2016/17**

![Map showing portability of publicly-subsidised loans](image)

Source: BFUG data collection.

**Notes:**
The figure covers publicly-subsidised loans, i.e. different types of loans subsidised by public authorities in the home country. It excludes publicly-subsidised loans dedicated specifically to mobility.
The figure shows that publicly-subsidised loans are offered in fewer than two-thirds of all EHEA systems, and are thus less widespread than public grants. Moreover, as the higher education mobility scoreboard shows (European Commission/EACEA/Eurydice 2016b, p. 29), some systems register only a negligible proportion of loan beneficiaries among their student population (e.g. less than 1% in the French Community of Belgium, France, Italy, Portugal and Slovakia), so that loans in these systems cannot be regarded as a major element of national student support (i.e. their portability is not considered in Scorecard indicator n°12 – Figure 7.26).

In general, systems that offer publicly-subsidised loans allow some degree of portability. Exceptions to this pattern are Armenia, Azerbaijan, Belarus, Bosnia and Herzegovina, Bulgaria, Greece, Serbia and Turkey, where students cannot benefit from their loans if they study abroad, be it for a short period (credit mobility) or a longer period (degree mobility). As with grants, the French Community of Belgium allows portability only in exceptional cases, when there is no equivalent programme within the Community.

Among systems where loans are portable, six limit portability to credit mobility (France, Italy, Kazakhstan, Lithuania, Poland and the United Kingdom – England, Wales and Northern Ireland), and, among these systems, some apply even stricter limitations. For example, Lithuania limits portability of loans to the mobility that falls under recognised exchange schemes such as Erasmus.

Most systems that offer publicly-subsidised loans allow portability for both credit and degree mobility. While the overall geographical pattern is very similar to the portability of grants, some countries with limited grant portability – for example Hungary, Latvia, Portugal, Slovakia and Switzerland – are more flexible when it comes to portability of publicly-subsidised loans (i.e. loans are portable – with or without restrictions – for credit as well as degree mobility, whereas grants are only portable for credit mobility). Iceland is another noteworthy case, as although there is no standard grant package, publicly-subsidised loans are portable without restrictions.

Scorecard indicator n°12 (Figure 7.26) brings together the elements presented in the two previous figures and puts countries’ existing schemes into pre-defined categories. The indicator is based on a five-colour scheme where 'dark green' represents full portability of all available domestic student support (this means that there are equivalent requirements for receiving public grants and/or taking loans if students study in the home country or abroad) and 'red' signifies no portability. Higher education systems applying the requirement that public financial support can be taken abroad only if no equivalent programme is available in the home country also belong to the 'red' category, as the portability of student support is only possible under exceptional circumstances. There are three transitional categories between 'dark green' and 'red'. The first of them – 'light green' – refers to systems where domestic support can be taken abroad for credit as well as degree mobility, yet with some restrictions (e.g. the definition of countries where students can take their grants or limits on the time spent abroad). The two following categories – 'yellow' and 'orange' – cover systems that limit the portability of all or most domestic support measures to credit mobility, the distinguishing feature between the two categories being the presence or absence of portability restrictions.

Following the above categorisation, the indicator shows that unrestricted portability of all domestic support for credit as well as degree mobility ('dark green') exists only in ten higher education systems, namely three Nordic systems (Finland, Sweden and Iceland), Andorra, Cyprus, the Flemish Community of Belgium, Liechtenstein, Luxembourg, Montenegro and Slovenia. Some of these systems offer to their student population both grants and loans (six systems), whereas in other instances, there is only one type of public support, i.e. either public grants (Andorra, Belgium – Flemish Community and Slovenia) or publicly-subsidised loans (Iceland).

In eight higher education systems – Austria, Denmark, France, Germany, Ireland, the Netherlands, Norway and the United Kingdom (Scotland) – all major support schemes are portable for credit as well as degree mobility; yet, there are various portability restrictions ('light green'). As discussed previously, these are mainly related to geography (i.e. mobility only towards certain countries).
Figure 7.26: Scorecard indicator no. 12: Portability of public grants and publicly-subsidised loans, 2016/17

Source: BFUG data collection.

**Scorecard categories**

- **Full portability** across the EHEA of all available domestic student support measures – grants and/or loans – for credit and degree mobility. Equivalent requirements for public grants and/or loans if students study in the home country or abroad.

- **Portability** of available domestic student support measures – grants and/or loans – for credit and degree mobility, but with some restrictions related to geography (country limitations), and/or types of programme, and/or field of study or time.

- **Portability for credit mobility**, without restrictions. No portability for degree mobility OR not all major support measures with portability for degree mobility.

- **Portability for credit mobility but with some restrictions** related to geography (country limitations), and/or types of programme, and/or field of study or time. No portability for degree mobility OR not all major support measures with portability for degree mobility.

- **No portability**: public grants and/or loans are only provided if students study in the home country or in exceptional cases (no equivalent programme is available in the home country).

- **Not available**

A further eight systems – Croatia, the Czech Republic, Estonia, Hungary, Italy, Poland, Slovakia and Switzerland – limit the portability of their major domestic support to credit mobility, generally with no restrictions (‘yellow’). It is noteworthy that some of these systems – Hungary, Slovakia and Switzerland – provide publicly-subsidised loans that are portable for credit as well as degree mobility; yet, the portability of grants is limited to credit mobility. The flexibility is even higher in Estonia, where loans as well as need-based grants are fully portable, but the portability of other grants is limited to credit mobility.

Seven countries – Kazakhstan, Latvia, Lithuania, Malta, Portugal, Spain and most parts of the United Kingdom – apply various restrictions to credit mobility (‘orange’). Among them, Latvia and Portugal offer fully portable loans, yet, the portability of grants is limited to credit mobility with restrictions. Kazakhstan provides loans that are portable for credit mobility without restrictions, while grants are portable for credit mobility with restrictions.

Finally, 15 higher education systems – Albania, Armenia, Azerbaijan, the French Community of Belgium, Belarus, Bosnia and Herzegovina, Bulgaria, Georgia, Greece, the former Yugoslav Republic of Macedonia, Moldova, Romania, Serbia, Turkey and Ukraine – provide domestic support with no
portability or allow portability only under exceptional circumstances, when there is no equivalent programme in the home system (‘red’). Armenia and Greece have a specific position in this group, allowing credit portability of grants (with restrictions), but providing no possibility for the portability of loans.

Overall, the analysis suggests that around one-third of all EHEA systems allow credit as well as degree portability of their domestic financial support (though some restrictions may apply). The scorecard indicator also points to a rather clear geographical pattern, in particular a contrast between north-western Europe, with a high degree of portability, and south-eastern Europe, with low to non-existent portability.

The comparison between the 2015 and 2018 reports suggests a decreasing portability of public support. This is, however, mainly related to fine-tuning of the indicator, as some previous misinterpretations have been rectified.

**Supporting disadvantaged learners**

Not all students have equal chances to experience learning mobility, and thus to benefit from all its advantages. Evidence shows that students with low socio-economic background or students with disabilities are less likely to participate in mobility programmes (Hauschildt et al., 2015; King, Findlay and Ahrens, 2010; Souto Otero, 2008), further deepening their already disadvantaged position among their peers.

In order to improve the current situation, the Yerevan Communiqué highlights the important place of learning mobility within the social dimension of higher education, calling for the increasing participation of students from disadvantaged backgrounds in international mobility (139).

For this reason, it is important to examine measures supporting the mobility participation of students from under-represented groups. This section distinguishes the following main support measures: 1) comprehensive monitoring of the participation of students from under-represented groups in mobility programmes; 2) the presence of quantitative policy objectives on the mobility participation of students from under-represented groups; 3) financial support provided to disadvantaged learners, in the form of either portable grants (universal or need-based) or targeted mobility grants; and 4) the presence of top-level recommendations/incentives to higher education institutions to implement targeted measures supporting the participation of students from under-represented groups in mobility programmes.

**Monitoring** relevant characteristics of the student population participating in mobility allows policymakers to obtain information on whether different groups of students can – and do – participate proportionally in mobility programmes. Such information is important for being able to design and provide adequate support for students from disadvantaged backgrounds.

Monitoring the participation of under-represented groups in mobility programmes is not widespread across the EHEA. Two types of monitoring practices can be distinguished (see also European Commission/EACEA/Eurydice, 2016b). First, some education systems monitor the participation of students from under-represented groups in some specific mobility programmes, but not in all of them. Second, seven reporting education systems (Austria, Belgium – Flemish Community, Germany, France, Italy, and the United Kingdom – England and Scotland) monitor the overall participation of students from under-represented groups in mobility programmes. This is labelled as comprehensive monitoring, since it aims at having a comprehensive picture on the participation of disadvantaged students in all mobility programmes.

Quantitative policy objectives signal a strong political commitment towards increasing the participation of students from disadvantaged backgrounds in mobility programmes. However, so far, only three education systems (Austria, Belgium – Flemish Community and France) have set such an objective or target. By 2025, Austria aims to increase the mobility participation of students with parents without higher education qualifications to at least 18% (BMWFV 2017, p. 34). The Flemish Community of Belgium is aiming for 33% of mobile students to come from under-represented groups by 2020 (defined as students receiving a grant (low socio-economic status), students with a (part-time) job, and students with a disability) (Government of Flanders/Department of Education and Training 2013, p. 64). In France, the French National Strategy for Higher Education STRANES adopted in 2014 puts forward a proposal to double student mobility by 2025, in particular thanks to a specific mobility grant for disadvantaged students. Besides, in the 2017 annual programme of the Erasmus+ Agency, a 30% target is set for disadvantaged students in Erasmus+ mobility programmes.

Financial support is essential for enabling disadvantaged students to participate in international mobility. Given the financial difficulties faced by students, non-repayable forms of public support – public grants – are the most essential (see also Chapter 5). When providing such grants to disadvantaged students, two main models exist in Europe.

In the first model, disadvantaged students receive targeted support that is only available to them. Such targeted support can take the form of either specific mobility grants (provided specifically for mobility purposes, in addition to domestic support (140)), or need-based domestic grants that are portable, at least for credit mobility (see previous section). The second model is based on the so-called mainstreaming approach. According to this model, countries provide portable grants to the majority (more than 50%) of students (see Figure 5.22 for the proportion of students receiving grants). In this case, students from disadvantaged backgrounds are not targeted specifically (though the exact sum of grants might be determined by need-based criteria), but their support is ensured by the holistic approach towards grant provision. In other words, the logic behind this approach is that if all (or at least the majority of) students receive grants – thus grant provision is ‘mainstream’ – then the support of those in need is ensured without them being specifically targeted by education authorities.

As Chapter 5 described, the overwhelming majority of education systems provide need-based or universal grants to students. The portability of these grants is depicted on Figure 7.24. In addition to portable need-based or universal grants, education systems often provide specific mobility grants to students from low socio-economic backgrounds (e.g. France with its aides à la mobilité internationale) or for students with disabilities (e.g. Ireland and Turkey).

Finally, top-level recommendations on how to provide support for the participation of students from under-represented groups in mobility programmes can provide important incentives to higher education institutions to implement targeted measures. Such top-level recommendations exist in four education systems. In Austria, the 2016 Higher Education Mobility Strategy includes recommendations on the development and implementation of targeted measures for improving the mobility participation of under-represented groups. The Flemish Community of Belgium has organised conferences and promotion campaigns targeting the mobility participation of under-represented groups. In addition, their 2015 Handbook on study and internships abroad includes one chapter dedicated to students with disabilities. In France, ministerial notes (‘circulaires’) are calling for an increasing and specific attention to disadvantaged students. Finally, in Kazakhstan, the responsible ministry recommends higher education institutions to pay special attention to under-represented groups of students when selecting applicants for academic mobility programmes.

(140) The term ‘domestic support’ refers to financial support issued by authorities in the home country.
Scorecard indicator n°13 depicted on Figure 7.27 summarises these measures supporting the mobility of students from under-represented groups. Most of its elements require a specific focus on under-represented groups. While general policy measures may also enhance the mobility participation of disadvantaged learners (hence the inclusion of mainstream grants among the scorecard categories), given the vulnerable position of students from under-represented groups, this indicator aims to capture the presence of targeted policies in EHEA countries.

Figure 7.27: Scorecard indicator n°13: Supporting the mobility of students from under-represented groups, 2016/17

Scorecard categories

- The following measures are undertaken to increase the mobility participation of students from under-represented groups:
  - Comprehensive monitoring of the participation of students from under-represented groups in mobility programmes;
  - Quantitative policy objectives on the mobility participation of students from under-represented groups;
  - Financial support in the form of:
    - Targeted specific mobility grants OR
    - Portable targeted grants OR
    - Mainstream portable grants provided to more than 50% of students;
  - Top-level recommendations/incentives to HEIs to implement targeted measures supporting the participation of students from under-represented groups in mobility programmes.

| 2016/17 | 3 | 0 | 5 | 27 | 13 | 1 |

Three out of the four types of measures are undertaken.

Two out of the four types of measures are undertaken.

One out of the four types of measures is undertaken.

None of the four types of measures are undertaken.

Not available

Source: BFUG data collection.
As the figure illustrates, comprehensive mobility support targeting disadvantaged learners is very rare. There are only three education systems in the dark green category (Austria, the Flemish Community of Belgium and France), and none in the light green. Five education systems (Germany, Italy, Kazakhstan and the United Kingdom – England and Scotland) undertake two out of the four measures. In addition to targeted financial support, comprehensive monitoring systems have been established in Germany, Italy and the United Kingdom, while top-level recommendations encouraging higher education systems to pay attention to students from under-represented groups exist in Kazakhstan.

The large majority of education systems only provide one single support measure targeting the mobility participation of disadvantaged students (typically financial support), or none at all. This calls for improving attention to the mobility participation of students from under-represented groups throughout the EHEA.

### 7.3. Staff mobility

While the main focus of internationalisation activities has often been student mobility, policy issues related to the mobility of academic staff have been given increased attention. Following up on the recommendations of the 2015 report of the Working group on mobility and internationalisation (141), the Yerevan Communiqué has identified staff mobility as a priority area for improvement (142).

There is a wide understanding among policy makers and actors at institutional level that the mobility of academic staff is beneficial for improving the quality of higher education and research, developing the circulation of knowledge and supporting student mobility (European Commission/EACEA/Eurydice, 2015).

However, a number of obstacles to staff mobility continue to exist. At institutional level, there is an extra administrative burden related to issues such as the temporary replacement of mobile staff, legal and administrative restrictions of employment contracts and recognition of qualifications of incoming staff. From a personal perspective, securing a leave of absence with contractual continuity, addressing differences in social security arrangements abroad, as well as a lack of recognition of the value of periods abroad can all pose obstacles to staff mobility (Education International, 2007).

Staff mobility can take a number of forms such as academic visits, exchanges, sabbaticals, grants and employment positions (Education International, 2007). Where top-level monitoring of staff mobility exists, education authorities use various definitions that could be limited to the definitions used by the Erasmus+ programme or distinguish between other types of mobility that vary in objectives and duration (European Commission/EACEA/Eurydice 2017a, p. 104).

Central level mobility targets for outgoing and incoming staff are less common than targets for student mobility. Nevertheless almost half of all EHEA countries report that they have set up such objectives, either as part of a national strategy for internationalisation, or in specific central actions to support staff mobility (see Figures 7.28 and 7.29).

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Even when centrally set targets are reported, they often refer to the more general goals of increasing the number of incoming and outgoing staff by, for instance, removing administrative and other obstacles and providing financial support, rather than setting up specific numerical targets. Examples of numerical targets for outgoing staff mobility have been provided by Austria, where 4 500 academic staff should embark on a teaching/research-related stay annually by 2020 and Greece, where 1 400 Erasmus+ mobility periods have been planned for 2017.
7.4. Conclusions

This chapter provides considerable evidence that across the EHEA the trend for internationalisation is growing. However, countries present very different situations with regard to internationalisation and mobility, especially when looking at mobility flows and the level of engagement in some internationalisation activities.

Most countries encourage the internationalisation of higher education through their steering documents, with policy-making in this area continuing to be dynamic and showing significant progress since the 2015 Bologna Process Implementation Report. Thirty-two countries have an active strategy for the internationalisation of higher education. A similar number of countries estimate that more than half of higher education institutions have adopted internationalisation strategies. Moreover, most countries report that they have specific budgets for funding internationalisation activities in higher education.

Although the vast majority of countries have now amended their legislation to allow the development of joint programmes and the award of joint degrees, a lot of ambiguity remains which is often due to the lack of a clear legal basis and/or additional regulations to operationalise these concepts.

In comparison with the 2015 Bologna Process Implementation report, there has been a significant increase in the use of targets to support and monitor progress in student mobility. The majority of countries have adopted national targets for outward (35 systems) and incoming (29 systems) student mobility. One quarter of all countries have not established targets for either type of student mobility.

Existing targets use various definitions for the target groups and the mobility periods, and express objectives in different quantitative and/or qualitative components. It is thus difficult to monitor progress across the EHEA and over time.

The use of multiple definitions when identifying and reporting mobile students in the EHEA continues to hinder the comparability of the data across countries and over time. Nevertheless, overall trends in student mobility rates show slight increases since the 2015 Bologna Process Implementation Report, although still only a minority of students benefit from such experience.

Both the incoming and the outward degree mobility rates within the EHEA are below 5 % for the vast majority of countries. When looking at degree mobility flows with non-EHEA countries, students from outside the EHEA make up more than 5 % of the total student population in only seven countries, while in many this proportion is close to or less than 1 %.

The distinction between 'net importing' and 'net exporting' countries continues to be valid. Data usually also shows a strong relation between the mobility balance and the outward mobility rate: the higher the importing balance, the lesser the outward mobility.

There are substantial differences between countries when the portability of domestic student financial support is considered. In around one-third of all EHEA systems, domestic financial support is portable for credit as well as degree mobility, so that students can benefit from their grant or loan during short-term as well as long-term studies abroad. In contrast, 15 higher education systems provide domestic support with no portability or limit portability to exceptional cases. From the geographical perspective, countries allowing portability for credit as well as degree mobility are mainly situated in north-western Europe, whereas countries with low or non-existent portability can mainly be found in south-eastern Europe.
The support provided to disadvantaged learners to participate in mobility programmes also varies across countries: while a handful of them provide extensive support in all identified areas (monitoring, target-setting, financial support and top-level recommendations), there is almost no support facilitating the mobility of students from under-represented groups in the majority of education systems in the EHEA. Most countries limit their efforts to providing financial support and portable grants; in turn, targeted attention and clear policy priorities are scarce.

The mobility of academic staff can take a number of forms and, where it is monitored, education authorities use various definitions. Staff mobility targets are reported by almost half of all EHEA countries. They often refer to the more general goals of increasing the numbers of mobile staff by, for instance, removing administrative and other obstacles and providing financial support, rather than setting up specific numerical targets.
I. Codes, abbreviations and acronyms

I.1. Country Codes

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<td>UK-WLS</td>
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<td>Holy See</td>
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I.2. Abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>BFUG</td>
<td>Bologna Follow-Up Group</td>
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<td>CEEPUS</td>
<td>Central European Exchange Program for University Studies</td>
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<td>COFOG</td>
<td>Classification of the Functions of Government</td>
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<td>EEA</td>
<td>European Economic Area</td>
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<td>EHEA</td>
<td>European Higher Education Area</td>
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<td>ENIC</td>
<td>European Network of Information Centres</td>
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<td>European Standards and Guidelines for Quality Assurance</td>
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<td>EUA</td>
<td>European University Association</td>
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<td>EU-SILC</td>
<td>European Union Statistics on Income and Living conditions</td>
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<td>EU-LFS</td>
<td>EU Labour Force Survey</td>
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<td>FTE</td>
<td>Full-time equivalent</td>
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<td>GDP</td>
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<td>ISCED</td>
<td>International Standard Classification of Education</td>
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<td>ISCO</td>
<td>International Standard Classification of Occupations</td>
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<td>NARIC</td>
<td>National Academic Recognition Information Centres</td>
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<td>OECD</td>
<td>Organisation for Economic Co-operation and Development</td>
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<td>PPS</td>
<td>Purchasing Power Standard</td>
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<td>UOE</td>
<td>UNESCO-UIS/OECD/Eurostat</td>
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II. General terms

Access routes to higher education

Routes to higher education are the different formal access requirements that are defined to be the necessary conditions of higher education access. Questions of selection or acceptance into a programme are not part of the definition.

Standard route: entering higher education with a standard entry qualification. The standard entry qualification is the most widely used diploma or certificate issued by a competent authority attesting the successful completion of an education programme and giving the holder of the qualification the right to be considered for admission to higher education (typically the upper secondary school leaving certificate).

Alternative route: entering higher education without a standard entry qualification, based on requirements other than the standard entry requirements (e.g. based on qualification other than the standard entry qualification or based on the recognition of prior non-formal and informal learning).

Admission (to higher education institutions and programmes)

The act of, or system for, allowing qualified applicants to pursue studies in higher education at a given institution and/or a given programme (see the Lisbon Recognition Convention (143)).

Completion

The successful finishing of a study programme (graduation).

---

Credit accumulation/Accumulation of credits

The process of collecting credits awarded for achieving the learning outcomes of educational components in formal contexts and for other learning activities carried out in informal and non-formal contexts. A student can accumulate credits in order to obtain qualifications, as required by the degree-awarding institution, or to document personal achievements for lifelong learning purposes (European Commission 2015, p. 66).

Credit mobility

Credit mobility is a short-term form of mobility – usually a maximum of one year – aiming at the acquisition of credits in a foreign institution in the framework of on-going studies at the home institution.

Credit transfer/Transfer of credits

Is the process of having credits awarded in one context (programme, institution) recognised in another formal context for the purpose of obtaining a qualification. Credits awarded to students in one programme may be transferred from an institution to be accumulated in another programme offered by the same or another institution. Credit transfer is the key to successful study mobility. Institutions, faculties, departments may make agreements which guarantee automatic recognition and transfer of credits (European Commission 2015, p. 68).

Cycle

One of the objectives in the Bologna Declaration in 1999 was the ‘adoption of a system based on two main cycles, undergraduate and graduate.’ In 2003 doctoral studies were included in the Bologna structure and referred to as the third cycle. The EHEA has thus defined a hierarchy of three Higher Education cycles (first cycle, second cycle and third cycle). All higher education qualifications in the European Higher Education Area are located within these three cycles (European Commission 2015, p. 68).

Degree mobility

Degree mobility is a long-term form of mobility which aims at the acquisition of a whole degree or certificate in the country of destination.

Digital certificates

Two types exist: a) Certificates that confirm participation in/ completion of a course, b) Certificates that verify the learner’s identity and confirm attainment of learning outcomes. Digital certificates typically include a URL which leads to the course information and/or the display of certificate information at the website of the course provider to prove the authenticity of the credential (Witthaus, et al., 2016).

Diploma Supplement (DS)

Is a document accompanying a higher education diploma, providing a standardised description of the nature, level, context, content and status of the studies completed by its holder. It is produced by the higher education institutions according to standards agreed by the European Commission, the Council of Europe and UNESCO. The Diploma Supplement is also part of the Europass framework transparency tools.

It has the following eight sections of information: the holder of the qualification; the qualification; its level and function; the contents and results gained; certification of the supplement; details of the national higher education system concerned (provided by the National Academic Recognition Information Centres (NARICs)); any additional relevant information.
Graduates in all the countries taking part in the Bologna Process have the right to receive the Diploma Supplement automatically, free and in a major European language (European Commission 2015, p. 69).

**Doctoral/Research school**

An organisational structure that includes only doctoral students. It may be organised around a particular discipline, research theme or a cross-disciplinary research area and/or it is focused on creating a research group/network and is project-driven. It may involve one institution or several institutions and organise co-operation among them (EUA 2007, p. 27).

**Credit (ECTS)**

ECTS credits express the volume of learning based on the defined learning outcomes and their associated workload. 60 ECTS credits are allocated to the learning outcomes and associated workload of a full-time academic year or its equivalent, which normally comprises a number of educational components to which credits (on the basis of the learning outcomes and workload) are allocated. ECTS credits are generally expressed in whole numbers (European Commission 2015, p. 68).

**Drop-out**

Refers to students who start but do not continue or finish a study programme.

**European Association for Quality Assurance in Higher Education (ENQA)**

The association of quality assurance agencies in the European Higher Education Area was set up in 2000. It aims to disseminate information, experiences and good practices in the field of quality assurance in higher education. Membership of the association is open to quality assurance agencies in the EHEA member states. Membership of ENQA represents recognition that an agency complies with the Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG).

**European Credit Transfer and Accumulation System (ECTS)**

ECTS is a learner-centred system for credit accumulation and transfer, based on the principle of transparency of the learning, teaching and assessment processes. Its objective is to facilitate the planning, delivery and evaluation of study programmes and student mobility by recognising learning achievements and qualifications and periods of learning (European Commission 2015, p. 69).

**European Qualifications Framework for Lifelong Learning (EQF)**

The European Qualifications Framework for lifelong learning is a common European reference framework which aims to increase the transparency, comparability and portability of qualifications systems and all types and levels of qualifications in Europe. The EQF uses eight common European reference levels based on learning outcomes that are defined in terms of knowledge, skills and competences. The EQF is implemented by referencing levels of national qualifications frameworks to the levels of the EQF. The EQF was adopted by the Council of Ministers in the EU in 2008 and revised in 2017.

**European Quality Assurance Register for Higher Education (EQAR)**

The Register aims at increasing transparency of quality assurance in higher education across Europe. It has been founded in 2008 by the European Association for Quality Assurance in Higher Education (ENQA), the European Students’ Union (ESU), the European University Association and the European Association of Institutions in Higher Education (EURASHE). EQAR publishes and manages a list of quality assurance agencies that substantially comply with the European Standards and Guidelines for
Quality Assurance (ESG) to provide clear and reliable information on quality assurance agencies operating in Europe (144).

**External quality assurance**

External quality assurance refers to the process of evaluation or audit of a higher education programme or institution undertaken by a specialised body outside the institution. Typically the body may be a quality assurance or accreditation agency, or an ad hoc panel of experts and peers constituted by the responsible Ministry. The evaluation will involve the collection of data, information and evidence for assessment against agreed standards.

**Fee**

Any sum of money paid by students with which they formally and compulsorily contribute to the cost of their higher education. This may include, but is not restricted to e.g. a registration fee, tuition fees, graduation fees, administrative fees, etc. Payments to student unions are not taken into account.

**Formal learning**

Formal learning means learning which takes place in an organised and structured environment, specifically dedicated to learning, and typically leads to the award of a qualification, usually in the form of a certificate or a diploma. It includes systems of general education, initial vocational training and higher education (145).

**Framework for Qualifications of the European Higher Education Area /Qualifications Framework for the European Higher Education Area (QF-EHEA)**

Refers to the overarching framework for qualifications in the EHEA, which comprises three cycles (including, within national contexts, the possibility of intermediate qualifications), generic descriptors for each cycle based on learning outcomes, and credit ranges in the first and second cycles. In order to prove the compatibility of national qualifications frameworks for higher education with the QF-EHEA, NQFs need to be self-certified to the QF-EHEA.

**Funding formulas**

Funding formulas are formulas that automatically allocate funds to institutions. They may vary on the basis of the factors used in their development. These might include among others inputs, such as students or staff, nominal, real or average costs per student and performance-based criteria (Salmi and Hauptman 2006, p. 10).

**Governing bodies**

Refers to structures with responsibility for the strategic orientation and organisation/management of higher education institutions.

**Graduate tracking surveys**

A survey of graduates from institutions of higher education (sometimes also called as 'alumni survey' or 'follow-up survey') that usually aims at mapping the labour market situation (professional success, relevance of skills etc.) of graduates. Graduate surveys provide information for evaluating the results of the education and training of a specific institution of higher education (Schomburg 2003, p. 11).

Regular graduate tracking surveys are conducted repeatedly, in regular intervals.

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**Grant**

Non-repayable public financial support. A need-based grant is awarded on the basis of financial hardship/socio-economic background of students. Universal grants are awarded to (almost) all students. For the purposes of this report, grants can be regarded as universal if they are awarded to at least 50% of students. A merit-based grant is awarded on the basis of the academic performance of students.

**Higher education institution**

Any institution providing services in the field of higher and/or tertiary education, as defined by national law.

**Higher education qualification**

Any degree, diploma or other certificate issued by a competent authority attesting the successful completion of a higher education programme (Lisbon Recognition Convention (146)).

**Incentives**

Apart from regulations, educational authorities can also encourage higher education institutions to follow certain policy lines (e.g. support under-represented groups, enhance completion, include work placements or mobility windows into study programmes, etc.) through incentives. Incentives can be financial, based on funding formulas or performance-based funding, or can include organisational or managerial support.

**Incoming mobility**

Incoming mobility refers to students that moved (i.e. crossed a national border) to a specified country to study.

**Informal learning**

Informal learning means learning resulting from daily activities related to work, family or leisure and is not organised or structured in terms of objectives, time or learning support; it may be unintentional from the learner’s perspective; examples of learning outcomes acquired through informal learning are skills acquired through life and work experiences, project management skills or ICT skills acquired at work, languages learned and intercultural skills acquired during a stay in another country, ICT skills acquired outside work, skills acquired through volunteering, cultural activities, sports, youth work and through activities at home (e.g. taking care of a child) (147).

**Integrated/long programmes**

Programmes including both the first and the second cycle and leading to a second-cycle qualification.

**Internal quality assurance**

Internal quality assurance refers to the processes involved in assuring and/or improving the quality of defined areas of activity within higher education institutions. Typically, it involves the systematic collection and analysis of administrative data, as well as the feedback of students, lecturers, other staff and external stakeholders.

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**Joint degree**

A joint degree is a single document officially recognised by the appropriate (national or, if applicable, regional) authorities of at least two countries.

**Joint programme**

Joint programmes are usually inter-institutional arrangements among higher education institutions leading to a joint degree. Parts of joint programmes undertaken by students at partner institutions are recognised automatically by the other partner institutions. The same is true for joint degrees.

**Labour market/skills forecasting**

Forecasting skill needs involves estimating the expected future number of jobs available in an economy [in the medium or long term] and their particular skill or qualification requirements. Skills needs forecasts are complemented by forecasts of the number of people (supply) with particular skills. The comparison of demand and supply can indicate potential imbalances or skill mismatches in future labour markets. Most typically, skills supply and demand is forecasted in order to help different labour market actors – employees, employers, students and parents, social partners, policy makers – to take informed decisions and appropriate action concerning the labour market. Labour market forecasting is usually conducted by occupation and qualification levels (Cedefop, 2012).

**Learning outcome**

Learning outcomes are statements of what the individual knows, understands and is able to do on completion of a learning process. The achievement of learning outcomes has to be assessed through procedures based on clear and transparent criteria. Learning outcomes are attributed to individual educational components and to programmes at a whole. They are also used in European and national qualifications frameworks to describe the level of the individual qualification (European Commission 2015, p. 72).

**Lisbon Recognition Convention (LRC)**

The Convention on the Recognition of Qualifications concerning Higher Education in the European Region (148) was developed by the Council of Europe and UNESCO and adopted in 1997 in Lisbon. It aims to ensure that holders of a qualification from one European country have that qualification recognised in another.

**Loan**

Repayable financial aid. Student loan models may differ in many aspects, such as in their repayment plans, the level of subsidy, the expenses covered, eligibility rules, etc. A student loan is subsidised when the government bears a part of the costs. This can take the form of a government guarantee, when student loans are guaranteed or insured by the government against the risk of default and loss (Salmi and Hauptman 2006, p. 43).

**Massive Open Online Courses (MOOCs)**

Courses which allow open entry, are free, and are delivered online usually with peer or automated support. They often have large enrolment numbers. For the purposes of this data collection, we consider MOOCs as (usually shorter) online courses which do not result in degree qualifications. MOOCs may be provided by higher education institutions as well as other providers.

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**Mobility window**

A period of time reserved for international student mobility that is embedded into the curriculum of a study programme.

**Monitoring**

Monitoring is the process of systematic data gathering, analysis and use of information by top-level authorities to inform policy. Systematic monitoring must include mechanisms of cross-institutional data gathering and allow cross-institutional data comparability.

**National qualifications frameworks for higher education**

National qualifications frameworks describe qualifications in terms of level, workload, learning outcomes and profile. They relate qualifications and other learning achievements in higher education coherently and are internationally understood.

**Non-formal learning**

Non-formal learning means learning which takes place through planned activities (in terms of learning objectives, learning time) where some form of learning support is present (e.g. student-teacher relationships); it may cover programmes to impart work skills, adult literacy and basic education for early school leavers; very common cases of non-formal learning include in-company training, through which companies update and improve the skills of their workers such as ICT skills, structured on-line learning (e.g. by making use of open educational resources), and courses organised by civil society organisations for their members, their target group or the general public (149).

**Online programme**

A higher education programme that is provided primarily or entirely through the use of an Internet-connected computer, rather than attending a programme in a traditional higher education institution/campus setting.

**Outward mobility**

Outward mobility refers to students that left their country of residence (i.e. crossed a national border) to study elsewhere (in which they are counted as inwardly mobile students).

**Performance-based mechanisms**

Performance-based mechanisms are funding mechanisms related to actual or intended results by an institution over a certain period. They may be based on outputs, such as number of graduates, or inputs, such as number of students/staff with certain characteristics. Performance-based mechanisms may take the form of performance contracts, performance set asides and payments for results in research and/or education (Salmi and Hauptman 2006, p. 16).

**Portability**

The possibility to take the support available to students in their home country abroad (within EHEA) for credit mobility (credit portability) or degree mobility (degree portability) (European Commission/EACEA/Eurydice 2016b, p. 57).

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**Preferential treatment**

The treatment of one individual or group of individuals in a manner that is likely to lead to greater benefits, access, rights, opportunities or status than those of another individual or group of individuals. Regarding admission to higher education, preferential treatment can include, for example, entry quotas, the awarding of extra points in a selection process on the basis of belonging to an under-represented group, etc.

**Public higher education institution**

With this term we refer to higher education institutions directly or indirectly administered by a public education authority. Public higher education institutions thus include two categories of institution: 'public institution', i.e. an institution directly managed by a government agency/authority or by a governing body, most of whose members are either appointed by a public authority or elected by public franchise, and: 'government-dependent private higher education institution', i.e. an institution controlled/managed by a non-governmental organisation or where the governing board consists of members not selected by a public agency but receiving 50 percent or more of its core funding from government agencies or whose teaching personnel are paid by a government agency – either directly or through government.

**Quality assurance agency**

A body established by public authorities with responsibility for external quality assurance. Agencies are intended to play a strong role in ensuring accountability of higher education institutions and may have specific objectives and developmental roles regarding enhancing quality.

**Quantitative objectives**

Quantitative targets defining a goal to be reached (in terms of a concrete percentage) regarding the composition of students in various respects (e.g. regarding the proportion of under-represented groups entering higher education, completing it or participating in mobility programmes).

**Recognition of non-formal and informal learning**

Validation and formal recognition of learners' non-formal and informal learning experiences in order to:

- provide higher education access to candidates without an upper secondary school leaving certificate; or
- within a higher education programme, allocate credits towards a qualification and/or provide exemption from some programme requirements.

**Retention**

The successful continuation of a study programme.

**Self-certification**

A procedure when national authorities, other bodies and stakeholders certify the compatibility of their national qualifications framework for higher education with the overarching Qualifications Framework for the European Higher Education Area. A set of procedures for the transparent self-certification of compatibility by member states was agreed by higher education ministers in the Bologna Process.

**Short cycle**

Degree programmes of less than 180 ECTS (or lasting less than 3 years), leading to a qualification that is recognised at a lower level than a qualification at the end of the first cycle. Short-cycle qualifications are recognised in the overarching framework of qualifications for the European Higher Education Area (QF-EHEA).
**Socio-economic status**

A combined economic and sociological measure of an individual's or family's economic and social position relative to others, based on income, level of education, and occupation. Definitions of socio-economic status might differ depending on the national context.

**Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG)**

European standards and guidelines are an agreed set of standards and guidelines for quality assurance in European higher education. They were developed by the 'E4 Group' (i.e. ENQA, EUA, EURASHE and ESU) and adopted by the ministers in Bergen in 2005. Revision to the ESG was undertaken between the Bucharest and Yerevan Ministerial Conferences, and an updated version of the ESG was adopted at the Yerevan Ministerial Conference in 2015 (150).

**Steering documents**

Official documents containing guidelines, obligations and/or recommendations for higher education policy and/or institutions.

**Strategy**

An official policy document developed by the central authorities in an effort to achieve an overall goal. A strategy can comprise a vision, identify objectives and goals (qualitative and quantitative), describe processes, authorities and people in charge, identify funding sources, make recommendations, etc.

**Student-centred learning**

The European Students' Union (ESU) defines student-centred learning as "both a mindset and a culture [...] characterised by innovative methods of teaching which aim to promote learning in communication with teachers and other learners and which take students seriously as active participants in their own learning, fostering transferable skills such as problem-solving, critical thinking and reflective thinking" (ESU, 2015, n.p.).

**Tax benefits**

Tax relief of any kind, not limited to income tax.

**Under-represented groups of students**

Societal groups that may be considered as not being proportionally represented in higher education in different countries. Examples might include people with disabilities, migrants, ethnic groups, lower socio-economic status groups, women/men, etc.

**Vertical segregation**

Vertical segregation refers to the phenomenon that while women outnumber men amongst higher education graduates, they are slightly under-represented at doctoral level, and there are even fewer women amongst higher ranking academic staff in universities. Thus, vertical segregation refers to the under-representation of women at higher levels of the professional hierarchy.

**Workload**

An estimation of the time learners typically need to complete all learning activities such as lectures, seminars, projects, practical work, work placements, individual study required to achieve the defined learning outcomes in formal learning environments. The correspondence of the fulltime workload of an academic year to 60 credits is often formalised by national legal provisions. In most cases, student

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workload ranges from 1,500 to 1,800 hours for an academic year, which means that one credit corresponds to 25 to 30 hours of work. It should be recognised that this represents the normal workload and that for individual learners the actual time to achieve the learning outcomes will vary. (European Commission 2015, p. 77)

**Work placement/practical training**

The term 'work placement' refers to experience gained in a working environment as an integrative part of a higher education programme. Most typically, it refers to the placement of students in supervised work settings (e.g. through internships) so they can apply the knowledge and skills learned during their studies. Alternatively, it can also refer to a period of voluntary work (also referred to as 'student-community engagement') that is intended to allow students to become familiar with the working environment in general, whilst also conveying some benefit to the community (Bourner and Millican, 2011).

### III. Statistical terms

**Academic staff (Figures 1.6, 1.7 and 1.8)**

This category includes:

- Personnel employed at the tertiary level of education whose primary assignment is instruction or research;
- Personnel who hold an academic rank with such titles as professor, associate professor, assistant professor, instructor, lecturer or the equivalent of any of these academic ranks;
- Personnel with other titles, (e.g. dean, director, associate dean, assistant dean, chair or head of department), if their principal activity is instruction or research.

It excludes student teachers, teachers’ aides and paraprofessionals (UNESCO-UIS, OECD and Eurostat 2016, p. 43).

**Access routes to higher education (Figure 5.16)**

Standard route: entering higher education with the standard entry qualification (the upper secondary school leaving certificate) obtained in direct relation to leaving school for the first time (e.g. Matura, Abitur, Baccalauréat), either in the country of survey or abroad.

Delayed route: entering higher education with the standard entry qualification (the upper secondary school leaving certificate) obtained with a delay, e.g. via evening classes or adult learning.

Alternative route: entering higher education without the standard entry qualification.

**At-risk-of-poverty rate (Figure 6.8)**

The at-risk-of-poverty rate is the share of people with an equivalised disposable income (after social transfer) below the at-risk-of-poverty threshold, which is set at 60% of the national median equivalised disposable income after social transfers (Eurostat, 2018a).

The equivalised disposable income is the total income of a household, after tax and other deductions, that is available for spending or saving, divided by the number of household members converted into equalised adults; household members are equalised or made equivalent by weighting each according to their age, using the so-called modified OECD equivalence scale (Eurostat, 2018b).
Completion rate (Figure 5.28)

Tertiary completion rates show the percentage of students who enter (i.e. entrants) a tertiary programme and ultimately graduate from it. The preferred method used to calculate the completion rate is the true cohort method based on panel data (survey or registers), which follow the individual student from entrance to graduation in the programme. The completion rate gives the proportion of entrants who graduated within the theoretical duration of the programme (N) plus 3 years (N+3), to ensure that only a minority of entrants are still enrolled in the system by that time. Unfortunately, as Figure 5.28 shows, only a limited number of countries apply the true cohort method to calculate completion rates.

Delayed transition students (Figures 5.2 and 5.9)

Delayed transition is a characteristic used for defining a type of student, who entered higher education for the first time more than 24 months after leaving school.

Educational attainment (Figures 5.1, 5.2, 6.1, 6.2, 6.3, 6.6, 6.7 and 6.8)

Educational attainment refers to the highest level of education successfully completed. Indicators using the International Standard Classification of Education (ISCED) often distinguish between low, medium and high educational attainment. These categories are compiled as follows (in EU LFS):

- Low educational attainment corresponds to completed pre-primary, primary and lower secondary education (ISCED levels 0, 1 and 2). For figures in Chapter 6, low educational attainment refers to completed lower secondary education (ISCED 2).
- Medium educational attainment corresponds to upper secondary and post-secondary non-tertiary education (ISCED levels 3 and 4). For figures in Chapter 6, medium educational attainment refers to completed upper secondary education (ISCED 4).
- High educational attainment corresponds to tertiary education (ISCED levels 5 to 8).

When referring to students with or without a higher education background (Figure 5.2), then students with higher education background are those whose parents’ highest degree is at ISCED level 5-8; and students without higher education background are those whose parents’ highest degree is at ISCED level 0-4.

Expenditure on tertiary education (Figures 1.9, 1.10, 1.12, 1.13, 1.14 and 5.21)

Within the UOE data collection, education expenditure includes the following financial data:

- Goods and Services of educational institutions: All direct public, private and international expenditure whether educational or non-educational (e.g. ancillary services), but with some exceptions; and;
- Goods and Services purchased outside educational institutions: private expenditure on educational goods and services; plus
- Public subsidies to students for student living costs regardless of where or how the student spends these subsidies (UNESCO-UIS, OECD and Eurostat 2016, p. 48).

Public expenditure refers to spending of public authorities. Expenditure on education by other ministries or equivalent institutions, for example Health and Agriculture is included. It includes subsidies provided to households and other private entities (often in the form of financial aid to students) which can be attributable to educational institutions (e.g. fees) or not (e.g. private living costs outside of institutions). Expenditure that is not directly related to education (e.g., culture, sports, youth activities, etc.) is excluded unless provided as ancillary services. (Ibid, p. 56).
Three main types of government expenditure (at central, regional or local levels) on education are distinguished:

- Direct expenditure on educational institutions,
- Intergovernmental transfers for education, and
- Transfers or other payments from governments to households and other private entities.

Public subsidies to households includes:

- Scholarships and other grants (including child allowances contingent to student status, special public subsidies in cash or in kind that are contingent on student status) and
- Student loans (including those not attributable to household payments for educational institutions, such as subsidies for student living costs) (Ibid, p. 58).

On differences between the UOE data collection and data based on COFOG (see Figure 1.11), see Section IV.

**Formal student status (Eurostudent) (Figures 2.24 and 2.25)**

In the framework of Eurostudent research, formal status includes student's official registration, which is recognised by the state’s order and/or the higher education institutions in the respective country. It contains the categories full-time, part-time, and other. A full-time/part-time student is a student who formally holds the respective status irrespective of the weekly number of hours spent on study-related activities (taught and personal study time) (Hauschildt et al., 2015).

**Full-time equivalent student (Figures 1.12, 1.13 and 1.14)**

A full-time equivalent (FTE) is a unit to measure students in a way that makes them comparable although they may study a different number of hours per week. The unit is obtained by comparing a student's average number of hours studied to the average number of hours of a full-time student. A full-time student is therefore counted as one FTE, while a part-time student gets a score in proportion to the hours he or she studies (Eurostat, 2015b).

**Gross income (Figures 6.6 and 6.7)**

Gross income is the sum of the variables PY010G 'Employee cash or near cash income' and PY020G 'Non-Cash employee income' derived from the EU-SILC database. Gross means that neither taxes nor social contributions have been deducted at source. Employee income is defined as the total remuneration, in cash or in kind, payable by an employer to an employee in return for work done by the latter during the income reference period.

Gross employee cash or near cash income (PY010G) refers to the monetary component of the compensation of employees in cash payable by an employer to an employee. It includes the value of any social contributions and income taxes payable by an employee or by the employer on behalf of the employee to social insurance schemes or tax authorities. Examples of items included are:

- Wages and salaries paid in cash for time worked or work done in main and any secondary or casual job(s);
- Remuneration for time not worked (e.g. holiday payments);
- Enhanced rates of pay for overtime;
- Supplementary payments (e.g. thirteenth month payment);
- Profit sharing and bonuses paid in cash;
- Allowances for transport to or from work.
Gross non-cash employee income (PY020G) refers to the non-monetary income components which may be provided free or at reduced price to an employee as part of the employment package by an employer (only the value of private use is taken into account). Examples are a company car and associated costs, free or subsidised meals, luncheon vouchers, reimbursement or payment of housing-related expenses.

**Incoming mobility rate** *(Figures 7.10, 7.11, 7.17, 7.18, 7.19 and 7.20)*

Incoming mobility rate refers to mobile students (enrolments or graduates) from abroad studying in the country of destination as a percentage of the total number of students enrolled/graduating in the country.

**International Standard Classification of Education (ISCED)**

The International Standard Classification of Education (ISCED) has been developed to facilitate comparisons of education statistics and indicators across countries on the basis of uniform and internationally agreed definitions. The coverage of ISCED extends to all organised and sustained learning opportunities for children, young people and adults, including those with special educational needs, irrespective of the institutions or organisations providing them or the form in which they are delivered.

The older ISCED classification – known as ISCED 1997 *(UNESCO, 1997b)* – referred to seven levels of education:

- ISCED 0: Pre-primary education;
- ISCED 1: Primary education;
- ISCED 2: Lower secondary education;
- ISCED 3: Upper secondary education;
- ISCED 4: Post-secondary non-tertiary education;
- ISCED 5: Tertiary education (first stage);
- ISCED 6: Tertiary education (second stage).

The current classification – ISCED 2011 or 'ISCED' *(UNESCO-UIS, 2012)* – refers to the following levels of education:

- **ISCED 0**: Pre-primary education

  Programmes at level 0 (pre-primary), defined as the initial stage of organised instruction, are designed primarily to introduce very young children to a school-type environment, i.e. to provide a bridge between the home and a school-based atmosphere. Upon completion of these programmes, children continue their education at level 1 (primary education).

  ISCED level 0 programmes are usually school-based or otherwise institutionalised for a group of children (e.g. centre-based, community-based, home-based).

  Early childhood educational development (ISCED level 010) has educational content designed for younger children (in the age range of 0 to 2 years). Pre-primary education (ISCED level 020) is designed for children aged at least 3 years.

- **ISCED 1**: Primary education

  Primary education provides learning and educational activities typically designed to provide students with fundamental skills in reading, writing and mathematics (i.e. literacy and
It establishes a sound foundation for learning, a solid understanding of core areas of knowledge and fosters personal development, thus preparing students for lower secondary education. It provides basic learning with little specialisation, if any.

This level begins between 5 and 7 years of age, is compulsory in all countries and generally lasts from four to six years.

**ISCED 2: Lower secondary education**

Programmes at ISCED level 2, or lower secondary education, typically build upon the fundamental teaching and learning processes which begin at ISCED level 1. Usually, the educational aim is to lay the foundation for lifelong learning and personal development that prepares students for further educational opportunities. Programmes at this level are usually organised around a more subject-oriented curriculum, introducing theoretical concepts across a broad range of subjects.

This level typically begins around the age of 11 or 12 and usually ends at age 15 or 16, often coinciding with the end of compulsory education.

**ISCED 3: Upper secondary education**

Programmes at ISCED level 3, or upper secondary education, are typically designed to complete secondary education in preparation for tertiary or higher education, or to provide skills relevant to employment, or both. Programmes at this level offer students more subject-based, specialist and in-depth programmes than in lower secondary education (ISCED level 2). They are more differentiated, with an increased range of options and streams available.

This level generally begins at the end of compulsory education. The entry age is typically age 15 or 16. Entry qualifications (e.g. completion of compulsory education) or other minimum requirements are usually needed. The duration of ISCED level 3 varies from two to five years.

**ISCED 4: Post-secondary non-tertiary education**

Post-secondary non-tertiary programmes build on secondary education to provide learning and educational activities to prepare students for entry into the labour market and/or tertiary education. It typically targets students who have completed upper secondary (ISCED level 3) but who want to improve their skills and increase the opportunities available to them. Programmes are often not significantly more advanced than those at upper secondary level as they typically serve to broaden rather than deepen knowledge, skills and competencies. They are therefore pitched below the higher level of complexity characteristic of tertiary education.

**ISCED 5: Short-cycle tertiary education**

Programmes at ISCED level 5 are short-cycle tertiary education, and are often designed to provide participants with professional knowledge, skills and competencies. Typically, they are practice-based and occupation-specific, preparing students to enter the labour market. However, these programmes may also provide a pathway to other tertiary education programmes.

Academic tertiary education programmes below the level of a Bachelor's programme or equivalent are also classified as ISCED level 5.

**ISCED 6: Bachelor's or equivalent level**

Programmes at ISCED level 6 are at Bachelor's or equivalent level, which are often designed to provide participants with intermediate academic and/or professional knowledge, skills and
competencies, leading to a first degree or equivalent qualification. Programmes at this level are typically theory-based but may include practical elements; they are informed by state of the art research and/or best professional practice. ISCED 6 programmes are traditionally offered by universities and equivalent tertiary educational institutions.

**ISCED 7: Master's or equivalent level**

Programmes at ISCED level 7 are at Master's or equivalent level, and are often designed to provide participants with advanced academic and/or professional knowledge, skills and competencies, leading to a second degree or equivalent qualification. Programmes at this level may have a substantial research component but do not lead to the award of a doctoral qualification. Typically, programmes at this level are theory-based but may include practical components and are informed by state of the art research and/or best professional practice. They are traditionally offered by universities and other tertiary educational institutions.

**ISCED 8: Doctoral or equivalent level**

Programmes at ISCED level 8 are at doctoral or equivalent level, and are designed primarily to lead to an advanced research qualification. Programmes at this ISCED level are devoted to advanced study and original research and are typically offered only by research-oriented tertiary educational institutions such as universities. Doctoral programmes exist in both academic and professional fields.

The first statistical data collection based on ISCED 2011 took place in 2014.

The ISCED classification also refers to fields of education. This area was revised in 2013 (ISCED-F 2013). The current classification refers to 'broad fields', which are further divided into 'narrow fields' and 'detailed fields' (UNESCO-UIS, 2015). The 'broad fields' are as follows:

- 00 Generic programmes and qualifications;
- 01 Education;
- 02 Arts and humanities;
- 03 Social sciences, journalism and information;
- 04 Business, administration and law;
- 05 Natural sciences, mathematics and statistics;
- 06 Information and Communication Technologies (ICTs);
- 07 Engineering, manufacturing and construction;
- 08 Agriculture, forestry, fisheries and veterinary;
- 09 Health and welfare;
- 10 Services;
- 99 Field unknown.
**International Standard Classification of Occupations (ISCO)** *(Figures 6.9, 6.10, 6.11 and 6.12)*

ISCO is a tool for organizing jobs into a clearly defined set of groups according to the tasks and duties undertaken in the job. The first version of ISCO was adopted in 1957 by the Ninth International Conference of Labour Statisticians (ICLS). The second version, ISCO-68 was adopted in 1966 and the third version, ISCO-88, in 1987. Though ISCO-88 was updated in December 2007 (ISCO-08), this report uses the classification of the ISCO-88 version, which defines the following major groups:

1. Legislators, senior officials and managers
2. Professionals
3. Technicians and associate professionals
4. Clerks
5. Service workers and shop and market sales workers
6. Skilled agricultural and fishery workers
7. Craft and related trades workers
8. Plant and machine operators and assemblers
9. Elementary occupations
10. Armed forces *(151)*

**Mature students** *(Figures 5.8, 5.9 and 5.32)*

For the purposes of this report, mature students are defined as students aged 30 or more years old.

**Median**

The median is the middle value in a group of numbers ranked in order of size, thus dividing the group into two halves. In other words, it is the number in a range of scores that falls exactly in the middle so that 50 % of the scores are above and 50 % are below (Eurostat, 2018c). In this report, the EHEA median refers to the median of values among the EHEA countries where data are available.

**Migrant status** *(Figure 5.6)*

In the Eurostudent survey, students are classified according to their own and their parents' places of birth and the location of their latest educational attainment. Students are classified as international students if they possess a foreign higher education entry qualification or have left the school system for the first time abroad (regardless of their and their parents' birthplace). Students with a national higher educational entry qualification, or who have left the regular school system for the first time without a qualification in the country of the survey, are further categorised according to their own and their parents' places of birth. First generation students with national educational background were born abroad, as were at least one of their parents. Second generation students with national educational background have one (mixed) or two (foreign) parents who were not born in the country of the survey. The category "Other" comprises students who were born abroad, but have parents born in the country of survey. Students without migration background and national educational background were born in the country of survey, as were their parents.

Eurostat data (Figure 5.7) only makes a distinction between the foreign-born and the native-born population, without reference to migrant status.

**New entrants (Figures 5.1, 5.3 and 5.4)**

New entrants to a level of education are students who, during the course of the reference school or academic year, enter for the first time any programme in a given level of education, irrespective of whether the students enter the programme at the beginning or at an advanced stage of the programme (e.g. by virtue of credits gained for relevant work experience or courses taken at another level of education) (UNESCO, OECD and Eurostat 2016, p. 36).

**Odds ratio (Figures 5.29 and 5.31)**

The odds ratio refers to the ratio of the likelihood that an event may occur in one group in comparison to its likelihood ratio in another group. An odds ratio of 1 indicates that the condition or event under study is equally likely to occur in both groups. An odds ratio greater than 1 indicates that the condition or event is more likely to occur in the first group. And an odds ratio less than 1 indicates that the condition or event is less likely to occur in the first group. An odds ratio is calculated in the following way (probabilities of the event in each of the groups are p1 (first group) and p2 (second group)): 

\[
\frac{p1/(1-p1)}{p2/(1-p2)}
\]

**Outward mobility rate (Figures 7.12, 7.13, 7.16, 7.17, 7.18 and 7.21)**

Outward mobility rate refers to students (enrolment or graduates) from a country of origin studying abroad (outwardly mobile students) as a percentage of the total number of students with the same country of origin.

**Percentile**

The percentile X (with X ≥0 and ≤100) of a sampled variable is the value of the variable under which are X per cent of the observations in the sample. For example, a percentile 25 (denoted P25) of EUR 1 000 for an income variable means that 25 % of people in that sample earn less than EUR 1 000. Percentile 0 is the minimum, and P100 the maximum. The median is percentile 50 (Eurostat and Eurostudent 2009, p. 129).

**Purchasing power parity (PPP)**

A currency conversion rate which converts economic indicators expressed in a national currency into an artificial common currency that equalises the purchasing power of different national currencies. In other words, PPP eliminates the differences in price levels between countries in the process of conversion to an artificial common currency, called Purchasing Power Standard (PPS).

**Purchasing power standard (PPS) (Figures 1.12, 1.14, 6.6 and 6.7)**

The artificial common reference currency unit used in the European Union to express the volume of economic aggregates for the purpose of spatial comparisons in such a way that price level differences between countries are eliminated. Economic volume aggregates in PPS are obtained by dividing their original value in national currency units by the respective PPP (Purchasing power parity). PPS thus buys the same given volume of goods and services in all countries, whereas different amounts of national currency units are needed to buy this same volume of goods and services in individual countries, depending on the price level.

**Students enrolled as part-timers (Figures 2.21, 2.22 and 2.23)**

Within the UOE data collection, the part-time/full-time classification is regarded as an attribute of student participation rather than as an attribute of the educational programmes or the provision of education in general. A part-time student is one who is enrolled in an education programme whose intended study load is less than 75 % of the normal full-time annual study load (UNESCO-UIS, OECD and Eurostat 2016, p. 27).

**Tertiary education (as defined within the ISCED classification)**
Tertiary education builds on secondary education, providing learning activities in specialised fields of education. It aims at learning at a high level of complexity and specialisation. Tertiary education includes what is commonly understood as academic education but also includes advanced vocational or professional education. It comprises ISCED levels 5, 6, 7 and 8, which are labelled as short-cycle tertiary education, Bachelor’s or equivalent level, Master’s or equivalent level, and doctoral or equivalent level, respectively. The content of programmes at the tertiary level is more complex and advanced than in lower ISCED levels.

**Unemployment rate and unemployment ratio** *(Figures 6.1, 6.2, 6.3, 6.4 and 6.5)*

An unemployed person is defined by Eurostat, according to the guidelines of the International Labour Organization, as:

- someone aged 15 to 74 (in Italy, Spain, the United Kingdom, Iceland, Norway: 16 to 74 years);
- without work during the reference week;
- available to start work within the next two weeks (or has already found a job to start within the next three months);
- actively having sought employment at some time during the last four weeks.

The unemployment rate is the number of people unemployed as a percentage of the labour force (Eurostat, 2018d).

The *unemployment ratio* is the number of people unemployed as a percentage of the total population.

**Vertical mismatch** *(Figure 6.12)*

Refers to a situation in which the level of education or skills is less or more than the required level of education or skills (Cedefop 2010, p. 13). Regarding Figure 6.12, vertical mismatch refers to the situation in which people with tertiary qualifications have jobs not requiring this qualification level.

**IV. Data sources**

**BFUG data collection**

This direct data collection based on two questionnaires (an Excel questionnaire and an on-line questionnaire) was aimed at collecting information for the present report. The reference year was the academic year 2016/17. The questionnaires primarily focused on qualitative information, and consisted of several parts covering the following areas:

- contextual data;
- learning and teaching;
- degree structures, qualifications, and Bologna tools;
- quality assurance;
- social dimension policies and measures;
- fees, support and portability;
- employability;
- internationalisation and mobility.
When filling in the questionnaires, the Bologna Follow-Up Group representatives were asked to consult all the relevant actors/stakeholders in their respective systems to ensure the highest degree of accuracy possible.

The information covered by the questionnaires was submitted by all signatory countries.

**Bologna with Student Eyes 2018 (European Students’ Union)**

**Reference year:** 2018

**Coverage:** 38 EHEA countries, 43 National Unions of Students

**Description:**

With different methodological approaches, ESU has been reviewing the implementation of the Bologna Process since 2003 with the Bologna with Student Eyes (BWSE) publication, launched prior to each ministerial conference.

BWSE2018 explores the perception of implementation amongst ESU’s members operating in EHEA countries and seeks to bring attention to the students’ priorities and recommendations for the future of the Bologna Process.

The 2018 edition of the publication highlights the need for further implementation, the slow development within the field of social dimension and embraces the importance of respect for the fundamental values of the Bologna Process.

**Classification of Functions of Government (COFOG)**

The Classification of Functions of Government (COFOG) was developed by the Organization for Economic Cooperation and Development (OECD) and is published by the United Nations Statistical Division (UNSD).

COFOG is regarded as the appropriate basis to examine the structure of government expenditure. It is a 3-level classification with 10 ‘divisions’ at the top level, each of which is broken down to about 6 ‘groups’ at the next level of detail, which in turn are subdivided into ‘classes’. Divisions describe the broad objectives of government, while groups and classes both define the means by which these broad objectives are achieved (152).

**EQAR/Eurydice survey to BFUG members**

This data collection was undertaken through an on-line questionnaire. It aimed at collecting information to be presented in this report and used by EQAR on the legal frameworks allowing higher education institutions to choose a suitable EQAR-registered agency for external quality assurance processes. The reference year was the academic year 2016/17.

Questionnaires responses were submitted by national authorities in all signatory countries with the exception of Cyprus and the Holy See.

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EU Labour Force Survey (EU-LFS)

The EU-LFS is the largest European household sample survey providing quarterly and annual results on labour participation of people aged 15 and over as well as on persons outside the labour force. It covers residents in private households. The EU-LFS is an important source of information about the situation and trends in the EU labour market.

The EU-LFS currently covers thirty-four countries (participating countries) providing Eurostat with data from national labour force surveys: the 28 Member States of the European Union, three EFTA countries (Iceland, Norway and Switzerland), and three candidate countries, i.e. the former Yugoslav Republic of Macedonia, Montenegro and Turkey. The EU-LFS is conducted by the national statistical institutes in accordance with Council Regulation (EEC) No. 577/98 of 9 March 1998 and the data are centrally processed by Eurostat.

Each quarter around 1.7 million interviews are conducted throughout the participating countries to obtain statistical information for some 100 variables. Due to the diversity of information and the large sample size the EU-LFS is also an important source for other European statistics like Education statistics or Regional statistics.

The main statistical objective of the EU-LFS is to divide the resident population of working age (15 years and above) into three mutually exclusive and exhaustive groups – persons employed, unemployed and economically inactive persons – and to provide descriptive and explanatory data on each of these categories. Respondents are assigned to one of these groups according to international classification on the basis of the information obtained through the survey questionnaire, which principally relates to their actual activity within a particular reference week. The EU-LFS defines the resident population as persons living in private households.

The EU-LFS data collection covers demographic background, labour status, employment characteristics of the main job, hours worked, employment characteristics of the second job, time-related underemployment, search for employment, education and training, previous work experience of persons not in employment, situation one year before the survey, main labour status and income (153).

Eurostudent VI survey

Reference year: 2016/17

Coverage: 28 EHEA countries

Description:

EUROSTUDENT couples a central coordination approach with a strong network of national partners in each participant country. The EUROSTUDENT consortium provides national contributors with the EUROSTUDENT core questionnaire, as well as extensive instructions for conducting the field phase at the national level, data cleaning and weighting, calculation of indicators, and data delivery.

The national research teams are chosen and funded by the participating national ministries. The national research teams are responsible for implementing a national student survey, delivering the data to the EUROSTUDENT VI data team in accordance with EUROSTUDENT conventions, and providing national interpretations of the delivered data. The delivered data are checked in a series of

feedback loops for accuracy and comparability and are validated for publication by the national research team.

EUROSTUDENT conventions are the instruments used to ensure the comparability and quality of the data collected. Since the 1st round of EUROSTUDENT, these conventions have been continuously developed further and are the result of productive discussions during several project meetings, intensive seminars, and workshops which were organised by the EUROSTUDENT consortium. They are documented in several handbooks which are provided to all EUROSTUDENT partners as well as the interested public.

The EUROSTUDENT core questionnaire details the items, responses, and instructions to be used in the national surveys. The questionnaire handbook provides in-depth explanations of the purpose of each question and instructions on adapting it, if necessary, to the national context.

The EUROSTUDENT VI questionnaire handbook is available on the EUROSTUDENT website.

The questionnaire handbook also provides guidelines for the preparation and execution of the survey at the national level. It provides information on the EUROSTUDENT standard target group, sampling guidelines, as well as information on the survey organisation and method.

**Target group:**

The EUROSTUDENT target group includes all students who are – at the time of observation (usually: semester) – enrolled in any national study programme regarded to be higher education in a country. Usually that corresponds to ISCED levels 5, 6, and 7.

This means all students should be included regardless of:

Nationality – National and foreign students should be included, as long as they are studying for a full degree in the country of observation (and are not only obtaining a limited number of credits, e.g. as an Erasmus student).

Full-time/part-time status – Full-time, part-time, and/or correspondence students should be included as long as the study programmes the students are enrolled in offer a minimum of physical face-to-face interaction in lectures/classes (not only exams).

Character of the higher education institution (HEI) or study programme – General as well as professional orientations of HEIs and study programmes should be included, as long as the programmes and institutions are considered to be higher education in the national context.

Legal character of the HEI – Public and private institutions should be included, as long as private institutions are considered to be a regular part of the higher education system in the national context.

Excluded from the EUROSTUDENT target group are:

Students on (temporary) leave, i.e. students who have officially or non-officially interrupted their studies at the time of observation for whatever reason.

Students on credit mobility, short-term mobile students (e.g. Erasmus students), i.e. students who are currently studying in the country of observation (incoming) or who have currently left the country of observation (outgoing) for a short time period (e.g. one or two semesters) with the purpose of gaining only a relatively small number of credits.

Students in ISCED 8 study programmes (PhD – and doctoral programmes).
Students in distance learning study programmes which do not offer any physical face-to-face lecture period at all, but are solely based on written/online interaction (apart from exams).

Students at very specialised HEIs, e.g. military or police academies, or HEIs directly affiliated with one company. This might also include programmes providing training only for public administration.

Students in programmes classified as ISCED (2011) levels 5 or 6 which are not regarded to be higher education in the national context. This could encompass, for example, further vocational training programmes for Master crafts(wo)men, or upper secondary schools or post-secondary programmes not regarded as higher education.

EU-Statistics on Income and Living Conditions (EU-SILC)

The EU statistics on income and living conditions, abbreviated as EU-SILC, is the reference source for comparative statistics on income distribution and social inclusion in the European Union (EU). It is used for policy monitoring within the ‘Open method of coordination (OMC)’.

EU-SILC was launched in 2003 on the basis of a gentlemen's agreement between Eurostat and six Member States (Austria, Belgium, Denmark, Greece, Ireland and Luxembourg) and Norway. It was formally launched in 2004 in fifteen countries and expanded in 2005 to cover all of the then EU-25 Member States, together with Norway and Iceland. Bulgaria launched EU-SILC in 2006 while Romania, Switzerland and Turkey introduced the survey in 2007. EU-SILC provides two types of annual data:

- cross-sectional data pertaining to a given time or a certain time period with variables on income, poverty, social exclusion and other living conditions;
- longitudinal data pertaining to individual-level changes over time, observed periodically over a four-year period.

EU-SILC is a multi-purpose instrument which focuses mainly on income. Detailed data are collected on income components, mostly on personal income, although a few household income components are included. However, information on social exclusion, housing conditions, labour, education and health information is also obtained.

EU-SILC is based on the idea of a common 'framework' and no longer a common 'survey'. The common framework defines:

- the harmonised lists of target primary (annual) and secondary (every four years or less frequently) variables to be transmitted to Eurostat;
- common guidelines and procedures;
- common concepts (household and income) and classifications aimed at maximising comparability of the information produced.

The reference population in EU-SILC includes all private households and their current members residing in the territory of the countries at the time of data collection. Persons living in collective households and in institutions are generally excluded from the target population. Some small parts of the national territory amounting to no more than 2 % of the national population and the national territories may be excluded from EU-SILC. All household members are surveyed, but only those aged 16 and more are interviewed.\(^{(154)}\)

\(^{(154)}\) For more details on the EU-SILC, see: [http://ec.europa.eu/eurostat/statistics-explained/index.php/EU_statistics_on_income_and_living_conditions_(EU-SILC)_methodology](http://ec.europa.eu/eurostat/statistics-explained/index.php/EU_statistics_on_income_and_living_conditions_(EU-SILC)_methodology)
Trends 2018 (European University Association)

Reference year: 2017

Coverage: 303 higher education institutions from 43 higher education systems

Description:

The Trends series has been published by the European University Association (EUA) and its predecessor organisation since the signing of the Bologna Declaration in 1999, with Trends 2018 presenting the eighth edition.

Trends provide an institutional perspective on higher education policy and institutional developments in Europe. Over the years, the focus of TRENDS has been changing. Whereas previous reports analysed mainly how the Bologna reforms have been implemented at the European universities, Trends 2015 discussed, amongst other themes, also developments in learning and teaching (L&T).

Trends 2018 research continues and further enhances this focus, and explores recent European policy developments and institutional strategies and practice on L&T.

UOE data collection on education and training systems (UOE)

The UNESCO Institute for Statistics (UIS-UNESCO), the Organisation for Economic Co-operation and Development (OECD) and the Statistical Office of the European Union (Eurostat) jointly provide internationally comparable data on key aspects of education and training systems through the annual UOE data collection.

For tertiary education the collection covers entrants (input), enrolments (stock) and graduates (output). Data on education expenditure and personnel is also provided. The data are broken down by educational level (using the ISCED classification), as well as by sex, age, sector and field of education. Separate tables provide information on mobile and foreign students and graduates by country of origin (as well as by level, sex and field of education).

Within the UOE data collection, Eurostat collects and disseminates data from the EU Member States, candidate countries and EFTA countries. The OECD collects data from other OECD countries (such as Australia, Canada, Japan and the United States), while the UIS-UNESCO collects data from other participating countries. The validated data are used by the three organisations (155).

V. Notes on figures

Chapter 1

Figure 1.1: Number of students enrolled in tertiary education by ISCED level, 2014/15

Belgium: Data on 'Independent private institutions' not included, except at ISCED 6 and 7.
Bosnia and Herzegovina, Bulgaria, Finland Greece, Liechtenstein, Lithuania, Montenegro, Romania and Serbia: ISCED 5: not applicable.
Greece: ISCED levels are estimated.
Estonia and the former Yugoslav Republic of Macedonia: ISCED 5: not applicable according to Eurostat database.

Figure 1.2: Change in the total number of students enrolled in tertiary education between 2009/10 and 2011/12 and between 2012/13 and 2014/15

Belgium: 2013-2015 - Data on 'Independent private institutions' not included, except at ISCED 6 and 7. 2010-2012 - Data exclude the German-speaking Community. Data exclude students in private independent institutions.

Bosnia and Herzegovina, Bulgaria, Finland, Greece, Liechtenstein, Lithuania, Montenegro, Romania and Serbia: 2013-2015 ISCED 9: not applicable.

Cyprus: 2010-2012 - Due to 2 years compulsory military service for men aged 18-20, some of them are not in education.

Greece: 2013-2015 ISCED levels are estimated.

Liechtenstein and Romania: 2010-2012 - ISCED 5B: not applicable.

Russia is not included in the analysis. Missing data for Bosnia and Herzegovina and Luxembourg for the 2009-2012 period.

Figure 1.3: Enrolment rates in tertiary education for the 18-34 years old (% of the total population aged 18-34), 2008/09, 2011/12, 2014/15


Romania: 2010: Changes in classification at tertiary level.

Missing data for Montenegro (2012) and Albania, Andorra, Bosnia and Herzegovina, Greece, Kazakhstan, Luxembourg and Montenegro (2009).

Figure 1.6: Percentage change in the total number of academic staff between 2000 and 2016

Data referring to 2000, 2005 and 2010 covers academic staff at ISCED 1997 levels 5-6. Data referring to 2016 covers academic staff at ISCED 2011 levels 5-8. All data covers all types of higher education institutions (i.e. public, private government dependent and private government independent).

Belgium, the Czech Republic, Estonia, Germany, Italy, Latvia, the former Yugoslav Republic of Macedonia, Norway, Poland, Slovakia, Slovenia, Spain, Sweden and the United Kingdom are represented by 2015 data.

Figure 1.7: Academic staff by age groups (%), 2015

Data refers to academic staff at ISCED 2011 levels 5-8. It covers all types of higher education institutions (i.e. public, private government dependent and private government independent).

Greece and Turkey are represented by 2014 data.

Figure 1.8: Female academic staff (%), 2000 and 2016

Data refers to academic staff at ISCED 2011 levels 5-8.

Belgium, Croatia, Denmark, Estonia, France, Germany, Italy, Latvia, Luxembourg, the former Yugoslav Republic of Macedonia, Norway, Poland, Portugal, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom are represented by 2015 data. Greece and Turkey are represented by 2014 data.

Figure 1.9: Annual public expenditure on tertiary education as a % of GDP, total with R&D and total without R&D, 2014

Belgium: Expenditure in independent private institutions is not included.

Countries not in the analysis: Andorra, Azerbaijan, Belarus, Bosnia and Herzegovina, Croatia, Greece, Liechtenstein, the former Yugoslav Republic of Macedonia and Montenegro.

Figure 1.10: Annual public expenditure on tertiary education as a % of total public expenditure, 2008, 2011, 2014

EHEA is the EHEA median. Countries are sorted by the share of annual public expenditure on tertiary education in 2014. Countries not in the analysis: Andorra, Azerbaijan, Belarus, Bosnia and Herzegovina, Croatia, Finland, Greece, Holy See, Kazakhstan, Liechtenstein, the former Yugoslav Republic of Macedonia, Moldova, Montenegro, Russia, Serbia, Turkey, and Ukraine. Missing data for Bosnia and Herzegovina and Luxembourg in 2011 and 2008. The numbers from 2015 report for 2011-2012 do not match the numbers for 2011-2012 in this report.

Figure 1.11: Yearly changes in real public expenditure on tertiary education between year 2011 and year 2015 (price index 2010=100)


Figure 1.12: Annual public and private expenditure on public and private tertiary education institutions, per full-time equivalent student in PPS, 2008, 2011, 2014

Austria: 2008: Payments from private entities other than households to public educational institutions are not available.

Belgium: Expenditure exclude independent private institutions for all years and the German-speaking Community for years 2008 and 2011. 2014 - Expenditure in independent private institutions is not included.

Croatia: 2008: Capital expenditure from private educational institutions is not available. 2008: Expenditure for compensation of personnel in private educational institutions is not available. 2008 and 2011: Payments from international agencies and other foreign sources to independent private educational institutions are not available. 2008: Expenditure for independent private
educational institutions is not available.

**Denmark:** Expenditure of post-secondary non-tertiary level of education is partially included in tertiary level of education. R&D expenditure is not available. 2011: Payments from other private entities to educational institutions are not available.

**Poland:** Payments from other private entities to educational institutions are not available. 2008: Payments from international agencies and other foreign sources to educational institutions are not available.

**Portugal:** Expenditure at local level of government is not available. 2008 and 2011: Expenditure of post-secondary non-tertiary level of education is partially included in upper secondary and tertiary level of education. 2008: Imputed retirement expenditure is not available; Payments from international agencies and other foreign sources to educational institutions are not available.

**Slovakia:** Expenditure of ISCED 5B is not included. 2008: Expenditure for independent private educational institutions is not available. Payments from international agencies and other foreign sources to private educational institutions are not available.

**Slovenia:** 2008: Capital expenditure from private educational institutions is not available.

**Spain:** 2008: Expenditure for auxiliary services is not available.

**United Kingdom:** 2008-2011: Adjustment of educational expenditure of financial year that is running from 1 April to 31 March, to the calendar year.

Countries not in the analysis – Albania, Andorra, Armenia, Azerbaijan, Belarus, Bosnia and Herzegovina, Bulgaria, Croatia, Georgia, Greece, Kazakhstan, Liechtenstein, the former Yugoslav Republic of Macedonia, Moldova, Montenegro, Russia, Switzerland and Ukraine. Missing data for Denmark (2014), Hungary, Ireland, Luxembourg, Serbia (2011), and Hungary, Ireland, Luxembourg, Turkey, Romania and Serbia (2008).

**Figure 1.13:** Annual public expenditure on public and private tertiary education institutions per full-time equivalent student in euro, 2014

Countries not included in the analysis – Albania, Andorra, Armenia, Azerbaijan, Belarus, Bosnia and Herzegovina, Croatia, Georgia, Greece, Kazakhstan, Liechtenstein, the former Yugoslav Republic of Macedonia, Moldova, Montenegro and Ukraine.

**Figure 1.14:** Annual public and private expenditure on public and private education institutions on tertiary education per full-time equivalent student in PPS relative to the GDP per inhabitant in PPS, 2008, 2011 and 2014

**Austria:** 2008: Payments from private entities other than households to public educational institutions are not available.

**Belgium:** Expenditure exclude independent private institutions for all years and the German-speaking Community for years 2008 and 2011.

**Croatia:** 2008: Capital expenditure from private educational institutions is not available. 2008: Expenditure for compensation of personnel in private educational institutions is not available. 2008 and 2011: Payments from international agencies and other foreign sources to independent private educational institutions are not available. 2008: Expenditure for independent private educational institutions is not available.

**Denmark:** Expenditure of post-secondary non-tertiary level of education is partially included in tertiary level of education. R&D expenditure is not available. 2011: Payments from other private entities to educational institutions are not available.

**Iceland:** 2008: Expenditure for ancillary services, payments from other private entities to educational institutions and payments from international agencies and other foreign sources to educational institutions are not available. 2008: Capital expenditure from private educational institutions is not available. 2011: R&D expenditure is not available.

**Norway:** 2008: Payments from other private entities to educational institutions are not available. Payments from international agencies and other foreign sources to educational institutions are not available.

**Poland:** Payments from other private entities to educational institutions are not available. 2008: Payments from international agencies and other foreign sources to educational institutions are not available.

**Portugal:** Expenditure at local level of government is not available. 2008 and 2011: Expenditure of post-secondary non-tertiary level of education is partially included in upper secondary and tertiary level of education. 2008: Imputed retirement expenditure is not available; Payments from international agencies and other foreign sources to educational institutions are not available.

**Slovakia:** Expenditure of ISCED 5B is not included. 2008: Expenditure for independent private educational institutions is not available. Payments from international agencies and other foreign sources to private educational institutions are not available.

**Slovenia:** 2008: Capital expenditure from private educational institutions is not available.

**Spain:** 2008: Expenditure for auxiliary services is not available.

**United Kingdom:** 2008-2011: Adjustment of educational expenditure of financial year, that is running from 1st of April to 31 March, to the calendar year.

Countries missing in the analysis: for 2008 – Albania, Andorra, Armenia, Azerbaijan, Belarus, Bosnia and Herzegovina, Georgia, Greece, Hungary, Ireland, Kazakhstan, Liechtenstein, Luxembourg, the former Yugoslav Republic of Macedonia, Moldova, Montenegro, Romania, Russia, Serbia, Switzerland, Turkey and Ukraine; for 2011 – Albania, Andorra, Armenia, Azerbaijan, Belarus, Bosnia and Herzegovina, Georgia, Greece, Hungary, Ireland, Kazakhstan, Liechtenstein, Luxembourg, the former Yugoslav Republic of Macedonia, Moldova, Montenegro, Bulgaria, Romania, Russia, Serbia, Switzerland, Turkey and Ukraine; for 2014 – Albania, Andorra, Armenia, Azerbaijan, Belarus, Bosnia and Herzegovina, Denmark, Georgia, Greece, Kazakhstan, Liechtenstein, the former Yugoslav Republic of Macedonia, Moldova, Montenegro, Russia, Switzerland, Turkey and Ukraine.
Chapter 2

Figure 2.1: Expectations towards higher education institutions specified in national learning and teaching strategies (% of institutions reporting that there is a national strategy in place), 2017

Data source: Trends 2018 (European University Association)
Question: Q.8.1: What does this national strategy imply? Higher education institutions are expected...
Coverage: The question was only answered by those institutions that reported the presence of a national learning and teaching strategy, or a national higher education strategy, which includes learning and teaching among other matters (234 institutions out of 301 institutions that replied to the question).

Figure 2.2: Elements included in institutional learning and teaching strategies (% of institutions reporting that there is an institutional strategy in place), 2017

Data source: Trends 2018 (European University Association)
Question: Q.9.1: What elements does your institutional L&T strategy/policy address or include?
Coverage: The question was only answered by those institutions that indicated the presence of an institutional strategy on teaching and learning, including respondents referring to strategies at faculty/department level (260 institutions out of 303 institutions that replied to the question).

Figure 2.8: Impact of the learning outcomes approach in higher education institutions (% of institutions), 2017

Data source: Trends 2018 (European University Association)
Question: Q.22.1: What effect on the institution has the introduction of learning outcomes had so far?
Coverage: The figure was calculated on a basis of replies from 264 higher education institutions. It shows the percentage of institutions that answered ‘Yes, this is the case’ or ‘Yes, to some extent’ to specific items in this question. Answers ‘No impact’ and ‘Don’t know/No opinion’ are not shown in the figure.

Figure 2.11: Training for higher education teaching staff in developing learning outcomes (% of institutions), 2017

Data source: Trends 2018 (European University Association)
Question: Q.39: Please indicate how teachers receive training in developing learning outcomes.
Coverage: The figure was calculated on a basis of replies from 285 higher education institutions.

Figure 2.14: Use of ECTS for credit accumulation and transfer by all higher education institutions, first- and second-cycle programmes, students’ perspective, 2016/17

Data source: ESU data collection (Bologna with Student Eyes 2018 (European Students’ Union))
Question: 2.2. In first and second cycle programmes, in your country, ECTS is used as a ... ‘credit transfer system for student learning outcomes acquired in another institution in the country’, ‘credit transfer system for periods of study abroad’.

Figure 2.15: Elements used for the calculation of ECTS points in public higher education institutions, students’ perspective, 2016/17

Data source: ESU data collection (Bologna with Student Eyes 2018 (European Students’ Union))
Question: 2.1. Which elements are used in the calculation of ECTS points in your country?

Figure 2.17: Provision of part-time programmes or other alternative study forms by higher education institutions, 2016/17

Albania: According to the new Law on Higher Education (October 2015), higher education institutions can offer only ‘full-time’ study programmes. However, they can offer ‘extended form of study’, but only for short-cycle study programmes (post-secondary), Professional Master and Executive Master. According to the higher education law, extended form of study means that the duration of studies does not exceed the double normal time of the respective study programme. At present, Albania is in a transitory phase: higher education institutions are reorganising their study programmes as foreseen in the abovementioned law, while students enrolled before 2015 will finish their studies with the same status they entered in. Thus some phasing out students with part-time status could be found among the majority of full-time students.

Figure 2.21: Median of country percentages of students enrolled as part-timers in tertiary education, by age, 2014/15

Data source: Eurostat, [specific extraction from Eurobase: file ‘ENRL3_AGE&P’] and additional collection for the other EHEA countries.
Albania, Azerbaijan, Kazakhstan, Moldova and Ukraine: data are missing for ages 45+.
Belgium: Data on ‘Independent private institutions’ not included, except at ISCED 6 and 7.
Greece: ISCED levels are estimated.
Coverage: Albania, Andorra, Azerbaijan, Belgium, Bosnia and Herzegovina, Bulgaria, Croatia, Denmark, Estonia, Finland, Germany, Hungary, Kazakhstan, Iceland, Ireland, Latvia, Liechtenstein, Lithuania, Luxembourg, the former Yugoslav Republic of Macedonia, Malta, Moldova, the Netherlands, Norway, Poland, Portugal, Romania, Russia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Ukraine, the United Kingdom.

Figure 2.22: Students enrolled as part-timers in tertiary education, by country and by age (%), 2014/15

Data source: Eurostat, [specific extraction from Eurobase: file ‘ENRL3_AGE&P’] and additional collection for the other EHEA countries.

Albania: Missing values for ISCED 5.
Austria, Greece, Italy, Serbia and Turkey: Not applicable.
Belgium: Data on ‘Independent private institutions’ not included, except at ISCED 6 and 7.
Cyprus, Czech Republic and France: Not available.
Kazakhstan: Data cover ISCED level 6.

Figure 2.23: 25, 50 and 75 percentile of countries according to the percentage of students enrolled as part-timers in tertiary education, by year, 2005-2015

Data source: Eurostat, [educ_enrl1ad] and [educ_uoe_enrt01] and additional collection for the other EHEA countries.

Belgium: Data on ‘Independent private institutions’ not included, except at ISCED 6 and 7.
Coverage: Albania, Andorra, Armenia, Azerbaijan, Belarus, Belgium, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, Germany, Hungary, Iceland, Ireland, Kazakhstan, Latvia, Liechtenstein, Lithuania, the former Yugoslav Republic of Macedonia, Malta, Moldova, the Netherlands, Norway, Poland, Romania, Russia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Ukraine, the United Kingdom.

Figure 2.24: Students qualifying themselves as full-timers (%), 2016/17

Data source: EUROSTUDENT VI, C.5.

Countries in which no formal part-time status exists: Austria, Denmark, France, Georgia, Serbia and Turkey.
Countries which did not include part-time students in sample: Albania and Latvia.
No data: Italy.
EUROSTUDENT question(s): 1.5 What is your current formal status as a student?
Deviations from EUROSTUDENT conventions: the Czech Republic, Italy, Romania and Switzerland.
Deviations from EUROSTUDENT standard target group: Albania, Germany, Ireland, Italy, Latvia and Serbia.

Comments from national research teams on EUROSTUDENT data on part-time students:

Albania: According to the new Law on Higher Education (October 2015), higher education institutions can offer only ‘full-time’ study programmes. However, they can offer ‘extended form of study’, but only for short-cycle study programmes (post-secondary), Professional Master and Executive Master. According to the higher education law, extended form of study means that the duration of studies does not exceed the double normal time of the respective study programme. At present, Albania is in a transitory phase: higher education institutions are reorganising their study programmes as foreseen in the abovementioned law, while students enrolled before 2015 will finish their studies with the same status they entered in. Thus some phasing out students with part-time status could be found among the majority of full-time students.

Czech Republic: We assume part-time students as those who are studying during the weekend etc. Full-time students go to school on daily basis.

Slovenia: Part-time students, unlike full-time students in 1st and 2nd cycle studies, have to pay (higher) tuition fees. Regarding the part-time studies, Article 37 of Higher Education Act states, that ‘...the organisation and schedule of lectures, seminars and practical exercises may be adapted to the possibilities of students (e.g. part-time studies). This shall be done in the manner and under the procedure laid down by the statute. Full-time study in Slovenia is study with a full load, i.e. 60 ECTS per year. It can be payable or unpayable. In case of ‘part-time study’ the organization and schedule of lectures, seminars and exercises may be adapted to the possibilities of students – however, ‘part-time study’ still leads to 60 ECTS per year and is payable. Students, irrespective of whether the study is provided full-time or part-time, have the right to health care and other benefits and rights (e.g. food, transport, grants) in accordance with special regulations provided they are not in full-time employment or registered job seekers.

Sweden: The students course registrations defines if the student is a full-time student or not. The study pace is stated as a percentage of average credits per week throughout the course period. 1.5 ECTS credits per week = 100 % (20 credits per semester). A course comprising of 15 credits over a given term corresponds to a study pace of 50 % on this specific course. If the students are registered to more than one course during the same period, the total course registration credits for the period will define if the student is a full-time student or not. In Sweden distance studies and on-campus studies are also registered in the study administrative system. Of the students that only studied distance courses in the academic year 2015/2016, more than 71 percent studied free-standing courses. For students studying on campus the relationship was the reverse, 76 percent were programme students.

Turkey: In Turkey there are ‘İkinci Öğretim Programı’ in Turkish in higher education (‘Evening Education Programme’ in English) within the framework of the law 3843. According to this Law, Evening Education is defined as the formal education when the normal formal education (daytime education) has been completed in higher education institutions. There is no difference between Formal Education and Evening Education in terms of period of study, study guidelines for associate’s degree and bachelor’s degree levels, attendance, number of mid-term examinations, contribution to the success grade, implementation and make-up examination conditions, and other issues regarding education and training [these fall under the category ‘other’].
Figure 2.25: Part-time students according to their study intensity (self-reported) as % of students in different study intensity groups, 2016/17

Data source: EUROSTUDENT VI, C.5.
Countries in which no formal part-time status exists: Austria, Denmark, France, Georgia, Serbia and Turkey.
Countries which did not include part-time students in sample: Albania and Latvia.
No data: Italy.
EUROSTUDENT question(s): 1.5 What is your current formal status as a student?
Deviations from EUROSTUDENT conventions: the Czech Republic, Italy, Romania and Switzerland.
Deviations from EUROSTUDENT standard target group: Albania, Germany, Ireland, Italy, Latvia and Serbia.

Figure 2.33: Trends in higher education institutions regarding digital learning, last three years (% of institutions), 2017

Data source: Trends 2018 (European University Association)
Question: Q.25: What are the main trends at your institution regarding digital learning in the last three years?
Coverage: The figure was calculated on a basis of replies from 293 higher education institutions. The figure shows the percentage of institutions that answered 'Yes, this is the case' or 'Yes, to some extent' to specific items in this question. Answers 'No' and 'Information unavailable' are not shown in the figure.

Figure 2.34: Formal or most common requirements for holding higher education positions with teaching responsibilities (% of institutions), 2017

Data source: Trends 2018 (European University Association)
Question: Q.34: In your institution, what formal or most common requirements are needed for holding one of the positions below with teaching responsibilities?
Coverage: The figure was calculated on a basis of replies from 303 higher education institutions.

Figure 2.36: Measures to promote and develop teaching skills of academics (% of institutions), 2017

Data source: Trends 2018 (European University Association)
Question: Q.38: Has there been a systematic effort to establish the following at your institution?
Coverage: The figure was calculated on a basis of replies from 287 higher education institutions. The figure shows the percentage of institutions that answered 'Yes' to specific items in this question. Answers 'No, but we are planning to do this', 'No' and 'Information unavailable' are not shown in the figure.

Figure 2.37: Means of assessment/enhancement of teaching in place throughout the institution (% of institutions), 2017

Data source: Trends 2018 (European University Association)
Question: Q.36: Which of the following means and criteria are used for the assessment of teaching?
Coverage: The figure was calculated on a basis of replies from 289 higher education institutions. The figure shows the percentage of institutions that answered 'Yes, throughout the institution' to specific items in this question. Answers 'Yes, in some parts of the institution', 'No, but we are planning to do it' and 'No, we do not use this' are not shown in the figure.

Figure 2.38: Students’ satisfied with quality of teaching in their current study programme (%), 2016/17

Data source: EUROSTUDENT VI, J.29.
No data: Austria, Germany, Italy, Switzerland and Turkey.
EUROSTUDENT Question(s): 1.9 How satisfied are you regarding the following aspects of your current (main) study programme?
Deviations from EUROSTUDENT standard target group: Albania, Germany, Ireland, Italy, Latvia and Serbia.

Figure 2.39: Students agreeing with the statement that their teachers inspire them (%), 2016/17

Data source: EUROSTUDENT VI, J.15.
No data: Austria, France, Germany, Italy, Switzerland and Turkey.
EUROSTUDENT Question(s): 1.13 To what extent do you agree with the following statements? - My teachers inspire me.
Deviations from EUROSTUDENT standard target group: Albania, Germany, Ireland, Italy, Latvia and Serbia.
Chapter 3

Figure 3.1: Distribution of students enrolled in ISCED 5-8 programmes, 2014/15

Data source: Eurostat, [educ_uoe_enrt02] and additional collection for the other EHEA countries.
Belgium: Data on 'Independent private institutions' not included, except at ISCED 6 and 7.
Bosnia and Herzegovina, Bulgaria, Finland Greece, Liechtenstein, Lithuania, Montenegro, Romania and Serbia: ISCED 5: not applicable.
Estonia and the former Yugoslav Republic of Macedonia: ISCED 5: not applicable according to Eurostat database.
Greece: ISCED levels are estimated.

Figure 3.2: Share of first cycle-programmes with a workload of 180, 210, 240 or another number of ECTS credits, 2016/17
Coverage: No data for the United Kingdom (England, Wales and Northern Ireland).

Figure 3.3: Share of second-cycle programmes with a workload of 60-75, 90, 120 or another number of ECTS credits, 2016/17

Chapter 4

Figure 4.5: European Student Unions perception of student participation in external quality assurance, 2016/17
Data source: ESU data collection (Bologna with Student Eyes 2018 (European Students’ Union))
Questions: 3.2. Is there a requirement that students are involved in external quality assurance review teams?

Figure 4.11: Scorecard indicator n°7: Level of openness to cross border quality assurance of EQAR registered agencies, 2016/17

Chapter 5

Figure 5.1: Relationship between the educational background of first-cycle new entrants (ISCED 6) and the educational attainment of their parents' cohort (population aged 45-64), 2016/17
Data source: Eurostat, EU-LFS (Population by educational attainment level, sex and age: edat_lfse_03).
Luxembourg: Data not reliable for proportions of the population aged 45-64 with different educational attainment levels.

Figure 5.2: Percentage of delayed transition students among students with/without higher education background, 2016/17
Data source: EUROSTUDENT VI, B.4.
No data: Malta.
EUROSTUDENT Question(s): 2.3 How long after leaving the #regular school system for the first time did you enter higher education for the first time?
Deviations from EUROSTUDENT survey conventions:
Austria: Only national students.
France: Delay calculated based on month and year of obtaining #matura or foreign equivalent.
Hungary: Delay calculated using additional questions about the high school type, year of maturation and starting year of higher education studies.
Switzerland: Information from national register of students (Swiss University Information System); duration of transition into higher education is approximated.
Deviations from EUROSTUDENT standard target group: Albania, Germany, Ireland, Italy, Latvia and Serbia.

Figure 5.3: Percentage of women among new entrants in tertiary education in 2004/05 and 2014/15
Data source: Eurostat, [educ_entr2tl] and [educ_uoe_ent01] and additional collection for the other EHEA countries.
Albania and Estonia: 2015 - ISCED 5 not available
Belgium, Ireland and Poland: 2005 - ISCED 6 not included.
Belgium and Malta: 2015 - ISCED 8 not available
Bosnia and Herzegovina, Bulgaria, Finland, Greece, Liechtenstein, Lithuania, Montenegro, Romania and Serbia: 2015 - ISCED 5: not applicable.
Croatia: 2005 – not significant data.
Finland: 2005 - ISCED 5B not applicable.
Finland and the Netherlands: 2005 ISCED 6 not included.
France: 2005 – missing data. 2015 - ISCED 5, 6 and 7 are not available
Germany: 2005 ISCED 6 not included.
Italy: 2005: ISCED 5B not significant.
Luxembourg, Latvia and Portugal: 2005 – missing data.
The Netherlands: 2005 - ISCED 5B not applicable.

Figure 5.4: Percentage of women among new entrants in tertiary education by level of education, 2014/15

Data source: Eurostat, [educ_uoe_ent01] and additional collection for the other EHEA countries.

Albania and Estonia: ISCED 5 not available
Belgium and Malta: ISCED 8 not available
Bosnia and Herzegovina, Bulgaria, Finland, Greece, Liechtenstein, Lithuania, Montenegro, Romania and Serbia: ISCED 5: not applicable.
France: ISCED 5, 6 and 7 are not available

Figure 5.5: Median percentage of women among enrolled students in Bologna structures by field of education and level of Bologna structure (first and second cycle, ISCED 6 and 7), 2014/15

Data source: Eurostat, [educ_uoe_ent03] and additional collection for the other EHEA countries.

Country coverage ISCED 6:

Education: Albania, Austria, Azerbaijan, Belgium, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Georgia, Germany, Hungary, Iceland, Italy, Kazakhstan, Latvia, Lithuania, Luxembourg, the former Yugoslav Republic of Macedonia, Malta, Moldova, the Netherlands, Norway, Poland, Portugal, Romania, Russia, Serbia, Slovakia, Slovenia, Sweden, Turkey, the United Kingdom, Spain, Switzerland, Ukraine.

Arts and humanities: Albania, Austria, Azerbaijan, Belgium, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Hungary, Iceland, Italy, Latvia, Lithuania, Luxembourg, the former Yugoslav Republic of Macedonia, Malta Moldova, the Netherlands, Norway, Poland, Portugal, Romania, Russia, Serbia, Slovakia, Slovenia, Sweden, Spain, Switzerland, Turkey, Ukraine, the United Kingdom.

Social sciences, journalism and information: Albania, Austria, Azerbaijan, Belgium, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Hungary, Iceland, Italy, Latvia, Lithuania, Luxembourg, the former Yugoslav Republic of Macedonia, Malta Moldova, the Netherlands, Norway, Poland, Portugal, Romania, Russia, Serbia, Slovakia, Slovenia, Sweden, Spain, Switzerland, Turkey, Ukraine, the United Kingdom.

Business, administration and law: Albania, Austria, Azerbaijan, Belgium, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Georgia, Germany, Hungary, Iceland, Italy, Latvia, Lithuania, Luxembourg, the former Yugoslav Republic of Macedonia, Malta Moldova, the Netherlands, Norway, Poland, Portugal, Romania, Russia, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey, the United Kingdom, Ukraine.

Natural sciences, mathematics and statistics: Albania, Austria, Azerbaijan, Belgium, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Georgia, Germany, Hungary, Iceland, Italy, Kazakhstan, Latvia, Lithuania, Luxembourg, the former Yugoslav Republic of Macedonia, Malta Moldova, the Netherlands, Norway, Poland, Portugal, Romania, Russia, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey, Ukraine, the United Kingdom.

Information and communication technologies: Albania, Austria, Azerbaijan, Belgium, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Georgia, Germany, Hungary, Iceland, Italy, Latvia, Lithuania, Luxembourg, the former Yugoslav Republic of Macedonia, Malta Moldova, the Netherlands, Norway, Poland, Portugal, Romania, Russia, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey, Ukraine, the United Kingdom.

Engineering, manufacturing and construction: Albania, Austria, Azerbaijan, Belgium, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Georgia, Germany, Hungary, Iceland, Italy, Kazakhstan, Latvia, Lithuania, Luxembourg, the former Yugoslav Republic of Macedonia, Malta Moldova, the Netherlands, Norway, Poland, Portugal, Romania, Russia, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey, Ukraine, the United Kingdom.

Agriculture, forestry, fisheries and veterinary: Albania, Austria, Azerbaijan, Belgium, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, the Czech Republic, Georgia, Germany, Denmark, Estonia, Finland, France, Hungary, Kazakhstan, Iceland, Italy, Latvia, Lithuania, the former Yugoslav Republic of Macedonia, Malta, Moldova, the Netherlands, Norway, Poland, Portugal, Romania, Russia, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey, Ukraine, the United Kingdom.

Health and welfare: Albania, Austria, Azerbaijan, Belgium, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Georgia, Germany, Hungary, Iceland, Italy, Kazakhstan, Latvia, Lithuania, Luxembourg, the former Yugoslav Republic of Macedonia, Malta, Moldova, the Netherlands, Norway, Poland, Portugal, Romania, Russia, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey, Ukraine, the United Kingdom.

Services: Albania, Austria, Azerbaijan, Belgium, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Georgia, Germany, Hungary, Iceland, Italy, Kazakhstan, Latvia, Lithuania, Luxembourg, the former Yugoslav Republic of Macedonia, Malta, Moldova the Netherlands, Norway, Poland, Portugal, Romania, Russia, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey, the United Kingdom.

Country coverage ISCED 7:

Education: Albania, Austria, Azerbaijan, Belgium, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Georgia, Germany, Hungary, Iceland, Italy, Kazakhstan, Latvia, Lithuania, Luxembourg, the former Yugoslav Republic of Macedonia, Malta, Moldova the Netherlands, Norway, Poland, Portugal, Romania, Russia, Serbia,
Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey, Ukraine, the United Kingdom.

**Arts and humanities**: Albania, Austria, Azerbaijan, Belgium, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Georgia, Hungary, Iceland, Italy, Kazakhstan, Lithuania, Luxembourg, Latvia, the former Yugoslav Republic of Macedonia, Malta, Moldova the Netherlands, Norway, Poland, Portugal, Romania, Russia, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey, Ukraine, the United Kingdom.

**Social sciences, journalism and information**: Austria, Albania, Azerbaijan, Belgium, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Georgia, Germany, Hungary, Iceland, Italy, Latvia, Lithuania, Luxembourg, the former Yugoslug Republic of Macedonia, Malta, Moldova the Netherlands, Norway, Poland, Portugal, Romania, Russia, Serbia, Slovenia, Slovakia, Spain, Sweden, Switzerland, Turkey, Ukraine, the United Kingdom.

**Business, administration and law**: Albania, Austria, Azerbaijan, Belgium, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Georgia, Germany, Hungary, Iceland, Italy, Latvia, Lithuania, Luxembourg, the former Yugoslug Republic of Macedonia, Malta, Moldova the Netherlands, Norway, Poland, Portugal, Romania, Russia, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey, Ukraine, the United Kingdom.

**Natural sciences, mathematics and statistics**: Albania, Austria, Azerbaijan, Belgium, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Georgia, Germany, Hungary, Iceland, Italy, Kazakhstan, Latvia, Lithuania, Luxembourg, the former Yugoslug Republic of Macedonia, Malta, Moldova the Netherlands, Norway, Poland, Portugal, Romania, Russia, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey, Ukraine, the United Kingdom.

**Information and communication technologies**: Albania, Austria, Azerbaijan, Belgium, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Georgia, Germany, Hungary, Iceland, Italy, Latvia, Lithuania, Luxembourg, the former Yugoslug Republic of Macedonia, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Russia, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey, Ukraine, the United Kingdom.

**Engineering, manufacturing and construction**: Albania, Austria, Azerbaijan, Belgium, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Georgia, Germany, Hungary, Iceland, Italy, Kazakhstan, Latvia, Lithuania, Luxembourg, the former Yugoslug Republic of Macedonia, Malta, Moldova the Netherlands, Norway, Poland, Portugal, Romania, Russia, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey, Ukraine, the United Kingdom.

**Agriculture, forestry, fisheries and veterinary**: Albania, Austria, Azerbaijan, Belgium, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Georgia, Germany, Hungary, Iceland, Italy, Kazakhstan, Latvia, Lithuania, Luxembourg, the former Yugoslug Republic of Macedonia, Malta, Moldova the Netherlands, Norway, Poland, Portugal, Romania, Russia, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey, Ukraine, the United Kingdom.

**Health and welfare**: Albania, Austria, Azerbaijan, Belgium, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Georgia, Germany, Hungary, Iceland, Italy, Latvia, Lithuania, Luxembourg, the former Yugoslug Republic of Macedonia, Malta, Moldova the Netherlands, Norway, Poland, Portugal, Romania, Russia, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey, Ukraine, the United Kingdom.

**Services**: Austria, Albania, Azerbaijan, Belgium, Bulgaria, Bosnia and Herzegovina, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Georgia, Germany, Hungary, Iceland, Kazakhstan, Latvia, Lithuania, Luxembourg, the former Yugoslug Republic of Macedonia, Malta, Moldova the Netherlands, Norway, Poland, Portugal, Romania, Russia, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey, Ukraine, the United Kingdom.

**Data source**: EUROSTUDENT VI, A.4.

**No data**: Italy and Romania. International students: Germany.

**EUROSTUDENT Question(s)**: 5.3 In which country were you and your parents (or those who raised you) born? 2.0 Do you have a standard entrance qualification or foreign equivalent? 2.2 [only students without Matura] Where did you last attend the regular school system

**Notes**: Sum of categories may deviate from 100 due to rounding.

**Deviations from EUROSTUDENT survey conventions**: Germany: no international students included in sample.

**Deviations from EUROSTUDENT standard target group**: Albania, Germany, Iceland, Italy, Latvia, Lithuania.

**Figure 5.6**: Composition of students by migration background (%), 2016/17

**Data source**: Eurostat, EU-LFS.

Bulgaria, Estonia, Lithuania, Malta, Romania and Slovakia: Not reliable and not publishable for foreign born. Croatia, Latvia, the former Yugoslug Republic of Macedonia, Poland and Slovenia: Not reliable for foreign born.

**Figure 5.7**: Participation rates in tertiary education among persons aged 18-29, foreign-born, native-born and total population (%), 2016

**Data source**: Eurostat, EU-LFS.

Bulgaria, Croatia, Estonia, Latvia, Lithuania, Malta, Romania and Slovakia: Not reliable and not publishable for foreign born.

**Figure 5.8**: Percentage of students enrolled in tertiary education, 30 or more years old, in 2011/12 and 2014/15

**Data source**: Eurostat, [educ_enrl1tl] and [educ_uoe_enrt02] and additional collection for the other EHEA countries.

**Belgium**: 2013-2015 - Data on 'Independent private institutions' not included, except at ISCED 6 and 7. 2010-2012 - Data exclude the German-speaking Community. Data exclude students in private independent institutions.

**Bosnia and Herzegovina**, Bulgaria, Finland, Greece, Liechtenstein, Lithuania, Montenegro, Romania and Serbia: 2013-2015 ISCED 5: not applicable.

**Cyprus**: 2010-2012 - Due to 2 years compulsory military service for men aged 18-20, some of them are not in education.

**Greece**: 2013-2015 ISCED levels are estimated.

**Liechtenstein and Romania**: 2010-2012 - ISCED 5B: not applicable.
2016/17: 2.3 How long after leaving the regular school system for the first time did you enter higher education for the first time?

Deviations from EUROSTUDENT question(s):
- Austria: Only national students.
- France: Delay calculated using the moment of graduation from high school and the first entering into an higher education institution.
- Germany: Delay calculated based on month and year of obtaining #matura or foreign equivalent.
- Hungary: Delay calculated using additional questions about the high school type, year of maturation and starting year of higher education studies.
- Switzerland: Information from national register of students (Swiss University Information System); duration of transition into higher education is approximated.

Deviations from EUROSTUDENT survey conventions:
- Austria: All international students coded to have standard entry qualification, as the information was not asked.
- Estonia: Entry into higher education without #Matura not possible in Estonia, so response option ‘no, I do not have a #Matura’ was not offered.
- Hungary: Question 2.0 was asked in the English questionnaire only used by international students and not in the Hungarian version because regulations in Hungary only allow to apply for higher education studies for those having a matura. Questions 2.1 (Did you obtain your #Matura or foreign equivalent in direct relation (within 6 month) of leaving the regular school [adapted nationally] system for the first time?) & 2.2 (Where did you last attend the regular school system?) were slightly altered in the Hungarian version as in most cases, finishing the high school in Hungary concurs with obtaining a matura. However, this combination of altered questions is unreliable when identifying students with a delayed transition or alternative access route. Thus, additional questions from the Hungarian questionnaire about the high school type, year of maturation and starting year of higher education studies were also employed during data cleaning process for calculating EUROSTUDENT-compatible indicators.
- Switzerland: Information from national register of students (Swiss University Information System).

Deviations from EUROSTUDENT standard target group: Albania, Germany, Ireland, Italy, Latvia and Serbia.

Figure 5.9: Percentage of delayed transition students among respondents 30 or more years old, 2016/17 and 2013/14

Data source: EUROSTUDENT VI, B.4.

No data: Malta. Too few cases: Albania.

EUROSTUDENT Question(s): 2.3 How long after leaving the regular school system for the first time did you enter higher education for the first time?

Deviations from EUROSTUDENT survey conventions:
- Austria: Only national students.
- France: Delay calculated using the moment of graduation from high school and the first entering into an higher education institution.
- Germany: Delay calculated based on month and year of obtaining #matura or foreign equivalent.
- Hungary: Delay calculated using additional questions about the high school type, year of maturation and starting year of higher education studies.
- Switzerland: Information from national register of students (Swiss University Information System); duration of transition into higher education is approximated.

Deviations from EUROSTUDENT survey conventions:
- Austria: All international students coded to have standard entry qualification, as the information was not asked.
- Estonia: Entry into higher education without #Matura not possible in Estonia, so response option ‘no, I do not have a #Matura’ was not offered.
- Hungary: Question 2.0 was asked in the English questionnaire only used by international students and not in the Hungarian version because regulations in Hungary only allow to apply for higher education studies for those having a matura. Questions 2.1 (Did you obtain your #Matura or foreign equivalent in direct relation (within 6 month) of leaving the regular school system for the first time?) & 2.2 (Where did you last attend the regular school system?) were slightly altered in the Hungarian version as in most cases, finishing the high school in Hungary concurs with obtaining a matura. However, this combination of altered questions is unreliable when identifying students with a delayed transition or alternative access route. Thus, additional questions from the Hungarian questionnaire about the high school type, year of maturation and starting year of higher education studies were also employed during data cleaning process for calculating EUROSTUDENT-compatible indicators.
- Switzerland: Information from national register of students (Swiss University Information System).

Deviations from EUROSTUDENT standard target group: Albania, Germany, Ireland, Italy, Latvia and Serbia.

Figure 5.16: Percentage of students entering higher education through standard and alternative routes, 2016/17

Data source: EUROSTUDENT VI, B.5 & B.9.

No data: Finland, Italy and Turkey. Too few cases: Slovakia (for delayed and alternative access routes).

EUROSTUDENT Question(s): 2.0 Do you have a #general precondition for HE access [named country-specific] or foreign equivalent? 2.1. [only students with country specific standard qualification] Did you obtain your #general precondition or foreign equivalent in direct relations (within 6 months) of leaving the regular school [adapted nationally] system for the first time? 2.2 [only students without #general precondition for HE access] Where did you last attend the regular school system?

Deviations from EUROSTUDENT conventions:
- Austria: All international students coded to have standard entry qualification, as the information was not asked.
- Estonia: Entry into higher education without #Matura not possible in Estonia, so response option ‘no, I do not have a #Matura’ was not offered.
- Hungary: Question 2.0 was asked in the English questionnaire only used by international students and not in the Hungarian version because regulations in Hungary only allow to apply for higher education studies for those having a matura. Questions 2.1 (Did you obtain your #Matura or foreign equivalent in direct relation (within 6 month) of leaving the regular school system for the first time?) & 2.2 (Where did you last attend the regular school system?) were slightly altered in the Hungarian version as in most cases, finishing the high school in Hungary concurs with obtaining a matura. However, this combination of altered questions is unreliable when identifying students with a delayed transition or alternative access route. Thus, additional questions from the Hungarian questionnaire about the high school type, year of maturation and starting year of higher education studies were also employed during data cleaning process for calculating EUROSTUDENT-compatible indicators.
- Switzerland: Information from national register of students (Swiss University Information System).

Deviations from EUROSTUDENT standard target group: Albania, Germany, Ireland, Italy, Latvia and Serbia.

Figure 5.18: Percentage of first-cycle students who pay fees, 2016/17

Data source: EUROSTUDENT VI, F.171.

No data: Italy.

EUROSTUDENT Question: What are your average expenses for the following items during the current lecture period?

Notes: Fees include tuition fees, registration fees, examination fees, and administrative fees. Social welfare contributions to HEIs/student associations, learning materials, field trips should be excluded, but may have influenced students' perception.

Deviations from EUROSTUDENT standard target group: Albania, Germany, Ireland, Italy, Latvia and Serbia.

Figure 5.20: Most common amount of yearly fees for full-time home students as a percentage of GDP per capita, 2016/17

Data source: Authors’ calculation based on Student Fee and Support Systems in Europe 2016/17 (European Commission/EACEA/Eurydice, 2016a), the BFUG questionnaire and World Bank. NY.GDP.PCAP.CN, Data from database: World Development Indicators, Last Updated: 09/18/2017

No data: Andorra, Bulgaria, Croatia, Cyprus (second cycle), Estonia, France, Germany, Greece (second cycle), Holy See, Latvia, Liechtenstein, Lithuania, the former Yugoslav Republic of Macedonia, Moldova, Poland, Russia, Slovakia, Slovenia and Turkey.

Notes: Fees are understood as all fees charged – whether for tuition, enrolment, certification or other administrative costs, except contributions to student organisations. There are no fees: in the first cycle - Cyprus, Greece, Malta and the United Kingdom – Scotland; in the first and second cycles: Denmark, Finland, Norway and Sweden.

Figure 5.21: Support to students enrolled at tertiary education level as a percentage of public expenditure on tertiary education, 2008, 2011, 2014

Data source: Eurostat, [educ_fiaid] and [educ_uoe_fina01].

Belgium: 2011: Expenditure exclude independent private institutions and the German-speaking Community. 2014 - Expenditure in independent private institutions is not included.

Bulgaria, Czech Republic and Estonia: 2008: Student loans from public sources are not applicable.

Croatia: 2008: Public transfers to private entities other than households are not available. 2011: Public transfers to private
entities at local level of government are not available.


Denmark: Expenditure of post-secondary non-tertiary level of education is partially included in tertiary level of education.

Hungary: 2008 - Student loans from public sources are not available.

Iceland: Expenditure for ancillary services is not available.

Ireland: Expenditure for ancillary services is not available.

Portugal: 2008 - Expenditure at local level of government is not available. Imputed retirement expenditure is not available. Expenditure of post-secondary non-tertiary level of education is partially included in tertiary level of education. 2008 – 2011 – Student loans from public sources are not available. 2011 - Expenditure at local level of government is not available, except for tertiary institutions.


Slovakia: 2008-2011 - Expenditure at ISC 5B is included under upper secondary level of education.

Spain: Expenditure for ancillary services is not available.

United Kingdom: 2011: data is different from the data in the 2015 Bologna Implementation Report due to the revision of the UK data for the reference year 2011.

Figure 5.25: Percentage of fee-payers among recipients and non-recipients of public support, 2016/17

Data source: EUROSTUDENT VI, G.44.

No data: Finland.

EUROSTUDENT Questions: 3.3 What is the average monthly amount at your disposal from the following sources during the current lecture period? 3.4 What are your average expenses for the following items during the current lecture period?

Notes: Public support includes grants, loans, and scholarships from national public sources. Fees include tuition fees, registration fees, examination fees, and administrative fees. Social welfare contributions to HEIs/student associations, learning materials, field trips should be excluded, but may have influenced students’ perception.

Deviations from EUROSTUDENT standard target group: Albania, Germany, Ireland, Italy, Latvia and Serbia.

Figure 5.27: Percentage of persons with tertiary education, by age group, 2013 and 2016

Data source: Eurostat, [edat_lfs_9903] and additional collection for the other EHEA countries.

Figure 5.28: Completion rates in ISCED 6 (first-cycle) programmes (%), 2014

Data source: OECD, Education at a Glance 2016, Table A9.2: Distribution of full-time students who entered a given educational level, by theoretical duration (N) and theoretical duration plus three years (N+3) (2014).

Belgium (Flemish Community): Data for ‘Had not graduated and were not in education’ refer to students who were not enrolled in either bachelor’s or master’s degrees or equivalent programmes. They could still be enrolled at other levels or in adult education.

Czech Republic: N+3 corresponds to N+2.

France: Data provided using a longitudinal survey and excludes international students.

Netherlands: In the Netherlands, a few students enter bachelor’s or equivalent programmes and graduate from a long first degree within the theoretical duration of the original bachelor’s or equivalent programme. They represent less than 0.001% of total new entrants and are included with ‘Graduated from a long first degree’ by N+3.

Figure 5.29: Attainment by gender: odds ratios of men over women to attain higher education, 2006-2016

Data source: Eurostat, [edat_lfs_9903] and additional collection for the other EHEA countries.

Country coverage: Austria, Azerbaijan, Belgium, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Georgia, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, the former Yugoslav Republic of Macedonia, Malta, Moldova, Montenegro, the Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovenia, Slovakia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Figure 5.30: Percentage of female graduates in tertiary education programmes by level of education, 2014/15

Data source: Calculated based on Eurostat, [educ_uoe_grad03].

Figure 5.31: 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, 2013 and 2016

Data source: Eurostat, EU-LFS and additional collection for the other EHEA countries.

Bulgaria, Romania and Slovakia: Not reliable and not publishable.

Georgia: Reference year is 2014 instead of 2016.

Lithuania and Poland: Not reliable.

Figure 5.32: Adults (30-64) who attained their tertiary education degree during adulthood (aged 30-64) as a percentage of all adults (30-64), 2013 and 2016

Data source: Eurostat, EU-LFS and additional collection for the other EHEA countries.

Georgia: Reference year is 2014 instead of 2016.
Chapter 6

Figure 6.1.A: Unemployment rate and unemployment ratio of people aged 20-34 by educational attainment level (%), 2016

Data source: Eurostat, EU-LFS and additional collection for the other EHEA countries.
Croatia and Lithuania: Not reliable for the category ‘low educational attainment’.
Malta: Not reliable for the category ‘high educational attainment’.

Figure 6.1.B: Unemployment rate of people aged 20-34 by educational attainment level (%), 2016

Data source: Eurostat, EU-LFS and additional collection for the other EHEA countries.
Bulgaria, Lithuania, Luxembourg, Malta, Norway and Slovenia: Not reliable for Bachelor’s level.
Bulgaria, Latvia, Luxembourg, Norway and Romania: Not reliable for the Masters level.

Figure 6.2: Compound annual growth rate of unemployment by educational attainment (%), 2013-2016

Data source: Eurostat, EU-LFS and additional collection for the other EHEA countries.
Croatia and Lithuania: Not reliable for the category ‘low educational attainment’.
Malta: Not reliable for the category ‘high educational attainment’.

Figure 6.3: Unemployment rate of people aged 20-34 by educational attainment level and by sex (%), 2016

Data source: Eurostat, EU-LFS and additional collection for the other EHEA countries.
Bulgaria, Croatia (male), Czech Republic (male), Estonia, Hungary (male), Latvia (male) and Luxembourg: Not reliable for the category ‘high educational attainment’.
Malta (male): Not reliable for the category ‘medium educational attainment’.
Island, Lithuania and Malta: Not reliable and not publishable for the category ‘high educational attainment’.
Island and Malta (female): Not reliable and not publishable for the category ‘medium educational attainment’.
Island and Lithuania: Not reliable and not publishable for the category ‘low educational attainment’.

Figure 6.4: Unemployment rate of tertiary education graduates aged 20-34, by the number of years since graduation (%), 2016

Data source: Eurostat, EU-LFS and additional collection for the other EHEA countries.
Bulgaria, Croatia, Czech Republic, Estonia, Hungary and Luxembourg: Not reliable for the category ‘more than 3 years’.
Bulgaria, Estonia, Luxembourg and Malta: Not reliable for the category ‘3 years or less’.
Island (more than 3 years), Lithuania and Malta (more than 3 years): Not reliable and not publishable.

Figure 6.5: Unemployment rate of tertiary education graduates aged 20-34, by the number of years since graduation and by sex (%), 2016

Data source: Eurostat, EU-LFS and additional collection for the other EHEA countries.
Austria, Croatia, Czech Republic, Denmark (male), Finland (male), Latvia (female), the Netherlands, Norway, Poland (male), Romania, Slovenia and Switzerland (male): Not reliable for the category ‘more than 3 years’.
Bulgaria, Estonia, Hungary (male), Iceland, Latvia (male), Lithuania, Luxembourg (male) and Malta: Not reliable and not publishable for the category ‘more than 3 years or less’.
Bulgaria, Estonia, Hungary, Iceland, Latvia (male), Lithuania, Luxembourg and Malta: Not reliable and not publishable for the category ‘more than 3 years’.
Croatia, Czech Republic (male), Hungary (female), Luxembourg (female), Norway (female), Romania and Slovenia (male): Not reliable for the category ‘3 years or less’.

Figure 6.7: Ratio of median annual gross income of employees with tertiary education to the median annual gross income of employees with lower levels of education, 2013 and 2015

Data source: Eurostat, EU-SILC (Statistics on Income and Living conditions).
Moldova: Reference year is 2016 instead of 2015.

Figure 6.8: At-risk-of-poverty rate by educational attainment for people aged 25-34 by education level, 2015

Data source: Eurostat, EU-SILC (Statistics on Income and Living conditions), specific extraction.
Moldova: Reference year is 2016 instead of 2015.
Figure 6.11: Distribution of people with tertiary education (ISCED 5-6) aged 25-34 and employed in ISCO 1 or 2 (legislators, senior officials, managers and professionals), in ISCO 3 (technicians and associate professionals) and in ISCO 4-9, by sex (%)

Data source: Eurostat, EU-LFS and additional collection for the other EHEA countries.
Croatia (female): Not reliable for the category ‘ISCO 3’.
Luxembourg (female): Not reliable for the category ‘ISCO 4-9’.

Figure 6.12: Percentage of people aged 25-34 with tertiary education (ISCED 5-6) who are vertically mismatched (in ISCO 4-9) by field of study, 2016

Data source: Eurostat, EU-LFS and additional collection for the other EHEA countries.

Country coverage:

**Education:** Austria, Belgium, Croatia, Cyprus, the Czech Republic, Denmark, Germany, Greece, Hungary, Italy, the former Yugoslav Republic of Macedonia, the Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Sweden, Spain, Switzerland, Turkey, the United Kingdom.

**Arts and humanities:** Austria, Belgium, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, the former Yugoslav Republic of Macedonia, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey, the United Kingdom.

**Social sciences, journalism and information:** Austria, Belgium, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Hungary, Italy, Latvia, Lithuania, the former Yugoslav Republic of Macedonia, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey, the United Kingdom.

**Business, administration and law:** Austria, Belgium, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, the former Yugoslav Republic of Macedonia, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey, the United Kingdom.

**Natural sciences, mathematics and statistics:** Belgium, Cyprus, Czech Republic, Germany, Greece, Italy, the former Yugoslav Republic of Macedonia, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey, the United Kingdom.

**Information and Communication Technologies:** Belgium, Cyprus, Germany, France, Greece, Hungary, Ireland, Italy, the former Yugoslav Republic of Macedonia, Poland, Spain, Sweden, Switzerland, Turkey, the United Kingdom.

**Engineering, manufacturing and construction:** Austria, Belgium, Bulgaria, Switzerland, Cyprus, Czech Republic, Germany, Denmark, Estonia, Spain, Finland, France, Greece, Croatia, Hungary, Ireland, Italy, Latvia, Lithuania, the former Yugoslav Republic of Macedonia, the Netherlands, Norway, Poland, Portugal, Romania, Spain, Sweden, Turkey, the United Kingdom.

**Agriculture, forestry, fisheries and veterinary:** Austria, Belgium, Czech Republic, France, Germany, Greece, Hungary, Italy, the former Yugoslav Republic of Macedonia, the Netherlands, Poland, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey, the United Kingdom.

**Health and welfare:** Belgium, Cyprus, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Ireland, Italy, the former Yugoslav Republic of Macedonia, the Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey, the United Kingdom.

**Services:** Austria, Belgium, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, the former Yugoslav Republic of Macedonia, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey, the United Kingdom.

Figure 6.13: Students’ self-assessment of their chances on the national and international labour market based on the competences gained during studies (for all students and/or different focus groups), 2017

Data source: EUROSTUDENT VI, J.3
No data: Germany, Italy, Switzerland, Turkey

EUROSTUDENT Question(s): 1.12 Regarding the competences gained during your current study programme: How well do you think you are prepared for the labour market after graduating?

Notes: Students responded on a five-point scale ranging from ‘very well’ to ‘very poorly’. Values shown are aggregated across categories 1 + 2 (very) well

Chapter 7

EHEA countries use multiple definitions to identify and report mobile students. Before 2013 the UOE data collection defined mobile students as foreign students (non-citizens of the country in which they study) who have crossed a national border and moved to another country to study. Starting from 2013 reference year the UOE definition is based on the country of origin understood as the country where the upper secondary diploma was awarded (or the best national estimate) and not the country of citizenship. Twenty countries in the EHEA still use the foreign citizenship/nationality as criteria to define mobile students.

For the inward mobility to the EHEA from countries outside the EHEA information from all declaring countries in the world was considered. For the outward mobility from the EHEA towards countries outside the EHEA only the questionnaires from Australia, Canada, the United States, Japan and New Zealand were considered due to issues with data availability and quality.
Incoming degree mobility rate – tertiary education mobile students from the EHEA and from outside the EHEA studying in the country as a percentage of the total number of students enrolled, by country of destination, 2014/15

Albania, Andorra, Armenia, Azerbaijan, Bosnia and Herzegovina, Bulgaria, the Czech Republic, France, Greece, Hungary, Italy, Kazakhstan, Luxembourg, Malta, Moldova, Montenegro, Russia, Serbia, Slovakia, Turkey and Ukraine.

Germany and Spain: ISCED 8 is not included in the tertiary mobile students.

Norway: Change in the definition of mobile student since UOE 2014 (2012/13).

Number of incoming degree tertiary education mobile students from inside and outside the EHEA, by country of destination, 2014/15

Albania, Andorra, Armenia, Azerbaijan, Bulgaria, Bosnia and Herzegovina, the Czech Republic, France, Greece, Hungary, Italy, Kazakhstan, Luxembourg, Malta, Moldova, Montenegro, Russia, Serbia, Slovakia, Turkey and Ukraine.

Germany and Spain: ISCED 8 is not included in the tertiary mobile students.

Norway: Change in the definition of mobile student since UOE 2014 (2012/13).

Number of outward degree tertiary education students inside and outside the EHEA by country of origin, 2014/15

Albania, Andorra, Armenia, Azerbaijan, Bosnia and Herzegovina, Bulgaria, the Czech Republic, France, Greece, Hungary, Italy, Kazakhstan, Luxembourg, Malta, Moldova, Montenegro, Russia, Serbia, Slovakia, Turkey and Ukraine.

Germany and Spain: ISCED 8 is not included in the tertiary mobile students.

Norway: Change in the definition of mobile student since UOE 2014 (2012/13).

Outward degree mobility rate – mobile tertiary education graduates within the EHEA as a percentage of all graduates of the same country of origin, by country of origin, 2014/15

Albania, Andorra, Armenia, Azerbaijan, Bosnia and Herzegovina, Bulgaria, the Czech Republic, France, Greece, Hungary, Italy, Kazakhstan, Luxembourg, Malta, Moldova, Montenegro, Russia, Serbia, Slovakia, Turkey and Ukraine.

Andorra, France, Greece, Iceland, Slovakia and Georgia: Missing data.

Poland: ISCED 8 is not included in the graduated students.

Spain: Only including value from ISCED 6 and 7.

Share of degree mobile graduates from abroad by education level, sex and country of origin, 2014/15

Albania, Andorra, Armenia, Azerbaijan, Bosnia and Herzegovina, Bulgaria, the Czech Republic, France, Greece, Hungary, Italy, Kazakhstan, Luxembourg, Malta, Moldova, Montenegro, Russia, Serbia, Slovakia, Turkey and Ukraine.

Albania, Andorra, Armenia, Azerbaijan, Bosnia and Herzegovina, Belarus, France, Georgia, Greece, Iceland and Kazakhstan, Liechtenstein, Moldova, Montenegro, Russia and Ukraine: Missing data.

Poland: ISCED 8 is not included in the graduated students.

Spain: Only including value from ISCED 6 and 7.

Share of tertiary students enrolled abroad (degree mobility), by country of origin, 2014/15

Albania, Andorra, Armenia, Azerbaijan, Bosnia and Herzegovina, Bulgaria, the Czech Republic, France, Greece, Hungary, Italy, Kazakhstan, Luxembourg, Malta, Moldova, Montenegro, Russia, Serbia, Slovakia, Turkey and Ukraine.

Germany and Spain: ISCED 8 is not included in the tertiary mobile students.

Norway: Change in the definition of mobile student since UOE 2014 (2012/13).

Outward degree mobility rate – tertiary education students studying abroad outside the EHEA as a percentage of the total number of students of the same country of origin, 2014/15

Albania, Andorra, Armenia, Azerbaijan, Bosnia and Herzegovina, Bulgaria, the Czech Republic, France, Greece, Hungary, Italy, Kazakhstan, Luxembourg, Malta, Moldova, Montenegro, Russia, Serbia, Slovakia, Turkey and Ukraine.

Germany and Spain: ISCED 8 is not included in the tertiary mobile students.

Norway: Change in the definition of mobile student since UOE 2014 (2012/13).
Figure 7.17: Mobility balance: Incoming/outgoing tertiary students ratio within the EHEA, 2014/15

Albania, Andorra, Armenia, Azerbaijan, Bosnia and Herzegovina, Bulgaria, the Czech Republic, France, Greece, Italy, Kazakhstan, Luxembourg, Hungary, Malta, Moldova, Montenegro, Russia, Serbia, Slovakia, Turkey and Ukraine: The criteria used to define mobile students is the citizenship.

Germany and Spain: ISCED 8 is not included in the tertiary mobile students.

Greece, Liechtenstein, Montenegro and Turkey: Missing data.

Norway: Change in the definition of mobile student since UOE 2014 (2012/13).

Figure 7.18: Mobility balance: Incoming/outgoing tertiary students ratio within and outside the EHEA, 2014/15

Albania, Andorra, Armenia, Azerbaijan, Bosnia and Herzegovina, Bulgaria, the Czech Republic, France, Greece, Hungary, Italy, Kazakhstan, Luxembourg, Malta, Moldova, Montenegro, Russia, Serbia, Slovakia, Turkey and Ukraine: The criteria used to define mobile students is the citizenship.

Germany and Spain: ISCED 8 is not included in the tertiary mobile students.

Greece, Liechtenstein, Montenegro and Turkey: Missing data.

Figure 7.19: Balance as a measure of the attractiveness of the education system of the country at tertiary education level (mobility flows within and outside EHEA), 2014/15

Albania, Andorra, Armenia, Azerbaijan, Bosnia and Herzegovina, Bulgaria, the Czech Republic, France, Greece, Hungary, Italy, Kazakhstan, Luxembourg, Malta, Moldova, Montenegro, Russia, Serbia, Slovakia, Turkey and Ukraine: The criteria used to define mobile students is the citizenship.

Germany and Spain: ISCED 8 is not included in the tertiary mobile students.

Greece, Liechtenstein, Montenegro and Turkey: Missing data.

Figure 7.20: Student mobility flows: Top three countries of origin (inward) in %, 2014/15

Albania, Andorra, Armenia, Azerbaijan, Bosnia and Herzegovina, Bulgaria, the Czech Republic, France, Greece, Hungary, Kazakhstan, Italy, Luxembourg, Malta, Serbia, Slovakia, Turkey, Moldova, Montenegro, Russia and Ukraine: The criteria used to define mobile students is the citizenship.

Germany and Spain: ISCED 8 is not included in the tertiary mobile students.

Figure 7.21: Student mobility flows: Top three countries of destination (outward) in %, 2014/15

Albania, Andorra, Armenia, Azerbaijan, Bosnia and Herzegovina, Bulgaria, the Czech Republic, France, Greece, Hungary, Italy, Kazakhstan, Luxembourg, Malta, Serbia, Slovakia, Turkey, Moldova, Montenegro, Russia and Ukraine: The criteria used to define mobile students is the citizenship.

Germany and Spain: ISCED 8 is not included in the tertiary mobile students.

Figure 7.22: Outward mobility versus diversity of destination countries (mobility flows within and outside EHEA) 2014/15

Albania, Andorra, Armenia, Azerbaijan, Bosnia and Herzegovina, Bulgaria, the Czech Republic, France, Greece, Hungary, Italy, Kazakhstan, Luxembourg, Malta, Moldova, Montenegro, Russia, Serbia, Slovakia, Turkey and Ukraine: The criteria used to define mobile students is the citizenship.

Germany and Spain: ISCED 8 is not included in the tertiary mobile students.

Figure 7.23: Recognition of credits gained during (most recent) enrolment abroad – Share of students who have been enrolled abroad (in %), 2016/17

Data source: EUROSTUDENT VI, I.7.

No data: Germany: Partial recognition/no credits gained/no plans for recognition, Switzerland: no plans for recognition.

EUROSTUDENT Question: 4.4. [only students who have been enrolled abroad] Were the credits (ECTS, certificates) you gained for your enrolment abroad recognised by your home institution?

Deviations from EUROSTUDENT survey conventions:

Austria, France, Germany, Ireland and Switzerland: Response option ‘did not plan to get credits recognised’ not offered.

Germany: Fewer response options offered

Deviations from EUROSTUDENT standard target group: Albania, Germany, Ireland, Italy, Latvia and Serbia.

Germany: fewer response options: no distinction between ‘full’ and ‘partial’ recognition possible.
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