Chapter 5: Opening Higher Education to a Diverse Student Population
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
## CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foreword</td>
<td>3</td>
</tr>
<tr>
<td>Table of Figures</td>
<td>5</td>
</tr>
<tr>
<td>Executive Summary</td>
<td>13</td>
</tr>
<tr>
<td><strong>Introduction</strong></td>
<td></td>
</tr>
<tr>
<td>The Bologna Process</td>
<td>17</td>
</tr>
<tr>
<td>Report outline</td>
<td>19</td>
</tr>
<tr>
<td><strong>Chapter 1: The European Higher Education Area Landscape</strong></td>
<td></td>
</tr>
<tr>
<td>1.1. Student population</td>
<td>22</td>
</tr>
<tr>
<td>1.2. Higher education institutions and staff</td>
<td>29</td>
</tr>
<tr>
<td>1.3. Expenditure on higher education</td>
<td>32</td>
</tr>
<tr>
<td>1.4. Values and governance</td>
<td>40</td>
</tr>
<tr>
<td>1.5. Conclusions</td>
<td>46</td>
</tr>
<tr>
<td><strong>Chapter 2: Learning and Teaching</strong></td>
<td></td>
</tr>
<tr>
<td>2.1. National and institutional strategies</td>
<td>48</td>
</tr>
<tr>
<td>2.2. Credits and learning outcomes</td>
<td>50</td>
</tr>
<tr>
<td>2.3. Modes and forms of study</td>
<td>66</td>
</tr>
<tr>
<td>2.4. Learning in digital environments</td>
<td>74</td>
</tr>
<tr>
<td>2.5. Teaching in new learning environments</td>
<td>83</td>
</tr>
<tr>
<td>2.6. Conclusions</td>
<td>91</td>
</tr>
<tr>
<td><strong>Chapter 3: Degrees and Qualifications</strong></td>
<td></td>
</tr>
<tr>
<td>3.1. Implementation of a common degree structure</td>
<td>94</td>
</tr>
<tr>
<td>3.2. Transparency of qualifications: Diploma Supplement and national qualifications frameworks</td>
<td>113</td>
</tr>
<tr>
<td>3.3. Conclusions</td>
<td>125</td>
</tr>
<tr>
<td><strong>Chapter 4: Quality Assurance and Recognition</strong></td>
<td></td>
</tr>
<tr>
<td>4.1. Quality Assurance</td>
<td>128</td>
</tr>
<tr>
<td>4.2. Recognition</td>
<td>142</td>
</tr>
<tr>
<td>4.3. Conclusions</td>
<td>151</td>
</tr>
<tr>
<td><strong>Chapter 5: Opening Higher Education to a Diverse Student Population</strong></td>
<td></td>
</tr>
<tr>
<td>5.1. Access and participation</td>
<td>154</td>
</tr>
<tr>
<td>5.2. Attainment and completion</td>
<td>193</td>
</tr>
<tr>
<td>5.3. Conclusions</td>
<td>214</td>
</tr>
<tr>
<td><strong>Chapter 6: Relevance of the Outcomes and Employability</strong></td>
<td></td>
</tr>
<tr>
<td>6.1. Graduates on the labour market: transition from education to work</td>
<td>216</td>
</tr>
<tr>
<td>6.2. Policies for enhancing graduates’ employability</td>
<td>230</td>
</tr>
<tr>
<td>6.3. Conclusions</td>
<td>240</td>
</tr>
<tr>
<td><strong>Chapter 7: Internationalisation and Mobility</strong></td>
<td></td>
</tr>
<tr>
<td>7.1. Policies for internationalisation</td>
<td>242</td>
</tr>
<tr>
<td>7.2. Student Mobility</td>
<td>249</td>
</tr>
<tr>
<td>7.3. Staff mobility</td>
<td>274</td>
</tr>
<tr>
<td>7.4. Conclusions</td>
<td>276</td>
</tr>
</tbody>
</table>
**Glossary and Methodological Notes**

I. Codes, abbreviations and acronyms  
II. General terms  
III. Statistical terms  
IV. Data sources  
V. Notes on figures

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Codes, abbreviations and acronyms</td>
<td>279</td>
</tr>
<tr>
<td>II. General terms</td>
<td>280</td>
</tr>
<tr>
<td>III. Statistical terms</td>
<td>289</td>
</tr>
<tr>
<td>IV. Data sources</td>
<td>298</td>
</tr>
<tr>
<td>V. Notes on figures</td>
<td>303</td>
</tr>
</tbody>
</table>

**References**  

| References | 317 |

**Acknowledgements**  

| Acknowledgements | 323 |
### TABLE OF FIGURES

<table>
<thead>
<tr>
<th>Chapter 1: The European Higher Education Area Landscape</th>
<th>21</th>
</tr>
</thead>
<tbody>
<tr>
<td>Figure 1.1: Number of students enrolled in tertiary education by ISCED level, 2014/15</td>
<td>23</td>
</tr>
<tr>
<td>Figure 1.2: Percentage change in the total number of students enrolled in tertiary education between 2009/10 and 2011/12 and between 2012/13 and 2014/15</td>
<td>25</td>
</tr>
<tr>
<td>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 and 2014/15</td>
<td>27</td>
</tr>
<tr>
<td>Figure 1.4: Demographic projections in steering documents for higher education policy, 2016/17</td>
<td>28</td>
</tr>
<tr>
<td>Figure 1.5: Number of higher education institutions in the EHEA, 2016/17</td>
<td>29</td>
</tr>
<tr>
<td>Figure 1.6: Percentage change in the total number of academic staff between 2000 and 2016</td>
<td>30</td>
</tr>
<tr>
<td>Figure 1.7: Academic staff by age groups (%), 2015</td>
<td>31</td>
</tr>
<tr>
<td>Figure 1.8: Female academic staff (%), 2000 and 2016</td>
<td>31</td>
</tr>
<tr>
<td>Figure 1.9: Annual public expenditure on tertiary education as a % of GDP, total with R&amp;D and total without R&amp;D, 2014</td>
<td>33</td>
</tr>
<tr>
<td>Figure 1.10: Annual public expenditure on tertiary education as a % of total public expenditure, 2008, 2011, 2014</td>
<td>35</td>
</tr>
<tr>
<td>Figure 1.11: Yearly changes in real public expenditure on tertiary education between year 2011 and year 2015 (price index 2010=100)</td>
<td>36</td>
</tr>
<tr>
<td>Figure 1.12: Annual public and private expenditure on public and private tertiary education institutions, per full-time equivalent student in PPS, 2008, 2011 and 2014</td>
<td>37</td>
</tr>
<tr>
<td>Figure 1.13: Annual public expenditure on public and private tertiary education institutions, per full-time equivalent student in euro, 2014</td>
<td>38</td>
</tr>
<tr>
<td>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 capita in PPS, 2008, 2011 and 2014</td>
<td>40</td>
</tr>
<tr>
<td>Figure 1.15: Legal authority to appoint and/or dismiss higher education institution executive heads (rectors) and some categories of higher education staff (e.g. professors), 2017</td>
<td>43</td>
</tr>
<tr>
<td>Figure 1.16: Decision making regarding the development of new higher education programmes, 2017</td>
<td>44</td>
</tr>
<tr>
<td>Figure 1.17: Support for higher education institutions to promote gender equality, political and religious tolerance, and democratic and civic values, 2017</td>
<td>45</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chapter 2: Learning and Teaching</th>
<th>47</th>
</tr>
</thead>
<tbody>
<tr>
<td>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</td>
<td>48</td>
</tr>
<tr>
<td>Figure 2.2: Elements included in institutional learning and teaching strategies (% of institutions reporting that there is an institutional strategy in place), 2017</td>
<td>49</td>
</tr>
<tr>
<td>Figure 2.3: Credit system used for the accumulation and transfer of credits, 2016/17</td>
<td>51</td>
</tr>
<tr>
<td>Figure 2.4: Share of higher education institutions using ECTS credits for accumulation and transfer, first- and second-cycle programmes, 2016/17</td>
<td>52</td>
</tr>
<tr>
<td>Figure 2.5: Share of first- and second-cycle programmes using ECTS credits for accumulation and transfer for all elements of study programmes, 2016/17</td>
<td>52</td>
</tr>
<tr>
<td>Figure 2.6: Extent to which ECTS credits are linked with learning outcomes in higher education programmes, 2016/17</td>
<td>53</td>
</tr>
<tr>
<td>Figure 2.7: Basis to allocate ECTS credits in the majority of higher education institutions, 2016/17</td>
<td>54</td>
</tr>
<tr>
<td>Figure 2.8: Impact of the learning outcomes approach in higher education institutions (% of institutions), 2017</td>
<td>55</td>
</tr>
<tr>
<td>Figure 2.9: Steering and/or encouraging use of learning outcomes in national policy for programme development, 2016/17</td>
<td>56</td>
</tr>
<tr>
<td>Figure 2.10: Steering and/or encouraging student assessment procedures to focus on learning outcomes, 2016/17</td>
<td>57</td>
</tr>
<tr>
<td>Figure 2.11: Training for higher education teaching staff in developing learning outcomes (% of institutions), 2017</td>
<td>58</td>
</tr>
<tr>
<td>Figure 2.12: Basis for external quality assurance to monitor ECTS implementation in higher education, 2016/17</td>
<td>59</td>
</tr>
</tbody>
</table>
Figure 2.13: Monitoring key aspects of ECTS implementation by external quality assurance, 2016/17
A) Requirement to monitor learning outcomes and credit allocation
B) Requirement to monitor credit accumulation and transfer
C) Requirement to monitor appeals procedures for problems of credit recognition

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

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

Figure 2.16: Scorecard indicator n°1: Monitoring the implementation of the ECTS system by external quality assurance, 2016/17

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

Figure 2.18: Existence of different formal student statuses related to modes of study, 2016/17

Figure 2.19: Impact of formal student status on financial contributions related to higher education studies, 2016/17

Figure 2.20: Impact of formal student status on eligibility to financial support for students, 2016/17

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

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

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

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

Figure 2.25: Part-time students according to their study intensity (self-reported) as % of students in different study intensity groups, 2016/17

Figure 2.26: National strategies on the use of new technologies in teaching and learning in higher education, 2016/17

Figure 2.27: National policies and allocated funding for promoting the use of new technologies in teaching and learning in higher education, 2016/17

Figure 2.28: Incentives/support to the use of new technologies in teaching and learning in higher education (other than direct public funding), 2016/17

Figure 2.29: Most commonly offered online courses by higher education institutions, 2016/17

Figure 2.30: Level of degree programmes with online components, most commonly offered, 2016/17

Figure 2.31: Level of most commonly offered online degree programmes, 2016/17

Figure 2.32: Quality assurance of online programmes, 2016/17

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

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

Figure 2.35: Top-level requirements for third-cycle (doctoral) programmes to include teaching components, 2016/17

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

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

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

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

Chapter 3: Degrees and Qualifications

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

Figure 3.2: Share of first cycle-programmes with a workload of 180, 210, 240 or another number of ECTS credits, 2016/17

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

Figure 3.4: Centrally set minimum total workload of first- and second-cycle programmes, 2016/17

Figure 3.5: Most common total workload of first- and second-cycle programmes, 2016/17

Figure 3.6: Proportion of first-cycle graduates entering a second-cycle programme within one year after graduation, 2016/17

Figure 3.7: Presence of short-cycle programmes considered as part of higher education, 2016/17

Figure 3.8: Typical (most common) workload of short-cycle higher education programmes, 2016/17

Figure 3.9: Recognition of short-cycle higher education within first-cycle studies in the same field, 2016/17

Figure 3.10: Proportion of second-cycle graduates eventually entering a third-cycle programme, 2016/17
Figure 3.11: Percentage of third-cycle candidates in doctoral schools, 2016/17
Figure 3.12: Duration of full-time third-cycle programmes as defined in top-level steering documents, 2016/17
Figure 3.13: Use of ECTS in third-cycle programmes, 2016/17
Figure 3.14: Presence of integrated/long programmes leading to a second-cycle degree and the percentage of students in these programmes, 2016/17
Figure 3.15: Number of higher education systems reporting integrated/long programmes in defined fields, 2016/17
Figure 3.16: Programmes outside the Bologna-degree structure (other than integrated/long programmes), 2016/17
Figure 3.17: Number of higher education systems issuing the Diploma Supplement according to the agreed principles, first and second cycle, 2016/17
Figure 3.18: Scorecard indicator n°2:
Stage of implementation of the Diploma Supplement, 2016/17
Figure 3.19: Issuing the Diploma Supplement to graduates in short-cycle higher education, 2016/17
Figure 3.20: Issuing the Diploma Supplement to third-cycle graduates, 2016/17
Figure 3.21: Monitoring of the implementation of the Diploma Supplement by top-level authorities or their mandated bodies, 2016/17
Figure 3.22: Presence of large-scale projects/initiatives aiming to digitalise the Diploma Supplement, 2016/17
Figure 3.23: Progress in development of national qualifications frameworks according to the 11 steps, 2016/17
Figure 3.24: Use of national qualifications frameworks by national authorities, 2016/17
Figure 3.25: Scorecard indicator n°3:
Implementation of national qualifications frameworks, 2016/17

Chapter 4: Quality Assurance and Recognition

Figure 4.1: Requirements for higher education institutions to develop and publish quality assurance strategies, 2016/17
Figure 4.2: Responsibility for external quality assurance, 2016/17
Figure 4.3: Main outcome of external evaluation, 2016/17
Figure 4.4: Requirements for external quality assurance to consider the elements specified in the ESG 2015, 2016/17
Figure 4.5: European Student Unions perception of student participation in external quality assurance, 2016/17
Figure 4.6: Scorecard indicator n°4:
Level of student participation in external quality assurance system, 2016/17
Figure 4.7: Required involvement of employers in quality assurance governance bodies and external review teams, 2016/17
Figure 4.8: Scorecard indicator n°5:
Level of international participation in external quality assurance, 2016/17
Figure 4.9: Countries with quality assurance agencies registered on EQAR, 2017
Figure 4.10: Scorecard indicator n°6:
Stage of development of external quality assurance system, 2016/17
Figure 4.11: Scorecard indicator n°7:
Level of openness to cross border quality assurance of EQAR registered agencies, 2016/17
Figure 4.12: Countries allowing the European Approach for Quality Assurance of Joint Programmes, 2016/17
Figure 4.13: Principles of the Lisbon Recognition Convention in national legislation, 2016/17
Figure 4.14: Principles of the Lisbon Recognition Convention monitored in external quality assurance, 2016/17
Figure 4.15: Institution which makes final decisions on recognising foreign qualifications for academic purposes, 2016/17
Figure 4.16: Additional recognition procedures for higher education qualifications from other EHEA countries, 2016/17
Figure 4.17: Scorecard indicator n°8:
System level (automatic) recognition for academic purposes, 2016/17
Figure 4.18: Implementation of Article VII of the LRC at national level, 2016/17
Figure 5.35: Application of main measures (introductory or insertion courses, tutoring or mentoring programmes, support for learning and organisational skills) targeting the retention of first-year students, 2016/17 204
Figure 5.36: Financial consequences for students who do not complete an expected minimum number of ECTS and/or their degree within a defined period of time, 2016/17 205
Figure 5.37: Number of higher education systems reporting different financial consequences for students who do not complete the expected minimum number of ECTS and/or their degree within a defined period of time, 2016/17 206
Figure 5.38: Recognition of prior non-formal and informal learning for progression in higher education studies, 2016/17 208
Figure 5.39: Possible outcomes of the recognition of prior non-formal and informal learning, 2016/17 209
Figure 5.40: Scorecard indicator n°10: Recognition of prior non-formal and informal learning, 2016/17 210
Figure 5.41: Impact of completion performance on higher education institutions’ funding, 2016/17 212
Figure 5.42: Scorecard indicator n°11: Measures to support the retention and completion of students from under-represented groups, 2016/17 213

Chapter 6: Relevance of the Outcomes and Employability 215
Figure 6.1: Unemployment rate and unemployment ratio of people aged 20-34 by educational attainment level (%), 2016 217
A) Unemployment rate vs ratio (High education level) 217
B) Unemployment rate 217
Figure 6.2: Compound annual growth rate of unemployment by educational attainment (%), 2013-2016 218
Figure 6.3: Unemployment rate of people aged 20-34 by educational attainment level and by sex (%), 2016 219
Figure 6.4: Unemployment rate of tertiary education graduates aged 20-34, by the number of years since graduation (%), 2016 220
Figure 6.5: Unemployment rate of tertiary education graduates aged 20-34, by the number of years since graduation and by sex (%), 2016 221
Figure 6.6: 25, 50 and 75 percentiles of annual gross income of employees by educational attainment, EU-28, in PPS EUR, 2013 and 2015 222
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 223
A) Tertiary education compared to upper secondary education 223
B) Tertiary education compared to lower secondary education 223
Figure 6.8: At-risk-of-poverty rate by educational attainment for people aged 25-34 by education level, 2015 224
Figure 6.9: Distribution of people with tertiary education (ISCED 5-8) 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 (%), 2016 226
Figure 6.10: Change in percentage points (pp) of the share of people with tertiary education (ISCED 5-8) aged 25-34 and employed in ISCO 4-9, 2013 to 2016 227
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 (%) 228
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 229
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 230
Figure 6.14: Labour-market and skills forecasting at national level, 2016/17 231
Figure 6.15: Using labour-market and skills forecasting in central planning, 2016/17 232
Figure 6.16: Involvement of employers in higher education planning and management 233
A) Curriculum development, 2016/17 233
B) Higher education institutions’ decision-making bodies, 2016/17 233
Figure 6.17: Regulations and incentives on including work placements in HEIs’ programmes, 2016/17 234
Figure 6.18: Monitoring the proportion of students taking work placements and proportion of programmes with compulsory work placements, 2016/17 235
Figure 6.19: Obligation and incentives for higher education institutions to support students’ transition to work 2016/17 236
Figure 6.20: Following graduates’ career developments – different approaches, 2016/17 237
Figure 6.21: Channelling information on graduates’ career developments into education policy planning, 2016/17 238
Figure 6.22: Impact of employability performance on higher education institutions' funding, 2016/17

Chapter 7: Internationalisation and Mobility

Chapter 7: Internationalisation and Mobility

Figure 7.1: National strategies for internationalisation of higher education, 2016/17

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

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

Figure 7.4: Estimated percentage of institutions that participate in joint programmes, 2016/17

Figure 7.5: Estimated percentage of institutions that award joint degrees, 2016/17

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

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

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

Figure 7.9: Requirements for HEIs to provide a mobility period for students, 2016/17

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

Figure 7.11: Number of incoming degree tertiary education mobile students from inside and outside the EHEA, by country of destination, 2014/15

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Figure 7.26: Scorecard indicator n°12: Portability of public grants and publicly-subsidised loans, 2016/17

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

Figure 7.28: Mobility targets for outgoing staff, 2016/17

Figure 7.29: Mobility targets for incoming staff, 2016/17
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 reiterated 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).
# The Bologna Process: from Sorbonne to Yerevan, 1998-2015

<table>
<thead>
<tr>
<th>Mobility of students and teachers</th>
<th>Mobility also for researchers and administrative staff</th>
<th>Social dimension of mobility</th>
<th>Portability of loans and grants</th>
<th>Attention to visa and work permits</th>
<th>Attention also to pension systems and recognition</th>
<th>Benchmark of 20% by 2020 for student mobility</th>
<th>Explore path to automatic recognition of academic qualifications</th>
<th>Implementation of key commitments</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A common two-cycle degree system</strong></td>
<td>Easily readable and comparable degrees</td>
<td>Fair recognition Development of joint degrees</td>
<td>Inclusion of doctoral level as third cycle</td>
<td>QF-EHEA adopted National Qualifications Frameworks (NQFs) launched</td>
<td>NQFs by 2010</td>
<td>NQFs by 2012</td>
<td>Roadmaps for countries without NQF</td>
<td>Implementation of key commitments</td>
</tr>
<tr>
<td><strong>Social dimension</strong></td>
<td>Equal access</td>
<td>Reinforcement of the social dimension</td>
<td>Commitment to national action plans</td>
<td>National targets for the social dimension to be measured by 2020</td>
<td>Widening access and completion rates</td>
<td>Social inclusion</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Lifelong learning (LLL)</strong></td>
<td>Alignment of national LLL policies Recognition of Prior Learning (RPL)</td>
<td>Flexible learning paths</td>
<td>Partnerships to improve employability</td>
<td>LLL as a public responsibility Focus on employability</td>
<td>Enhance employability, LLL and entrepreneurial skills through cooperation with employers</td>
<td>Employability</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Use of credits</strong></td>
<td>A system of credits (ECTS) ECTS and Diploma Supplement (DS) ECTS for credit accumulation</td>
<td>Coherent use of tools and recognition practices</td>
<td>Implementation of Bologna tools</td>
<td>Ensure that Bologna tools are based on learning outcomes</td>
<td>Adoption of ECTS Users Guide</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>European cooperation in quality assurance (QA)</strong></td>
<td>Cooperation between QA and recognition professionals QA at institutional, national and European level European Standards and Guidelines for quality assurance (ESG) adopted Creation of the European Quality Assurance Register (EQAR)</td>
<td>Quality as an overarching focus for EHEA</td>
<td>Allow EQAR registered agencies to perform their activities across the EHEA</td>
<td>Adoption of revised ESG and European Approach to QA of joint programmes</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Europe of Knowledge</strong></td>
<td>European dimensions in higher education Attractiveness of the EHEA Links between higher education and research areas International cooperation on the basis of values and sustainable development Strategy to improve the global dimension of the Bologna Process adopted</td>
<td>Enhance global policy dialogue through Bologna Policy Fora</td>
<td>Evaluate implementation of 2007 global dimension strategy</td>
<td>Learning and Teaching: Relevance and quality</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>1998</th>
<th>1999</th>
<th>2001</th>
<th>2003</th>
<th>2005</th>
<th>2007</th>
<th>2009</th>
<th>2012</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sorbonne Declaration</td>
<td>Bologna Declaration</td>
<td>Prague Communiqué</td>
<td>Berlin Communiqué</td>
<td>Bergen Communiqué</td>
<td>London Communiqué</td>
<td>Leuven/Louvain-la-Neuve Communiqué</td>
<td>Bucharest Communiqué</td>
<td>Yerevan Communiqué</td>
</tr>
</tbody>
</table>
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 5: OPENING HIGHER EDUCATION TO A DIVERSE STUDENT POPULATION

The Yerevan Communiqué

In 2015, the Yerevan Communiqué reaffirmed EHEA ministers’ commitment to the social dimension of higher education, also placing it within the wider context of inclusive societies. Through the Communiqué, ministers expressed their determination to achieve, by 2020, an EHEA where ‘higher education is contributing effectively to build inclusive societies’ (81). At the same time, ministers also adopted a new strategy on Widening Participation for Equity and Growth (82), as well as the Report of the 2012-2015 BFUG Working Group on the Social Dimension and Lifelong Learning, containing guidelines ‘to assist the EHEA member countries in developing a national plan or strategy for access, participation and completion in higher education with the overall goal of developing the social dimension’ (83).

To further the goal of widening participation, ministers agreed to ‘enhance the social dimension of higher education, improve gender balance and widen opportunities for access and completion, including international mobility, for students from disadvantaged backgrounds’ (84). Among concrete measures, the Communiqué mentions supporting ‘institutions that provide relevant learning activities in appropriate contexts for different types of learners, including lifelong learning’, as well as improving ‘permeability and articulation between different education sectors’ (85). Thus, the emphasis of the Yerevan Communiqué is on flexible learning paths and the inclusion of different types of learners, also through the recognition of prior learning (86). Furthermore, similarly to previous communiqués, it stresses that widening participation is not only about widening access, but also about ensuring that those who enter higher education complete it successfully.

The 2015 Bologna Process Implementation Report

The 2015 Bologna Process Implementation Report (European Commission/EACEA/Eurydice, 2015) provided a snapshot on progress made towards the goal of widening participation. Despite this goal being a concern in almost all countries of the EHEA, the report showed that there is a lot to be done in order to achieve the objectives of past communiqués. The report concluded that gender imbalances still existed between different study fields; and students with an immigrant background or with parents without a higher education degree had lower chances to achieve tertiary attainment. Though many countries implemented measures to widen access to higher education, very few paid specific attention to disadvantaged learners in connection with the completion of studies. Regarding alternative access routes, little or no progress had been made between 2012 and 2015 in introducing frameworks for the recognition of prior non-formal and informal learning or to open higher education for non-traditional learners. Finally, concerning fees and financial support systems, these had been relatively stable in the EHEA, but with large variations between education systems – ranging from no fees and universal support to high fees and support targeted to a small proportion of the student population only.

---

(85) Ibid.
(86) Ibid., p. 3.
Chapter outline

The chapter is organised in two main parts. The first section focuses on the inclusiveness of access to higher education. After presenting statistics on the impact of students' background on their participation in higher education, the section discusses policy frameworks aiming to widen access to higher education. The emphasis is on the existence of monitoring tools, quantitative targets, support provided to non-traditional learners through adapting and opening up admission systems, as well as on fees and financial support. The scorecard indicator presented at the end of the section provides a summary of these policy measures.

The chapter then turns to higher education attainment and completion, also from the social dimension perspective. Again analysing statistical indicators to set the scene, the second section discusses national policies aiming at raising attainment levels and completion rates, with special attention to measures targeted at under-represented groups. The section also examines frameworks for the recognition of non-formal and informal learning in the context of completion: if students can have such learning experiences recognised in the form of credits, it can help them complete their studies. This section presents two scorecard indicators: one on the recognition of prior learning, and one summarising the main policy measures aiming to ensure that disadvantaged learners do not only access, but also complete higher education.

5.1. Access and participation

Who has access to higher education? To what extent does young peoples' socio-economic background or gender influence their chances of becoming higher education students? Do admission systems reduce or reinforce existing societal inequalities? The goal of the widening participation agenda is to increase the inclusiveness of higher education, and to provide opportunities to those from more disadvantaged backgrounds to enter (and complete) higher education. This section examines current trends in higher education entry and participation, as well as national policies aiming to broaden the group of people having access to higher education.

5.1.1. The impact of students' background on their participation in higher education

Central to the social dimension of the Bologna Process is the aim that the student body should reflect the diversity of the population, and that the background of students should not have an impact on their participation in higher education. Given the diversity of socio-economic and cultural realities across the EHEA, it is left to each country to decide which characteristics to take into account when comparing the composition of the student body with the total population. The societal groups which are then identified as under-represented in higher education also differ between countries.

Nevertheless, some common themes are inevitable across countries: low socio-economic background (in the form of low income or the low educational background of parents), gender, immigrant status and disability are often taken as main aspects of disadvantage. Furthermore, mature students are specifically targeted in many countries, as students from under-represented groups often enter higher education with a delay.

This section presents statistical data on higher education students in four respects: the impact of parental education on higher education participation, gender balance, and the participation of immigrant students and mature students in higher education.
5.1.1.1. Parental education

The educational background of parents is often regarded as one of the most important factors influencing the chances of learners to participate in higher education. It is widely known that students with parents with tertiary educational attainment are over-represented in higher education study programmes. However, differences may exist among education systems in this regard. Are students with high educational background over-represented in higher education to the same extent in all EHEA countries? What are the chances of learners coming from families with medium (at most post-secondary non-tertiary education completed) or low (with only primary or lower secondary education) educational attainment to enter higher education?

It is difficult to answer these questions looking simply at the composition of new entrants by the educational background of parents. If there is a high proportion of students entering higher education with parents having low educational attainment, is it because the system is highly equitable, providing a lot of support to under-represented groups, or because higher education is expanding, and there are many people with low educational attainment (and very few with higher educational attainment) in the parents’ generation?

In an attempt to answer these questions, this section looks at the relationship between the educational background of new higher education entrants in the first cycle (ISCED 6) and the educational attainment of their parents’ cohort, defined as the population aged 45-64 (see Figure 5.1).

Figure 5.1.A depicts first-cycle new entrants with parents of high educational background, and the corresponding proportion of people with high educational attainment (ISCED 5-8) in the hypothetical parents’ cohort.

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

A) Proportion of first-cycle new entrants with highly educated parents and the corresponding percentage of people aged 45-64 with high educational attainment (ISCED 5-8)
**B) Main clusters of countries concerning the educational background of first-cycle new entrants and the educational attainment of their parents’ cohort**

- **Group 1:** Proportion of people with tertiary education in the 45-64 age group: low; with low educational attainment: high.
  - Share of first-cycle new entrants coming from families with low educational background: highest.

- **Group 2:** All three educational attainment groups are relatively sizeable in the 45-64 year-old cohort.
  - First-cycle new entrants from low educated families: under-represented; first-cycle new entrants with highly educated parents: over-represented; proportions of first-cycle new entrants with medium educational background: vary.

- **Group 3:** Share of people with medium educational attainment in the 45-64 age group: high.
  - Share of first-cycle new entrants coming from families with low educational background: low.

- **Group 4:** Share of people with medium educational attainment in the 45-64 age group: dominant.
  - Shares of both low and highly educated people in this cohort: low.
  - Share of first-cycle new entrants with medium educated parents: highest.

Data not available

---

**New first-cycle entrants by the educational background of parents**

<table>
<thead>
<tr>
<th>Country</th>
<th>Low</th>
<th>Medium</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>LV</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EE</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LT</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CZ</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SK</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PL</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BG</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HU</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SI</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HR</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RO</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AT</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DE</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FR</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Educational attainment level of the population aged 45-64**

<table>
<thead>
<tr>
<th>Country</th>
<th>Low</th>
<th>Medium</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>NL</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BE</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IE</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EL</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CY</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>UK</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LU</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IT</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ES</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PT</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MT</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FR</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(*) The former Yugoslav Republic of Macedonia

**Source:** Authors, based on Eurostat, EU-LFS.
Notes:
In the table, data are sorted by the percentage of new entrants with parents of low educational background (ascending). Low educational attainment: ISCED 0-2; medium education attainment: ISCED 3-4; high educational attainment: ISCED 5-8. For definitions of ISCED levels, see the Glossary and Methodological Notes.
New entrants: Students who are entering any programme at a given level of education for the first time.

The figure shows a very clear relationship between the overall proportion of the highly educated within the population aged 45-64 and the share of new first-cycle entrants with highly educated parents, with very few differences among countries. Countries are clustering around the trendline (87), which means that the share of new entrants with highly educated parents among all new first-year students largely depends on the proportion of people having high educational attainment in their parents' cohort.

In addition, as a general pattern, first-cycle new entrants with highly educated parents are clearly over-represented among all new first-cycle entrants in comparison to the overall attainment levels of the (hypothetical) parents' cohort. In other words, in countries where the share of people with tertiary degrees is relatively high already within older age cohorts, the dominance of new entrants from highly educated households will be even more pronounced. This also means that with no significant higher education expansion, there is little room for learners coming from less educated families to enter higher education.

But if countries do not differ much in the degree of over-representation of new entrants coming from highly educated families, are they also alike in providing opportunities for learners from medium or low educated families? As Figure 5.1.B illustrates, for the countries with available data, four main country clusters can be distinguished based on the relationship between the educational background of first-cycle new entrants and the educational attainment of their parents' cohort.

In the first group of countries (Group 1), which includes Malta, Portugal and Turkey, the proportion of people with tertiary education in the 45-64 age group is low (around or below 15 %), and the share of the population aged 45-64 with low educational attainment (ISCED 0-2) is high (above 68 %). At the same time, the share of first-cycle new entrants coming from families with low educational background is the highest in these three countries (above 35 % in Portugal and Malta, and more than 55 % in Turkey), though these proportions are still lower than the share of people with low education attainment in their parents' cohort. On the other hand, new entrants from families with medium educational attainment (ISCED 3-4) are relatively over-represented: while the share of people with medium educational attainment is between 12 % and 21 % in these three countries, the proportion of new entrants with this educational background is between 20 % and 36 %. In other words, the strong and comparatively recent higher education expansion (see also Section 5.2.1) has created opportunities particularly for learners from medium educated families to access higher education in these countries.

In the second group of countries (Group 2), which includes most of the Western European region, all three educational attainment groups are relatively sizeable in the 45-64 year-old cohort, with none of them being above 50 % of the population. These countries cluster together both regarding the relative under-representation of new entrants from low educated families and the relative over-representation of entrants with highly educated parents.

(87) The three countries that are furthest away from the trendline are specific cases difficult to analyse: Cyprus, Luxembourg and the United Kingdom all host a high share of international students (see Figure 7.10), whose parents are not among the local population, which hampers making clear conclusions. In addition, from Cyprus and Luxembourg, a large percentage of learners also leave the country to study abroad (see Figure 7.13). Finally, data on educational attainment is not reliable in Luxembourg due to the small sample size.
Despite these similarities, however, differences within this group of countries can be quite large in the rate of over- and under-representation of first-cycle new entrants with medium educational background. In spite of similar shares of people with medium educational attainment in the 45-64 age cohorts across the region, proportions of new entrants with medium educational background vary. In countries with a relatively smaller share of people aged 45-64 with high educational attainment (thus in countries closest to Group 1: Greece, Italy, the former Yugoslav Republic of Macedonia and Spain), new entrants from medium educated families are slightly over-represented among all entrants in comparison to the corresponding shares in their parents’ cohort. In contrast, in Belgium, France, Ireland and the Netherlands, entrants from medium educated families are under-represented, though not to a large extent.

The third group of countries (Group 3) comprises parts of Central and Eastern Europe (Austria, Bulgaria, Germany, Hungary, Slovenia and the three Baltic States). What differentiates these countries from Group 2 is the dominance of people with medium educational attainment in the 45-64 age group: their share is above 50% in all countries in this group. At the same time, the share of people aged 45-64 with tertiary education degrees is comparable to the same proportions in Group 2. As a consequence, the shares of the low educated in the parents’ cohort are relatively small in this group.

Group 3 is the country cluster where social inequalities are the most visible. Despite having close to 20% of low educated in the parents’ cohort in several countries (Austria, Bulgaria, Hungary and Slovenia), the share of first-cycle new entrants from low educated families is below 5% in almost all countries in this group (the only exception being Germany). In addition, in all countries in this group, new entrants from medium educated families are under-represented, and in some cases (particularly in the Baltic States, Austria and Germany) quite considerably.

Finally, in the fourth group of countries (Group 4), which includes Croatia, the Czech Republic, Poland, Romania and Slovakia, the shares of both low and highly educated people in the 45-64 age cohort are relatively low. The proportion of the population having tertiary degrees in the 45-64 age group is below 20%, while medium level educational attainment is prevalent (close to or above 60%, and even above 70% in the Czech Republic, Poland and Slovakia). As a consequence, the share of first-cycle new entrants with medium educated parents is the highest in this group, and this proportion more or less corresponds to the related fraction of the medium educated population in the parents’ cohort. Nevertheless, for entrants coming from low and highly educated families, the general patterns apply: while the share of new entrants with parents with low educational background is marginal, new entrants with highly educated parents are over-represented.

These clusters illustrate well similarities and differences between education systems in the reproduction of educational inequalities. Based on this analysis, the following conclusions can be drawn. First, new entrants with parents having at most lower secondary education are under-represented in all countries. Unless there is a sizeable proportion of a low educated population in the parents’ cohort, their participation in higher education remains marginal. The only exception is Germany, where 8% of new entrants in the first cycle are coming from families with low educational attainment, despite the relatively low share of the low educated in the 45-64 year-old population.

Second, differences among countries with available data mainly lie in the relative chances of learners from medium educated families to enter higher education. They are the most likely to enter higher education in countries where significant (and relatively recent) higher education expansion have taken place, thus where there is a relatively low share of highly educated people in the parents’ generation. Nevertheless, countries with similar educational attainment patterns among the 45-64 year-olds can

(88) Cyprus, Luxembourg and the United Kingdom are left out from this analysis for the reasons explained above.
have differences in the relative size of new entrants by parental educational background. Examples for a stronger over-representation of entrants coming from highly educated families are Belgium (compared to the Netherlands), or Austria (compared to Bulgaria, for example). In some cases, this can be at least partly a result of differences in educational systems as well as in admission and access policies.

Admission systems play a key role in giving chances to under-represented groups to enter higher education. Figure 5.2 shows the proportion of delayed transition students – students who enter higher education two years or more after leaving school – by the educational background of their parents. As the figure illustrates, learners from low and medium educated families are not only under-represented among new higher education entrants, but are also more likely to enter higher education with a delay in almost all countries with available data. This makes it all the more important to provide such students – who are also more likely not to possess standard higher education entry qualifications – with alternative routes to higher education. Such alternative routes and the features of admission systems will be discussed in section 5.1.2.

Figure 5.2: Percentage of delayed transition students among students with/without higher education background, 2016/17

<table>
<thead>
<tr>
<th>Country</th>
<th>All students</th>
<th>With HE background</th>
<th>Without HE background</th>
</tr>
</thead>
<tbody>
<tr>
<td>SE</td>
<td>28</td>
<td>24</td>
<td>34</td>
</tr>
<tr>
<td>FI</td>
<td>27</td>
<td>22</td>
<td>27</td>
</tr>
<tr>
<td>IS</td>
<td>27</td>
<td>19</td>
<td>32</td>
</tr>
<tr>
<td>AT</td>
<td>22</td>
<td>17</td>
<td>25</td>
</tr>
<tr>
<td>NO</td>
<td>22</td>
<td>17</td>
<td>23</td>
</tr>
<tr>
<td>DK</td>
<td>22</td>
<td>16</td>
<td>23</td>
</tr>
<tr>
<td>DE</td>
<td>22</td>
<td>16</td>
<td>24</td>
</tr>
<tr>
<td>PT</td>
<td>19</td>
<td>16</td>
<td>20</td>
</tr>
<tr>
<td>HU</td>
<td>17</td>
<td>14</td>
<td>22</td>
</tr>
<tr>
<td>NL</td>
<td>17</td>
<td>13</td>
<td>20</td>
</tr>
<tr>
<td>RS</td>
<td>17</td>
<td>13</td>
<td>19</td>
</tr>
<tr>
<td>SK</td>
<td>16</td>
<td>12</td>
<td>21</td>
</tr>
<tr>
<td>EE</td>
<td>16</td>
<td>12</td>
<td>20</td>
</tr>
<tr>
<td>LV</td>
<td>15</td>
<td>11</td>
<td>18</td>
</tr>
<tr>
<td>TR</td>
<td>15</td>
<td>11</td>
<td>15</td>
</tr>
<tr>
<td>CH</td>
<td>13</td>
<td>11</td>
<td>14</td>
</tr>
<tr>
<td>IE</td>
<td>12</td>
<td>10</td>
<td>14</td>
</tr>
<tr>
<td>CZ</td>
<td>10</td>
<td>8</td>
<td>12</td>
</tr>
<tr>
<td>LT</td>
<td>9</td>
<td>7</td>
<td>11</td>
</tr>
<tr>
<td>AL</td>
<td>9</td>
<td>6</td>
<td>10</td>
</tr>
<tr>
<td>HR</td>
<td>7</td>
<td>4</td>
<td>9</td>
</tr>
<tr>
<td>PL</td>
<td>7</td>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td>RO</td>
<td>6</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>SI</td>
<td>6</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>IT</td>
<td>5</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>FR</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>GE</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>MT</td>
<td>5</td>
<td>4</td>
<td>2</td>
</tr>
</tbody>
</table>

Source: Eurostudent.

Notes:
Students with higher education background: Parents’ highest degree is at ISCED level 5-8. Students without higher education background: parents’ highest degree is at ISCED level 0-4. For definitions of ISCED levels, see the Glossary and Methodological Notes.

Delayed transition students: Students who enter higher education for the first time more than 24 months after leaving school.
5.1.1.2. Gender balance

Providing equal opportunities for men and women to participate in higher education is also a central concern of the social dimension within the Bologna Process. As will be shown below, the two main issues in this respect are, first, the under-representation of men in higher education in many countries, and second, strong gender imbalances in some study fields.

Figure 5.3 shows the percentage of women among new entrants in tertiary education in 2014/15 and ten years before. As the figure demonstrates, in 2014/15, female entrants were in a majority in nearly all countries. Women’s share among new entrants was the highest in Andorra, Albania and Iceland, above 60 % in all three countries.

Nevertheless, in the ten-year period between 2004/05 and 2014/15, while the EHEA median stayed relatively stable, the proportion of women among new entrants decreased in the majority of countries with available data. This indicates that although men are still under-represented in higher education, this is to a lesser degree in most countries than 10 years ago. Decreases of over 3 percentage points took place in Kazakhstan, Estonia and the former Yugoslav Republic of Macedonia. In the latter, gender parity was reached as a result. However, in Estonia, the share of women among new entrants was still among the highest in the EHEA.

Countries registering the largest increases in the rate of female entrants in this period are Cyprus (6.2 percentage points), Poland (4.6 percentage points), Slovakia (4.3 percentage points) and the Czech Republic (4.1 percentage points). The latter three countries are among those with the highest share of new female entrants in higher education.

However, the picture becomes less straightforward when looking at female/male ratios among new entrants by level of education, thus differentiating the three main cycles of higher education. Figure 5.4 shows the share of women among higher education entrants in the first, second and third cycle.
Figure 5.4: Percentage of women among new entrants in tertiary education by level of education, 2014/15

(*): the former Yugoslav Republic of Macedonia

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

Notes:
Data are sorted by the total percentage of women among new entrants in tertiary education.
Though not depicted on the figure, the table includes data on ISCED 5 for information.
EHEA: Refers to the EHEA median, which was calculated based on countries with available data for all levels from ISCED 6 to ISCED 8.
New entrants: Students who are entering any programme at a given level of education for the first time.
As the figure depicts, in countries where data are available for all the three cycles, the most widespread pattern is that the share of female entrants is the highest in the second cycle and the lowest in the third cycle. This is the case in 17 countries. Despite this pattern, female entrants still constitute the majority – or there is gender parity – at all levels in 8 out of 17 countries. Nevertheless, the share of female entrants in the third cycle is below 50% in Slovakia, the Czech Republic, Armenia, the United Kingdom, Bosnia and Herzegovina, the Netherlands, Luxembourg, Switzerland and Germany. In Switzerland, female entrants are in a minority at all levels; while in Germany, their share is below 50% in the first cycle in addition to the third.

In the second most widespread pattern, which can be found in 11 countries, female entrants still have the highest share in the second cycle, but their proportion is the lowest in the first cycle. In almost all of these countries, the share of female entrants is above or around 50% at all levels. The exceptions are Cyprus and Azerbaijan, where female entrants are in a minority in the first cycle.

In six countries (Sweden, Denmark, Portugal, Norway, Austria and Russia), the higher the level, the lower the share of female entrants. In Portugal and Norway, nevertheless, the share of female entrants is above 50% at all levels. In the other four countries, women are in a minority in the third cycle.

Finally, Ukraine and Liechtenstein have particular patterns that do not exist in other countries. In Liechtenstein, where around 95% of students study abroad at tertiary level, this is mostly due to the fact that the coverage of higher education programmes is limited to mostly male-dominated fields (see also Figure 5.5). In Ukraine, the proportion of women among new entrants is increasing with each cycle, and comes close to 60% in the third cycle.

All in all, men are clearly under-represented in the first two cycles of higher education, especially in the second. This shows that relatively fewer men transition from the first cycle to the second. However, despite this pattern, women are often in a minority in the third cycle. Here, female participation is clearly the lowest, despite the high participation of women in the second cycle. A part of the explanation might be that there are more third-cycle programmes in male-dominated study fields such as engineering and natural sciences (see below). Yet, this female under-representation in the third cycle, which provides key qualifications for academic and wider research careers, illustrates well that in spite of their dominance in higher education overall, women may still face hurdles in pursuing academic careers (see also European Commission/EACEA/Eurydice, 2017a).

Besides issues related to the low participation of men in higher education and the relatively low participation of women in the third cycle, another important aspect of gender imbalances is the presence of study fields with a clear dominance of one gender. Figure 5.5 depicts the median share of women among enrolled students in the first and the second cycle by field of education. As the figure illustrates, while ‘education’ and ‘health and welfare’ are clearly female dominated study fields, in ‘engineering, manufacturing and construction’ as well as in ‘information and communication technologies’ women are strongly under-represented.

In line with the picture shown on Figure 5.4, the share of women enrolled in the second cycle equals or is higher than the same proportion in the first cycle in almost all study fields. The only notable exception is the field of ‘health and welfare’. One potential reason behind this pattern is that in most countries, medical programmes with smaller gender imbalances are offered as long programmes (see the chapter on Degrees and Qualifications), whereas first-cycle programmes are often organised in more female dominated fields (e.g. nursing).
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

<table>
<thead>
<tr>
<th>Field of Education</th>
<th>ISCED 6</th>
<th>ISCED 7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Education</td>
<td>79.5</td>
<td>79.6</td>
</tr>
<tr>
<td>Health and welfare</td>
<td>77.5</td>
<td>69.2</td>
</tr>
<tr>
<td>Arts and humanities</td>
<td>65.6</td>
<td>66.2</td>
</tr>
<tr>
<td>Social sciences, journalism and information</td>
<td>64.6</td>
<td>68.4</td>
</tr>
<tr>
<td>Business, administration and law</td>
<td>55.9</td>
<td>59.4</td>
</tr>
<tr>
<td>Natural sciences, mathematics and statistics</td>
<td>54.4</td>
<td>57.7</td>
</tr>
<tr>
<td>Agriculture, forestry, fisheries and veterinary</td>
<td>45.5</td>
<td>62.1</td>
</tr>
<tr>
<td>Services</td>
<td>43.3</td>
<td>45.0</td>
</tr>
<tr>
<td>Engineering, manufacturing and construction</td>
<td>25.3</td>
<td>32.3</td>
</tr>
<tr>
<td>Information and communication technologies</td>
<td>19.3</td>
<td>23.5</td>
</tr>
</tbody>
</table>

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

Notes:
The country coverage varies across different study fields (see the Glossary and Methodological Notes).

5.1.1.3. Students with migrant background

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

Yet, it is difficult to gather comparable information on the participation of migrant students in higher education. Eurostat data presented in Figure 5.7 uses the country of birth as the criterion defining migrants, and this has two major limitations. Firstly, the group of foreign-born students includes not only migrants who become students, but also students who moved to the country just for the purposes of study, i.e. mobile students. Not only does the concept of 'foreign born' mix groups with very different characteristics, but when numbers of mobile students are substantial as they are in a number of countries, the picture becomes very distorted. The second limitation of this data is that a group that is of central concern to the social dimension is excluded, namely children of immigrants born in the country (often referred to as 'second-generation immigrants').

For these reasons, data have to be interpreted with caution. In order to help the data analysis, the composition of students by migrant background is presented in Figure 5.6 based on the Eurostudent survey. This contains important information on the relative size of each group within all students. However, such data are also difficult to analyse alone, as they are not linked to information about the overall proportions of migrants in the population in general. Therefore, data depicted on Figures 5.6 and 5.7 should be looked at together.
Figure 5.6: Composition of students by migration background (%), 2016/17

<table>
<thead>
<tr>
<th>National students:</th>
<th>%</th>
<th>PL</th>
<th>AL</th>
<th>SK</th>
<th>TR</th>
<th>GE</th>
<th>HU</th>
<th>LT</th>
<th>IS</th>
<th>CZ</th>
<th>SI</th>
<th>NL</th>
<th>DE</th>
<th>EE</th>
<th>LV</th>
</tr>
</thead>
<tbody>
<tr>
<td>without migration background</td>
<td>97</td>
<td>96</td>
<td>94</td>
<td>93</td>
<td>92</td>
<td>89</td>
<td>89</td>
<td>86</td>
<td>85</td>
<td>85</td>
<td>82</td>
<td>81</td>
<td>81</td>
<td>81</td>
<td></td>
</tr>
<tr>
<td>with mixed background</td>
<td>1</td>
<td>0.2</td>
<td>4</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>5</td>
<td>3</td>
<td>4</td>
<td>7</td>
<td>6</td>
<td>7</td>
<td>9</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>with migrant background (2nd generation)</td>
<td>0.1</td>
<td>0.1</td>
<td>0.3</td>
<td>1</td>
<td>0.2</td>
<td>1</td>
<td>1</td>
<td>0.2</td>
<td>0.4</td>
<td>4</td>
<td>4</td>
<td>6</td>
<td>4</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>with migrant background (1st generation)</td>
<td>0.3</td>
<td>0.1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>5</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>International students</td>
<td>1</td>
<td>2</td>
<td>0.3</td>
<td>3</td>
<td>3</td>
<td>5</td>
<td>3</td>
<td>6</td>
<td>9</td>
<td>3</td>
<td>5</td>
<td>:</td>
<td>:</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>Other</td>
<td>0.4</td>
<td>2</td>
<td>0.5</td>
<td>1</td>
<td>2</td>
<td>0.3</td>
<td>0.2</td>
<td>3</td>
<td>0.2</td>
<td>0.2</td>
<td>1</td>
<td>0.5</td>
<td>0.2</td>
<td>0.3</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>National students:</th>
<th>%</th>
<th>MT</th>
<th>NO</th>
<th>PT</th>
<th>RS</th>
<th>DK</th>
<th>HR</th>
<th>FI</th>
<th>AT</th>
<th>FR</th>
<th>IE</th>
<th>SE</th>
<th>CH</th>
<th>IT</th>
<th>RO</th>
</tr>
</thead>
<tbody>
<tr>
<td>without migration background</td>
<td>80</td>
<td>79</td>
<td>78</td>
<td>77</td>
<td>74</td>
<td>74</td>
<td>73</td>
<td>68</td>
<td>67</td>
<td>63</td>
<td>60</td>
<td>53</td>
<td>:</td>
<td>:</td>
<td>:</td>
</tr>
<tr>
<td>with mixed background</td>
<td>8</td>
<td>7</td>
<td>11</td>
<td>11</td>
<td>4</td>
<td>13</td>
<td>2</td>
<td>5</td>
<td>10</td>
<td>8</td>
<td>10</td>
<td>14</td>
<td>:</td>
<td>:</td>
<td>:</td>
</tr>
<tr>
<td>with migrant background (2nd generation)</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>4</td>
<td>4</td>
<td>5</td>
<td>0.3</td>
<td>3</td>
<td>7</td>
<td>1</td>
<td>4</td>
<td>9</td>
<td>:</td>
<td>:</td>
<td>:</td>
</tr>
<tr>
<td>with migrant background (1st generation)</td>
<td>2</td>
<td>4</td>
<td>3</td>
<td>3</td>
<td>7</td>
<td>5</td>
<td>3</td>
<td>3</td>
<td>11</td>
<td>8</td>
<td>7</td>
<td>:</td>
<td>:</td>
<td>:</td>
<td>:</td>
</tr>
<tr>
<td>International students</td>
<td>7</td>
<td>7</td>
<td>3</td>
<td>5</td>
<td>9</td>
<td>1</td>
<td>21</td>
<td>20</td>
<td>12</td>
<td>14</td>
<td>16</td>
<td>15</td>
<td>:</td>
<td>:</td>
<td>:</td>
</tr>
<tr>
<td>Other</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>0.5</td>
<td>1</td>
<td>0.5</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>:</td>
<td>:</td>
<td>:</td>
</tr>
</tbody>
</table>

Source: Eurostudent.

Notes:

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 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 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.

Germany: The country is not directly comparable with the others as international students were not included in the sample. For other country-specific notes, see the Glossary and Methodological Notes.

According to the latest Eurostudent survey, international students are a more sizeable group than first-generation immigrants in almost all countries, with the exception of Croatia, Portugal and Slovakia (see Figure 5.6). First-generation immigrant students have the largest share among all students in Ireland (11 %), Sweden (8 %), Denmark and Switzerland (7 %). The share of international students is above 10 % in Austria, Finland, France, Ireland, Sweden and Switzerland (in Austria and Finland, their proportion is 20 % or higher). Although the United Kingdom did not take part in the Eurostudent survey, Chapter 7 shows that incoming mobility to the United Kingdom is also substantial.
The proportion of students with a second generation immigrant background with both parents born abroad is lower than 10% in all countries, with the highest shares in Switzerland (9%) and France (7%). Countries with the smallest variation in student composition (thus with above 90% of national students without any migration background) are Albania, Georgia, Poland, Slovakia and Turkey.

Data presented on Figure 5.7 on the participation rates of the foreign-born and the native-born in higher education have to be evaluated against this background. As shown on the figure, the participation rate of the foreign-born population is below that of the native-born in almost every country with available data. Given that the group of international students is also included among the foreign-born, participation rates are even lower for first-generation immigrants. The higher the proportion of international students, the lower the actual participation rates of first-generation migrants compared to the level shown on Figure 5.7.

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

<table>
<thead>
<tr>
<th>%</th>
<th>SI</th>
<th>EL</th>
<th>RS</th>
<th>NL</th>
<th>ES</th>
<th>HR</th>
<th>BG</th>
<th>DK</th>
<th>NO</th>
<th>BE</th>
<th>AT</th>
<th>PT</th>
<th>(*)</th>
<th>LT</th>
<th>FR</th>
<th>IT</th>
<th>FI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>36.0</td>
<td>31.6</td>
<td>31.2</td>
<td>29.2</td>
<td>28.8</td>
<td>27.2</td>
<td>27.1</td>
<td>26.8</td>
<td>26.5</td>
<td>26.1</td>
<td>26.0</td>
<td>25.8</td>
<td>25.4</td>
<td>25.1</td>
<td>24.9</td>
<td>24.8</td>
<td>24.6</td>
</tr>
<tr>
<td>Native born</td>
<td>37.4</td>
<td>33.1</td>
<td>31.3</td>
<td>29.2</td>
<td>32.1</td>
<td>28.0</td>
<td>26.9</td>
<td>27.3</td>
<td>27.6</td>
<td>27.0</td>
<td>26.4</td>
<td>26.3</td>
<td>25.6</td>
<td>25.1</td>
<td>25.2</td>
<td>27.2</td>
<td>25.2</td>
</tr>
</tbody>
</table>

Source: Eurostat, EU-LFS.

Notes:
Data are not reliable for the values in italics.

5.1.1.4. Mature students

An important aspect of widening participation is that higher education should be open to 'non-traditional' learners who did not have the possibility or the aspiration – due to lack of information, resources, etc. – to enter higher education right after leaving school. As Figure 5.2 showed, this is all the more important since students from under-represented groups are more likely to enter higher education with a delay.

For these reasons, this section examines the proportion of mature students (defined as 30 or more years old) in EHEA countries. Figure 5.8 shows the percentage of mature students enrolled in tertiary
education in 2011/12 and 2014/15. As the figure depicts, differences between the countries are substantial. In 2014/15, the share of mature students was the highest – above 30 % – in four Nordic countries (Iceland, Finland, Norway and Sweden), as well as in two small education systems, Liechtenstein and Andorra. On the other hand, it was the lowest – barely above 1 % – in the Caucasian region, Azerbaijan and Georgia.

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

|       | IS | LI | SE | AD | FI | NO | DK | AT | UK | PT | CH | ES | EE | IE | HU | SK | LV | LU | CZ | NL | MT | DE | CY |
|-------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| 2012  | 36.1| 32.5| 30.4| 43.3| 33.5| 29.3| 24.5| 23.2| 22.7| 19.3| 22.3| 20.2| 24.7| 20.7| 18.8| 14.8| 19.2| 21.2| 14.1| 15.7| 16.4| 17.1| 24.4|
| 2015  | 37.9| 32.8| 32.4| 32.4| 31.3| 31.0| 27.4| 26.9| 26.2| 22.6| 22.0| 21.4| 21.0| 20.0| 18.8| 18.0| 17.7| 18.8| 16.2| 16.1| 16.0| 15.8| 15.7|

|       | TR | RO | SI | IT | BG | LT | BE | RU | BA (*) | AL | PL | RS | HR | FR | EL | MD | KZ | UA | GE | AZ | EHEA |
|-------|----|----|----|----|----|----|----|----|--------|----|----|----|----|----|----|----|----|----|----|----|----|----|
| 2012  | 21.5| 12.5| 9.5 | 11.8| 18.3| 11.9| 9.3 | 12.0| 9.4    | 11.4| 14.2| 8.8 | 9.4 | 8.1 | 6.3 | 6.5 | 6.8 | 5.6 | 1.0 | 1.1 | 15.7 |
| 2015  | 15.2| 14.1| 13.3| 13.2| 13.0| 12.1| 11.8| 11.0| 10.7   | 10.0| 9.8 | 9.3 | 9.3 | 8.3 | 7.7 | 6.3 | 6.3 | 1.5 | 1.4 | 15.7 |

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

Notes:
- EHEA: Refers to the EHEA median.

In comparison to 2011/12, more countries registered increases than decreases in the share of mature students. However, the decreases have been more substantial than the increases. Consequently, the EHEA median decreased slightly from 16.1 % to 15.7 %. The largest decrease was registered in Andorra (10.9 percentage points), followed by Cyprus (8.8 percentage points), Turkey (6.3 percentage points) and Bulgaria (5.3 percentage points). In contrast, the education system registering the largest increase in this period is Slovenia (3.8 percentage points), followed by Austria (3.7 percentage points), the United Kingdom (3.5 percentage points), Portugal (3.3 percentage points) and Slovakia (3.2 percentage points).

Nevertheless, it also has to be noted that not all mature students are delayed transition students, thus not all of them entered higher education with a delay (defined here as two years or more after leaving school). In some countries, studying for a longer period of time or taking gap years could be more common than in others. In fact, as Figure 5.9 illustrates, the share of delayed transition students within the group of mature students varies widely between education systems. While the large majority of mature students are delayed transition students in Slovakia and the Czech Republic, delayed transition students are in a small minority in France or Georgia.
Based on the two figures, three main groups of countries can be distinguished. First, there are countries – most Nordic countries are among them – where the share of mature students is relatively high, but the proportion of delayed transition students is close to or below 50% among them. This suggests that it is relatively common in these countries to stay in higher education longer. In the second group of countries (e.g. Germany or France), the proportion of mature students in general is relatively low, but the share of delayed transition students is still low among them. In these countries, mature delayed transition students are in a clear minority \(^{(89)}\). And finally, in a few countries (most notably the four Visegrad countries), the share of mature students is relatively low, but delayed transition students constitute the majority among them. In these countries, students tend to graduate at earlier ages, so most mature students are also delayed transition students.

All this means, for example, that while there could be more mature students in some countries (e.g. in the Netherlands with 16.1%) than in others (e.g. in Poland with 9.3%), given the differences in the relative size of delayed transition students among mature students (35% in the Netherlands while 58% in Poland), the proportion of mature students who are also delayed transition students could be quite similar in the two groups.

5.1.2. Policies on widening access

As these data show, equal access to higher education for students of different backgrounds is far from being a reality. Both top-level education authorities and higher education institutions still have the important task ahead to improve the inclusiveness of higher education.

In order to achieve this goal, an essential – though not sufficient – step is to open higher education to a diverse student population: in other words, to widen the group of people who have the chance to access higher education. In this context, this section of the report examines: 1) whether education authorities collect information about the diversity of the student population; 2) whether these authorities, in line with the Leuven/Louvain-la-Neve Communiqué of 2009 \(^{(80)}\) and the guidelines outlined in the report of the Social Dimension and Lifelong Learning Working Group of the BFUG

\(^{(89)}\) Either because the share of delayed transition students is low in general (see Figure 5.2), or because even delayed transition students tend to graduate before the age of 30.

approved in 2015 (91), have set any targets/quantitative objectives to be achieved in terms of improving such diversity; 3) what features of higher education admission systems can facilitate the access of people from under-represented groups; and finally 4) to what extent students with disadvantaged backgrounds can receive financial support once they gain access to higher education.

5.1.2.1. Monitoring the composition of the student body

As also emphasised by the Strategy on Widening Participation for Equity and Growth (92), the first step towards widening participation is actually collecting information on the existing situation regarding the participation of under-represented groups in higher education. Such information collected through systematic monitoring can provide evidence to education authorities on the effectiveness of measures aiming to improve the inclusiveness of higher education.

The composition of the student/graduate body can be monitored at four different stages: at entry, during higher education studies, at graduation and after graduation. Monitoring entrants can provide information on the inclusiveness of admission systems; monitoring students during higher education can give an insight into differences in drop-out rates based on students' specific characteristics; monitoring graduates can reveal the chances of specific groups of students to complete higher education; and finally, monitoring graduates after some years of graduation is typically used to analyse employment patterns of graduates as a whole, as well as that of specific groups of young people.

As Figure 5.10 demonstrates, monitoring students' specific characteristics is the least common after graduation. On the other hand, the majority of countries do monitor the composition of the student body at entry, during higher education studies and at graduation.

The most common characteristics to be monitored are gender and age at all stages. At the same time, while many education systems monitor the type and level of qualifications of higher education entrants prior to entry, in most cases, potential differences between students on this basis are not followed up at later stages.

Disability is also a relatively common characteristic to be monitored, most typically at entry and during higher education studies. As the next section will show, several education systems apply specific admission conditions when it comes to students with disabilities, which can explain the frequency of monitoring.

The socio-economic background of students – which can be defined on various bases, from income to the education background of parents – is less commonly monitored than disability. It is only monitored by the majority of education systems during higher education studies. Although it is difficult to judge the inclusiveness of admission systems without having information on the socio-economic background of entrants, less than half of the education systems monitor systematically this characteristic at entry. Moreover, completion statistics are rarely compiled taking the socio-economic background of graduates into account (see also Section 5.2).


Figure 5.10: Number of education systems monitoring the composition of the student body, by stage and by students’ characteristics, 2016/17

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Monitored at entry</th>
<th>Monitored during studies</th>
<th>Monitored at graduation</th>
<th>Monitored after graduation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>46</td>
<td>45</td>
<td>41</td>
<td>17</td>
</tr>
<tr>
<td>Age</td>
<td>44</td>
<td>23</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>Type and level of qualification prior to entry</td>
<td>43</td>
<td>21</td>
<td>12</td>
<td>5</td>
</tr>
<tr>
<td>Disability</td>
<td>41</td>
<td>23</td>
<td>12</td>
<td>1</td>
</tr>
<tr>
<td>Socio-economic status</td>
<td>13</td>
<td>12</td>
<td>9</td>
<td>1</td>
</tr>
<tr>
<td>Migrant status</td>
<td>12</td>
<td>14</td>
<td>5</td>
<td>7</td>
</tr>
<tr>
<td>Minority status</td>
<td>6</td>
<td>9</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Labour market status prior to entry</td>
<td>6</td>
<td>9</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Religion</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Other</td>
<td>12</td>
<td>14</td>
<td>14</td>
<td>7</td>
</tr>
<tr>
<td>No monitoring of such characteristics</td>
<td>4</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Data not available</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

Source: BFUG data collection.

Notes:
The figure is based on data supplied by 50 higher education systems.

Within the framework of the Bologna Process, widening participation does not stop at admission, but supportive measures have to follow through until the completion of studies. Therefore, it is certainly interesting to look at whether education systems monitor the same characteristics of students at the three stages from entry to completion (at entry, during higher education studies and at graduation). While the large majority of EHEA countries monitor some characteristics of the student body at all stages, it is somewhat less common to follow up on the composition of the student body based on the same criteria throughout the important steps towards a higher education degree.

Figure 5.11 shows education systems monitoring the student body based on gender – the most common characteristic to be monitored – and at least one other criterion of disadvantage (e.g. disability, socio-economic status, migrants status, etc.). As the figure reveals, with the exception of Bosnia and Herzegovina, all education systems monitor the composition of the student body based on minimum two different characteristics at least at one stage from entry to completion. In some countries (e.g. in Georgia), the main framework of monitoring is the Eurostudent survey. In addition, the majority of education systems (33) follow up on the same characteristics at all three stages.
5.1.2.2. Quantitative objectives and targets

With the Leuven/Louvain-la-Neuve Communiqué of 2009, ministers agreed that each participating country would set 'measurable targets for widening overall participation and increasing participation of under-represented groups in higher education, to be reached by the end of the next decade' (93). In line with this approach, in 2015, ministers also adopted the report of the Social Dimension and Lifelong Learning Working Group of the BFUG, which recommends EHEA countries to set national objectives on the participation of under-represented groups (94).

As the 2015 Bologna Implementation Report showed, the majority of countries have some targets related to widening participation in higher education. However, as the report argued, most of these objectives are about widening overall participation, without making reference to specific under-represented groups (European Commission/EACEA/Eurydice 2015, p. 117).

Nevertheless, some countries do set targets and quantitative objectives regarding the entry and/or participation of specific under-represented groups. Such objectives can be very short-term (e.g. the yearly setting of quotas in the admission system for certain groups, see Section 5.1.2.3), or can refer to a longer time-period (e.g. targets to be reached by 2020 or 2025).

Such longer-term targets exist in a handful of countries only: in Austria, the Czech Republic, France and the United Kingdom. Both Austria and the United Kingdom (Scotland) have set multiple goals for different groups. By 2025, among other targets, Austria aims to increase the number of first-year students with 'non-traditional' backgrounds to 5,300 and the proportion of second-generation immigrants among entrants to 30% (BMWFW 2017, p. 34). Regarding gender imbalances, Austria

---


aims to reach the goal of having at least 10% of men/women in each study programme, as well as halving the number of programmes with less than 30% of men/women by 2025 (ibid.). In the United Kingdom (Scotland), ‘national aspirations’ include for example that students from the 20% (and 40%) most deprived backgrounds should represent 20% (and 40%) of entrants to higher education respectively by 2030 (Scottish Funding Council, 2016). In addition, similarly to Austria, Scotland aims at reducing the gap between male and female participation in undergraduate study, as well as eliminating extreme imbalances (75/25 ratio or greater) in study programmes by 2030 (ibid.).

Targets for students with low socio-economic background(s) are set in France and the United Kingdom (England). France aims for 50% of students getting financial support (need-based grants) by 2025, which essentially means that 50% of students should come from lower socio-economic backgrounds (Ministère de l’Enseignement supérieur, de la Recherche et de l’Innovation, 2015). In England, the Government has set the goals to double the participation of students from disadvantaged backgrounds and increase by 20% the number of students from ethnic minority groups in higher education, both by 2020 (HEFCE, 2016).

In the Czech Republic, the target set out in the Strategic Plan for Higher Education Institutions 2016-2020 is about the higher education participation of students with specific educational needs: the aim is that the share of these students in higher education should be close to their share among high school graduates (MSMT, 2015).

How can these targets be achieved? The following section illustrates examples of measures supporting the access of students from under-represented groups that have been put in place in EHEA countries.

5.1.2.3. The openness of admission systems and access routes

The way in which admission systems are organised is key in influencing the inclusiveness of higher education. Admission systems determine who can and who cannot enter higher education. A recent study (Orr et al., 2017) provides a typology of admission systems based on two main dimensions: 1) whether all streams within upper secondary education lead to some form of higher education; and 2) whether higher education institutions have the autonomy to use their own criteria in selecting students.

Education systems where not all streams provide students with qualifications enabling them to access higher education and where higher education institutions can use their own criteria to select their students are among the most selective systems; in contrast, where all streams can lead to higher education and where higher education institutions cannot select their students based on additional criteria are among the least selective ones (Orr et al., 2017).

In education systems where not all streams or pathways provide students with qualifications giving access to higher education, only a selected group of students can enter higher education directly. In these systems, the question naturally arises: do students in streams not leading to higher education have a ‘second chance’ to acquire the right entry qualifications? Is there a way for them to access higher education – with or without the necessary qualifications – at a later stage? Similarly, even in systems where all streams may lead to higher education, students may drop out of school early, but they may wish to continue their studies in the future. Are admission systems flexible enough to provide higher education access to these students?

These questions are all the more important since students with lower socio-economic backgrounds tend to be over-represented in streams not giving direct access to higher education, and they drop out of school without any qualifications in higher proportions (see e.g. OECD, 2012; European Commission/EACEA/Eurydice, 2014). As Figure 5.2 illustrated, delayed transition students are over-
represented among those without a higher education background, thus among those whose parents do not possess a higher education degree. Therefore, it is important to examine the openness of admission systems and the possibilities they offer to such non-traditional students.

For this reason, this section examines admission systems by looking at all the routes through which students can enter higher education. In doing so, the following entry routes are distinguished (see also Figure 5.12):

1. entry with a standard qualification (with an upper secondary school leaving certificate from general or vocational education, giving direct access to higher education);
2. entry with a higher education entry qualification obtained later in life, either through a bridging programme where the standard entry qualifications can be obtained, or through higher education preparatory or other programmes providing learners with alternative entry qualifications;
3. entry without higher education entry qualifications, thus without either an upper secondary school leaving certificate that would give direct access to higher education or another (equivalent) higher education entry qualification.

The traditional direct access route to higher education is the possession of an upper secondary qualification from general or vocational education. However, though such a standard qualification can provide access to higher education, often it does not guarantee it. In the majority of EHEA countries, potential entrants meeting standard entry requirements do not have a guaranteed right to higher education. Typically, students compete for a limited number of places and are selected on the basis of their level of achievement in the upper secondary qualification, or even based on an additional entrance examination (see OECD, 2017). This selectivity of higher education admission systems is discussed by Orr et al. (2017) in more details.

In the context of entry routes, the access of non-traditional or disadvantaged learners can be supported by education authorities the following ways:

1. through easing the admission process for specific groups of students who nevertheless possess the standard entry qualifications;
2. through providing support to (specific groups of) students in getting qualifications necessary to enter higher education either
   1. through upper secondary bridging programmes where the standard entry qualifications can be obtained; or

Figure 5.12: Entry routes to higher education

Source: Authors.
2. by providing alternative admission qualifications through higher education preparatory or other programmes;

3. through providing support to (specific groups of) students to enter higher education without higher education entry qualifications, mostly by providing a framework for the recognition of prior non-formal and informal learning.

Sometimes the borders between these different ways are blurred, which makes the establishment of clear categories difficult at times. Nevertheless, the following discussion aims to create such categories, while at the same time demonstrating the diversity of national approaches in providing support for 'non-traditional' or disadvantaged learners.

1) Supporting the admission process for under-represented groups with standard entry qualifications

A relatively common way of easing the admission process for specific groups of students is to apply some form of preferential treatment or positive discrimination (see Figure 5.13). The idea behind such an approach is that in order to achieve equal access to higher education for various social groups, existing inequalities in resources and opportunities need to be counteracted by favouring the groups who are at a disadvantage (95).

Figure 5.13: Supporting the access of under-represented groups through standard entry routes: preferential treatment, 2016/17

The most prevalent arrangement for preferential treatment is the use of quotas: they exist in 18 education systems. Entry quotas mean that a given percentage of places at higher education institutions are reserved for specific, well-defined groups. Most often, these quotas are foreseen for relatively small segments of the population (e.g. ethnic minorities, the Roma, young men who completed the military service, orphans, refugees, or students with disabilities). A bit broader definition

(95) In some countries (e.g. Germany), positive discrimination is considered as a form of discrimination and is prohibited by law.
refers to prospective students from disadvantaged regions/remote or rural areas. For example, in France, 10% of the best ranked Baccalauréat (upper secondary school leaving examination) holders coming from deprived areas have guaranteed places in selected programmes.

Besides quotas, another form of preferential treatment is when specific groups of students have lower admission requirements or are awarded extra points in the admission procedure (96). In Denmark, this concerns a small group of prospective students only: people from Greenland. In Hungary (97) and Norway, students from under-represented groups can be awarded extra points in the admission procedure. In Slovenia, students with a special status such as students with disabilities or students in exceptional social circumstances can be admitted to programmes with 90% of the required minimum points. In Turkey, students with disabilities are allowed to take the special aptitude test even if they possess lower points than other prospective students. The most extensive arrangements can be found in Ireland, where there are separate admission schemes for students with disabilities (Disability Access Route to Education, DARE) and for school-leavers from socio-economically disadvantaged backgrounds (Higher Education Access Route, HEAR). Through these admission schemes, eligible students can gain access to higher education with reduced points.

Nevertheless, preferential treatment is not the only way education authorities can support the access of disadvantaged students within the standard admission procedure. While not depicted on a dedicated figure, special outreach programmes or projects aiming to provide pre-admission guidance to school-leavers in finding and applying for suitable higher education programmes exist in several EHEA countries (e.g. in Austria, Belgium – Flemish Community, Denmark, Estonia, Finland, Germany, Ireland, the Netherlands and the United Kingdom – England). In addition, pre-admission language support or counselling is provided to migrants, refugees or foreign students in a number of countries (e.g. in Andorra, Estonia, Finland, France, Germany, Ireland, Italy, Luxembourg, the Netherlands and Slovakia). There are also national efforts to increase the proportion of women/men in male-/female-dominated study fields (e.g. the promotion of studying to become primary school teachers among men in the Netherlands). Several countries have also taken the initiative to adapt admission criteria or entrance examinations to the needs of students with disabilities.

2) Supporting non-traditional learners getting higher education entry qualifications

Disadvantaged students might face difficulties in getting higher education entry qualifications at the first place. Therefore, it is crucial to examine whether they have a chance to obtain such as a qualification later in life, either through upper secondary bridging programmes where standard entry qualifications can be obtained, or through higher education preparatory programmes or other education programmes providing alternative, though most often equivalent entry qualifications.

A standard, though indirect route to higher education goes through bridging programmes. These are upper secondary education programmes (e.g. evening classes, additional follow-up years, etc.) through which an upper secondary school leaving certificate can be obtained, which provides access to higher education. Such second-chance or bridging programmes should be open to:

- students who followed vocational educational or training tracks not giving access to higher education;
- students who dropped out of school without obtaining an upper secondary school leaving certificate.

(96) Specific admission procedures provided for students with disabilities by request, which are not systematically favouring this group of students are not taken into account here.

(97) In Hungary, the groups of students who can be awarded extra points are: students whose families receive particular social benefits; whose parents have a low educational attainment; who are from low work intensity households; who experience severe housing deprivation or come from segregated neighbourhoods; who have disabilities or who have dependent children.
Even when such programmes are organised by higher education institutions, if they provide students with the standard entry qualifications (the upper secondary school leaving certificate), they are regarded as standard routes to higher education. As Figure 5.14 depicts, the majority of EHEA countries offer the possibility for students to obtain the standard entry qualifications through second-chance or bridging programmes. Nevertheless, there is certainly a difference between countries where such a qualification gives access to higher education without any additional selection criteria, or where learners have taken an entrance examination in addition to such a qualification (see OECD, 2017).

Figure 5.14: Second-chance routes to first-cycle higher education: standard or alternative qualifications, 2016/17

Alternatives to bridging programmes are higher education preparatory programmes or other programmes providing alternative qualifications to the upper secondary school leaving certificate. Common to these programmes is that they are offered to learners not having the standard upper secondary school leaving certificate, and that at the end of the programme learners are awarded a qualification which is equivalent to the standard upper secondary school leaving certificate, but is not the same. In other words, students who successfully complete such programmes can gain access to higher education institutions without the standard upper secondary leaving certificate. For this reason, such programmes are often regarded as alternative routes to higher education. Nevertheless, they are depicted together with bridging programmes as they still build on a system of entry qualifications necessary for higher education admission.

Such programmes exist in Denmark, France and the United Kingdom. These programmes can be specific higher education preparatory programmes, like in the United Kingdom, or general education programmes providing a qualification similar to the upper secondary school leaving certificate. This qualification – the Higher Preparatory Examination in Denmark, the Diplôme d’accès à l’enseignement supérieur in France and the Access to Higher Education Diploma in the United Kingdom – provides students with the same rights as an upper secondary school leaving certificate, the right to access higher education programmes among them.
3) Supporting non-traditional learners accessing higher education without higher education entry qualifications

Education systems might also allow students without formal entry qualifications to access higher education programmes. Though national variations in this respect are considerable, this report distinguishes between the following practices:

- entry through the recognition of prior learning;
- entry through the recognition of prior learning combined with an additional entrance exam;
- entrance exams/admission tests requiring no prior qualifications;
- entry through preparatory or trial higher education programmes.

These categories are depicted on Figure 5.15.

Figure 5.15: Possibilities to access higher education without formal qualifications: typology of access routes, 2016/17

The importance of the recognition of knowledge and skills gained through non-formal and informal learning has been stressed by communiqués of ministerial conferences for years. With the Bucharest Communiqué ministers explicitly agreed to 'step up [their] efforts towards under-represented groups to develop the social dimension of higher education, reduce inequalities and provide [...] alternative access routes, including recognition of prior learning' (98). The Yerevan Communiqué further stresses that structural reforms – such as providing a framework for the recognition of prior learning – agreed upon earlier should be implemented 'by policy makers and academic communities and [with the] stronger involvement of stakeholders' (99). For countries of the European Union, the recognition of

---


(99) Yerevan Communiqué, adopted at the EHEA Ministerial Conference in Yerevan, 14-15 May 2015, p. 3.
prior learning has been encouraged through a Council Recommendation on the validation of non-formal and informal learning (100).

Nevertheless, in more than half of the education systems, it is still not possible for candidates to be admitted to higher education on the basis of the recognition of prior non-formal and informal learning. This picture is very similar to the one presented in the 2015 Bologna Process Implementation Report, which means that no education system has introduced a framework for the recognition of prior learning for access since then.

Frameworks for the recognition of prior learning exist primarily in western European countries. In most cases, a recognition procedure is enough for applicants to gain access to (selected) higher education programmes. Nevertheless, such a recognition procedure is not always compulsory for all higher education institutions, but is an option institutions can choose to apply in their admission procedure. Furthermore, as Figure 5.15 shows, in three countries – Austria, Germany and Portugal – the recognition procedure in itself is not enough for applicants to gain access to higher education: they also have to pass an additional entrance examination.

Besides the recognition of prior learning, other forms of alternative access also exist in EHEA countries: simple entrance examinations and preparatory or trial programmes. However, these are usually complementing frameworks for the recognition of prior non-formal and informal learning.

For entrants without formal entry qualifications, some countries offer the possibility of taking an entrance exam or admission test. This is not to be confused with special aptitude tests offered to the most talented, most prevalent in the field of arts: these examinations should be open to a wider group of learners (e.g. all applicants or applicants over a certain age). Such special entrance examinations exist in Andorra, Austria (Studienberechtigungsprüfung), the French Community of Belgium, Luxembourg, the Netherlands (colloquium doctum), Portugal and Spain (see Figure 5.15). In Andorra, learners without the formal entry qualifications who are above the age of 25 can enter higher education through a special entry examination. They can also participate in courses preparing them for this examination. In Spain, different entrance possibilities exist depending on candidates’ age: entrance exams requiring no prior qualifications are organised for learners above 25 and 45; while learners above 40 with relevant professional experience can enter higher education through a recognition procedure, without being obliged to pass an entrance examination.

Finally, preparatory or trial higher education programmes exist in the Flemish Community of Belgium, Germany and Iceland. These programmes do not provide learners with a special qualification or certificate, but upon their successful completion, students can gain access to higher education degree programmes. In Germany, learners without the standard entry qualifications can enter some higher education programmes through ‘trial studies’ (Probestudium). The trial period lasts on average two to four semesters, and anyone who has successfully participated in courses and performance assessments during this time will gain access to the degree programme (typically in the first cycle) as a student. In Iceland, students can enter higher education upon the successful completion of a preliminary studies programme, which is a distance learning programme lasting around two years.

4) Incentives to higher education institutions for widening access

While some of the support measures described above include centralised procedures all higher education institutions have to comply with (e.g. the use of quotas or lower admission requirements for certain groups of learners), others are often only available options higher education institutions can freely choose from when designing their admission procedures (e.g. the recognition of prior learning or

special entrance examinations for learners without formal qualifications). In the latter case, top-level authorities often do not even monitor higher education institutions’ admission practices. Evidence, where available, shows that despite the presence of flexible entry paths, the overwhelming majority of students enter higher education the traditional way in most EHEA countries: with a standard qualification obtained directly at the end of upper secondary education.

As Figure 5.16 illustrates, alternative access routes are marginal in most countries with available data. According to the Eurostudent survey, the share of students entering higher education without the standard upper secondary entry qualifications is the biggest in Croatia (14 %), Malta (10 %), Iceland (6 %) and Switzerland (5 %). However, these data do not always provide the correct picture due to differences in Eurostudent country questionnaires. For example, as also Figure 5.15 shows, it is not possible to access higher education without the standard upper secondary qualification in Croatia; so the high percentage of students in this category most probably refers to those who got their upper secondary qualifications before the current State Matura exam was introduced.

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

<table>
<thead>
<tr>
<th>Country</th>
<th>Standard</th>
<th>Delayed</th>
<th>Alternative</th>
</tr>
</thead>
<tbody>
<tr>
<td>SK</td>
<td>99%</td>
<td>1%</td>
<td>0%</td>
</tr>
<tr>
<td>FR</td>
<td>99%</td>
<td>2%</td>
<td>0%</td>
</tr>
<tr>
<td>CZ</td>
<td>98%</td>
<td>2%</td>
<td>0%</td>
</tr>
<tr>
<td>LT</td>
<td>98%</td>
<td>3%</td>
<td>0%</td>
</tr>
<tr>
<td>RS</td>
<td>97%</td>
<td>2%</td>
<td>0%</td>
</tr>
<tr>
<td>GE</td>
<td>97%</td>
<td>4%</td>
<td>0%</td>
</tr>
<tr>
<td>HU</td>
<td>96%</td>
<td>3%</td>
<td>0%</td>
</tr>
<tr>
<td>PL</td>
<td>96%</td>
<td>4%</td>
<td>0%</td>
</tr>
<tr>
<td>RO</td>
<td>95%</td>
<td>3%</td>
<td>0%</td>
</tr>
<tr>
<td>DE</td>
<td>94%</td>
<td>4%</td>
<td>0%</td>
</tr>
<tr>
<td>LV</td>
<td>94%</td>
<td>7%</td>
<td>0%</td>
</tr>
<tr>
<td>SI</td>
<td>93%</td>
<td>7%</td>
<td>0%</td>
</tr>
<tr>
<td>EE</td>
<td>92%</td>
<td>7%</td>
<td>0%</td>
</tr>
<tr>
<td>AT</td>
<td>92%</td>
<td>7%</td>
<td>0%</td>
</tr>
<tr>
<td>SK</td>
<td>92%</td>
<td>4%</td>
<td>0%</td>
</tr>
<tr>
<td>FR</td>
<td>92%</td>
<td>4%</td>
<td>0%</td>
</tr>
<tr>
<td>CZ</td>
<td>91%</td>
<td>5%</td>
<td>0%</td>
</tr>
<tr>
<td>LT</td>
<td>90%</td>
<td>3%</td>
<td>0%</td>
</tr>
<tr>
<td>RS</td>
<td>87%</td>
<td>4%</td>
<td>0%</td>
</tr>
<tr>
<td>GE</td>
<td>84%</td>
<td>1%</td>
<td>0%</td>
</tr>
<tr>
<td>HU</td>
<td>81%</td>
<td>2%</td>
<td>0%</td>
</tr>
<tr>
<td>PL</td>
<td>78%</td>
<td>3%</td>
<td>0%</td>
</tr>
<tr>
<td>RO</td>
<td>74%</td>
<td>2%</td>
<td>0%</td>
</tr>
<tr>
<td>DE</td>
<td>72%</td>
<td>2%</td>
<td>0%</td>
</tr>
<tr>
<td>LV</td>
<td>71%</td>
<td>2%</td>
<td>0%</td>
</tr>
<tr>
<td>SI</td>
<td>71%</td>
<td>2%</td>
<td>0%</td>
</tr>
<tr>
<td>EE</td>
<td>71%</td>
<td>2%</td>
<td>0%</td>
</tr>
<tr>
<td>AT</td>
<td>71%</td>
<td>2%</td>
<td>0%</td>
</tr>
</tbody>
</table>

**Source:** Eurostudent.

**Notes:**

Students entering with the standard qualification possess an upper secondary qualification obtained in direct relation to leaving school for the first time (e.g. *Matura*, *Abitur*, *Baccalauréat*), either in the country of survey or abroad. Students entering with the standard qualification obtained later got this (national or foreign) qualification with a delay, e.g. via evening classes or adult learning.

---

(101) Education systems collecting data on students entering through alternative access routes are the Flemish Community of Belgium, Denmark, Finland, France, Norway and Portugal.

(102) See also the country notes in the Glossary and Methodological Notes.
When looking at students entering higher education with standard qualifications obtained later in life (i.e. through second-chance routes), their proportion is relatively substantial in some countries, especially in the Netherlands (23 %), Iceland (23 %), Portugal (19 %) and Malta (18 %). In most other countries, however, even their participation in higher education is very low.

So how can education authorities provide incentives to higher education institutions to increase the access rates of non-traditional learners? Examples of such incentives are systems of performance evaluation with criteria linked to the inclusiveness of higher education institutions’ admission systems. In such systems, the decision on how higher education programmes could be more open to a diverse student population is outsourced to higher education institutions: they have to reach certain goals, but they can choose the measures that are the most suitable for them.

For example, in Sweden, higher education institutions are required by law to actively promote and widen access to higher education. In this context, more than one third of Swedish higher education institutions have a target of increasing the proportion of students from educationally disadvantaged or non-academic homes, or from non-traditional or under-represented groups. In addition, some higher education institutions have a target of achieving an even gender distribution throughout the institution or in particular programmes (Swedish Council for Higher Education, 2016).

Another similar approach is the system of performance agreements, which exists for example in the United Kingdom. In England, higher education institutions wanting to charge higher tuition fees need to sign an Access Agreement with the Office for Fair Access (OFFA), which details how the institution will sustain or improve access, student success and progression among people from under-represented and disadvantaged groups. In Scotland, each higher education institution has an Outcome Agreement with the Scottish Funding Council. In addition to providing a narrative on the activity and support provided to under-represented groups, institutions also set targets for their own progress against national measures.

5.1.2.4. Fees and financial support

Access to quality higher education also depends on the financial means available to students to finance their studies and living costs. Thus, in order to ensure that no young person is prevented or discouraged from entering higher education due to his/her socio-economic background, EHEA higher education ministers have committed themselves to pay particular attention to student support systems in the national public budget allocated to financing national higher education systems.

While presenting the full variety of fee and support systems and how their different elements interlink is not possible in this report, this section will discuss which students pay, how much they pay and the financial burden study costs may mean in a specific national context. Similarly, student support systems will be looked at from the point of view of coverage (the share of students who can benefit from support), the criteria that determine which students can benefit from financial support, and the type of direct support (re-payable versus non-reimbursable support) available.

1) Student costs

The costs of higher education studies have multiple components (accommodation costs, travel, study material, study fees, etc.). Nevertheless, tuition fees and other (registration, certification, etc.) fees that are charged to students by higher education institutions are the most directly associated with study costs. Such fees often influence prospective students' decisions on starting higher education and they may also have an impact on the quality of student life for at least part of the enrolled population.
Prevalence of fees across the EHEA

Figure 5.17 shows the existence of fees for home students in first-cycle programmes and whether this concerns all students. The fees implied here are any types of costs students need to pay for their studies – tuition fees as well as registration, administrative, certification, etc. fees. Payments to student unions are not taken into account. The figure refers only to the prevalence of fees which are higher than EUR 100 annually and are charged to home students, or to those students who have the same status as home students in the national student fee and support system.

Figure 5.17: Prevalence of fees in public higher education institutions for home students in the first cycle, 2016/17

Source: BFUG data collection.

Similarly to the situation presented in the 2015 Bologna Process Implementation Report, in most EHEA countries, at least some students who study in first-cycle programmes pay fees. In 13 higher education systems, all students pay more than EUR 100 annual fee. In contrast, in six countries students do not pay fees at all or pay less than EUR 100 per year. From the academic year 2017/18, new entrants to first-cycle programmes do not pay fees in Montenegro (103). If higher education entry rates are maintained, this is a significant change from the previous system in Montenegro where more than half of the students (those on non-state funded places) paid fees. In the remaining 31 systems, some students pay fees depending on a variety of criteria. In Germany, students are required to pay only in some Länder – in particular when they exceed significantly the regular study time (see also Figures 2.19, 5.36 and 5.37).

For short-cycle (104) and second-cycle programmes, general fee policies are similar to the first cycle in most of the countries. Exceptions are Russia where all students pay for short-cycle programmes – while not all of them pay in the first and the second cycle – as well as Malta and the United Kingdom (Scotland), which do not claim fees for first- and short-cycle studies, but students have to pay in the second cycle.

(103) Legislation foresees that no fees will be charged on those who start their second cycle studies in the academic year 2020/21 in public higher education institutions in Montenegro (European Commission/EACEA/Eurydice, 2017b).

(104) Short-cycle higher education programmes are not offered in all EHEA countries (see also Figure 3.7 in Chapter 3).
In countries where some home students pay fees, the variation among countries in the proportion of fee-paying students is large. Figure 5.18 presents the share of first-cycle students who reported that they pay fees in the latest Eurostudent VI survey. In this survey, full- and part-time home and international (105) first-cycle students were asked whether they pay fees.

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

More than three-quarters of participating students claimed to pay fees in the Netherlands, Switzerland, Iceland, Albania, Portugal, Norway, Ireland and Slovenia (106). It should be noted that in Norway, although students at public higher education institutions do not pay fees, they may perceive the membership fee to the local student welfare organisation as some sort of fee. Similarly, in Germany students who do not exceed the regular study period do not pay fees, but some may consider the semester service contribution (*Semsterbeitrag*), which covers administrative costs as well as a social contribution to the local student services organizations as fee.

At the other end of the scale, less than 10% of students report paying fees in Finland, Malta, Denmark and Sweden. In these latter countries, no full-time home students pay fees, but in some of them part-time students (Denmark and Malta) do, and international students pay fees in all of them (European Commission/EACEA/Eurydice, 2017b).

Figure 5.19 shows which higher education systems take into account socio-economic criteria when determining which full-time home students (do not) pay fees, and how much they pay. In 26 higher education systems, socio-economic criteria influence how much students pay. In a few countries, the obligation to pay some fee remains for all students regardless of their background. In these countries, disadvantaged students may pay, however, lower fees (in Belgium – Flemish Community, Turkey and the United Kingdom – England, Wales and Northern Ireland).

---

(105) In the Eurostudent survey, international students studying for a full degree in the host country also participated. The survey sample did not include temporary/credit mobility students.

(106) Discrepancies between Figures 5.17 and 5.18 are due to the following circumstances: 1) in certain countries while all students pay fees as a rule, fee waivers for some students may exist based on socio-economic background (e.g. in Switzerland).
In 23 countries, students may be fully exempted from paying fees (fee waiver) if they come from low socio-economic background or belong to under-represented student groups. Such fee waivers are available for disabled students, minorities – for example the Roma, orphans or children of war victims in countries including Albania (in first-cycle programmes only), Armenia, Azerbaijan, Bulgaria, the former Yugoslav Republic of Macedonia, Montenegro, Russia, Serbia and Turkey. In the French Community of Belgium, France, Ireland and Italy, those students who do not need to pay fees based on their socio-economic circumstances also receive a study grant (see Figure 5.22).

In Albania, Armenia, Azerbaijan, the French Community of Belgium, the Czech Republic, France, Italy, the former Yugoslav Republic of Macedonia, Poland, Slovakia, Spain and Switzerland, both fee exemption and fee reduction may be granted. The fee reduction usually applies to students who do not meet the criteria for fee waivers, but are considered disadvantaged. Such fee reduction is often linked to the student's household income. It should, however, be noted that in the Czech Republic and in Slovakia, both fee waivers and fee reduction are allowed by national legislation, but it is up to the higher education institutions to decide whether they apply them.

In 14 countries, fee amounts are not influenced by students' socio-economic background. Data shows that in these countries either all students pay the same amount (Iceland, Liechtenstein and Portugal) or other criteria determine which students pay fees and how much they pay. The most common criteria are the study field, whether a student has a different status from the full-time status (part-time students, distance learning; see Figure 2.18) or academic performance.

When merit-based criteria are used in determining fee-payers among full-time home students, they usually function as negative incentives to improve study performance. In particular, there are two performance levels defined for higher education entry: the lower level needs to be met by all students who enter (are admitted to) higher education, while the higher performance level has to be met in order to avoid paying study fees. In Armenia, Belarus, Bosnia and Herzegovina, Hungary, Kazakhstan, Latvia, Lithuania, Montenegro, Romania and Serbia, students whose secondary school performance or entrance test results do not meet the higher performance limit for state-funded study
places (usually 30-50 % of students depending on the country) pay fees as from their entry to higher education. Students in these countries, however, may change funding status during their studies: if their study performance is among the best, they can obtain state-funded study places and do not pay fees.

Other criteria are related to the pace and completion of studies. The most common policies are that students who do not complete a prescribed number of ECTS credits per semester or continue their studies over the usual number of study years need to pay (see Figures 5.36 and 5.37). Some countries are conscious that while these measures are effective in encouraging study completion, they may have inverse effects on disadvantaged students. For this reason, disadvantaged students may receive exemption from paying fees even if their pace of study is below what is expected. For example, this is the case in Austria and Estonia. In the Czech Republic, those who become parents during their studies are exempted (European Commission/EACEA/Eurydice, 2016a).

How much students pay

Fee waivers and fee reduction are particularly important social support measures for disadvantaged students when fee levels are high in the country. In order to assess the actual fee burden on students, the most common annual fee amounts for full-time home students are compared to the GDP per capita for the corresponding year (2016) in Figure 5.20.

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

<table>
<thead>
<tr>
<th></th>
<th>1st cycle</th>
<th>2nd cycle</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>UK-ENG</strong></td>
<td>34.6</td>
<td>16.4</td>
</tr>
<tr>
<td><strong>AM</strong></td>
<td>27.7</td>
<td>35.6</td>
</tr>
<tr>
<td><strong>UA</strong></td>
<td>26.9</td>
<td>35.8</td>
</tr>
<tr>
<td><strong>GE</strong></td>
<td>24.7</td>
<td>24.7</td>
</tr>
<tr>
<td><strong>AZ</strong></td>
<td>24.2</td>
<td>32.3</td>
</tr>
<tr>
<td><strong>BY</strong></td>
<td>18.5</td>
<td>17.8</td>
</tr>
<tr>
<td><strong>KZ</strong></td>
<td>18.3</td>
<td>20.2</td>
</tr>
<tr>
<td><strong>RO</strong></td>
<td>12.3</td>
<td>21.3</td>
</tr>
<tr>
<td><strong>HU</strong></td>
<td>11.2</td>
<td>22.4</td>
</tr>
<tr>
<td><strong>RS</strong></td>
<td>10.9</td>
<td>17.6</td>
</tr>
<tr>
<td><strong>ME</strong></td>
<td>8.3</td>
<td>33.0</td>
</tr>
<tr>
<td><strong>BA</strong></td>
<td>7.9</td>
<td>10.8</td>
</tr>
<tr>
<td><strong>PT</strong></td>
<td>5.9</td>
<td>10.8</td>
</tr>
<tr>
<td><strong>IE</strong></td>
<td>5.4</td>
<td></td>
</tr>
<tr>
<td><strong>AL</strong></td>
<td>5.3</td>
<td></td>
</tr>
<tr>
<td><strong>NL</strong></td>
<td>4.8</td>
<td></td>
</tr>
<tr>
<td><strong>ES</strong></td>
<td>4.6</td>
<td></td>
</tr>
<tr>
<td><strong>IT</strong></td>
<td>4.6</td>
<td></td>
</tr>
<tr>
<td><strong>BE nl</strong></td>
<td>2.4</td>
<td></td>
</tr>
<tr>
<td><strong>BE fr</strong></td>
<td>2.3</td>
<td></td>
</tr>
<tr>
<td><strong>CH</strong></td>
<td>2.2</td>
<td></td>
</tr>
<tr>
<td><strong>AT</strong></td>
<td>1.8</td>
<td></td>
</tr>
<tr>
<td><strong>IS</strong></td>
<td>1.0</td>
<td></td>
</tr>
<tr>
<td><strong>LU</strong></td>
<td>0.9</td>
<td></td>
</tr>
<tr>
<td><strong>CZ</strong></td>
<td>0.1</td>
<td></td>
</tr>
<tr>
<td><strong>UK-SCT</strong></td>
<td></td>
<td>16.3</td>
</tr>
<tr>
<td><strong>MT</strong></td>
<td></td>
<td>1.8</td>
</tr>
</tbody>
</table>

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

Figure 5.20 shows that among countries for which data are available, first-cycle home students pay the highest fees in the United Kingdom (England, Wales and Northern Ireland); this amounts to almost 35 % of the GDP per capita. First-cycle fees are also over 20 % of the GDP per capita in Armenia, Ukraine, Georgia and Azerbaijan; and above 10 % of the GDP per capita in Belarus, Kazakhstan, Romania, Hungary and Serbia.

Relative to the GDP per capita, the highest second cycle fees are in Ukraine, Armenia and Montenegro – all of them amounting to above 30 % of the GDP per capita in the country. Some of
these countries have relatively low GDP, which can partly explain that relatively sizable burden on students.

Figure 5.20 also indicates that there may be big differences in the amount of fees to be paid in the first and the second cycles. In the United Kingdom (England, Wales and Northern Ireland), bachelor students pay more than double the fees that master students pay. In almost all other countries, second-cycle fees are higher. The difference between the most common first- and second-cycle fees is the highest in the United Kingdom (Scotland) (also because there are no fees for full-time home students in the first cycle), Montenegro, Albania, Ireland, Hungary and Romania. In these countries, second-cycle students most commonly pay double or more than first-cycle fees. Significantly higher fees in the second cycle may discourage progression from bachelor to master studies, in particular for disadvantaged students.

2) Student support

Student support from public funds is an important contribution enabling students to start and complete their studies. Students from some under-represented groups are specifically affected by the level of public support provided, especially if study fees are high and no reduction or exemption can be obtained based on social needs. Countries provide financial support in many different forms. The most common ones are grants, loans, tax benefits and family allowances. Among these, grants are the most widespread assistance tools.

Figure 5.21 shows how student support has evolved over the last years. It indicates the relative share of public funding to higher education spent on financial support to students in 2008, 2011 and 2014. Financial support here includes public spending on student grants and loans. This indicator needs to be interpreted with caution: it does not take into account indirect support such as dormitories or student accommodation and meals to students. Furthermore, the increase in the share of public expenditure on students support does not necessarily mean an increase in the total amount or in the per capita support; it can also signal a decrease in the total public funding for tertiary education or a change in the distribution of public funding to higher education between the different main budget items.

The figure points to the largest share of public expenditure on student support in the United Kingdom (over 60 %) and Norway (around 40 %) in 2014. The lowest proportion of public expenditure on student support is in the Czech Republic and Switzerland (around 2 %). The high value in the United Kingdom and the low value in Switzerland should be seen together with the universal fee policy in both countries.
Figure 5.21: Support to students enrolled at tertiary education level as a percentage of public expenditure on tertiary education, 2008, 2011 and 2014

<table>
<thead>
<tr>
<th></th>
<th>UK</th>
<th>NO</th>
<th>DK</th>
<th>NL</th>
<th>SE</th>
<th>CY</th>
<th>IT</th>
<th>IS</th>
<th>DE</th>
<th>IE</th>
<th>BE</th>
<th>PT</th>
<th>TR</th>
<th>MT</th>
<th>BG</th>
<th>FI</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>31.2</td>
<td>44.1</td>
<td>28.4</td>
<td>28.7</td>
<td>25.4</td>
<td>50.9</td>
<td>20.2</td>
<td>22.5</td>
<td>18.9</td>
<td>12.7</td>
<td>13.2</td>
<td>14.9</td>
<td>:</td>
<td>:</td>
<td>6.7</td>
<td>14.7</td>
</tr>
<tr>
<td>2011</td>
<td>39.2</td>
<td>42.8</td>
<td>28.4</td>
<td>28.8</td>
<td>24.7</td>
<td>52.6</td>
<td>22.2</td>
<td>26.2</td>
<td>21.9</td>
<td>13.3</td>
<td>14.4</td>
<td>15.4</td>
<td>14.1</td>
<td>18.4</td>
<td>18.3</td>
<td>13.7</td>
</tr>
<tr>
<td>2014</td>
<td>62.9</td>
<td>40.9</td>
<td>33.3</td>
<td>30.4</td>
<td>25.7</td>
<td>24.8</td>
<td>23.7</td>
<td>23.4</td>
<td>21.3</td>
<td>19.3</td>
<td>15.8</td>
<td>15.7</td>
<td>15.2</td>
<td>14.7</td>
<td>14.1</td>
<td>14</td>
</tr>
<tr>
<td>HU</td>
<td>14.3</td>
<td>17.5</td>
<td>23.2</td>
<td>1.5</td>
<td>9.9</td>
<td>7.4</td>
<td>17.4</td>
<td>7.4</td>
<td>7.1</td>
<td>14.1</td>
<td>:</td>
<td>:</td>
<td>2.2</td>
<td>4.9</td>
<td>3.1</td>
<td>14.7</td>
</tr>
<tr>
<td>SK</td>
<td>12.4</td>
<td>16.7</td>
<td>23.4</td>
<td>12.7</td>
<td>9.4</td>
<td>9.3</td>
<td>9.8</td>
<td>8</td>
<td>14</td>
<td>10.1</td>
<td>:</td>
<td>9.3</td>
<td>2.2</td>
<td>1.5</td>
<td>5.5</td>
<td>14.3</td>
</tr>
<tr>
<td>SI</td>
<td>14</td>
<td>14</td>
<td>12.5</td>
<td>11.6</td>
<td>11.4</td>
<td>9.2</td>
<td>8.6</td>
<td>8.5</td>
<td>8.4</td>
<td>7</td>
<td>7</td>
<td>6.7</td>
<td>2.2</td>
<td>2.1</td>
<td>:</td>
<td>14.1</td>
</tr>
</tbody>
</table>

Source: Eurostat, UOE.

Notes:
Data are sorted by support to students in tertiary education as a percentage of public expenditure on tertiary education in 2014. EHEA: Refers to the EHEA median.

When looking at the change in the share of public expenditure spent on student support over the years, it remained more or less constant within the EHEA as whole between 2011 and 2014. However, there are some significant changes in some countries. In the United Kingdom, after an increase between 2008 and 2011 an even steeper increase of more than 20 percentage points took place in the share of student support between 2011 and 2014. This latter increase may be explained by the increase in the public budget available for study and maintenance loans, which compensated for the removal of public grants in England. In Denmark, the high share of student support further increased by almost 5 percentage points; while in Ireland, an increase of 6 percentage points has taken place. In other countries with notable change, the share of student support has decreased. In Cyprus, the share of public expenditure spent on student support halved, and in Slovenia and Latvia it almost halved between 2011 and 2014. A decreasing trend can also be observed in Austria, the Czech Republic and Lithuania between 2008 and 2014.

Distribution of public support

As mentioned above, student support systems may consist of a variety of support tools in EHEA countries. They can be grouped as direct support tools which are directly awarded to students; and indirect support measures such as tax benefits and family allowances that students receive indirectly through their families.

In this report, only direct support measures are discussed for the reason that these affect students directly. Student grants are considered to be the most generous direct student support tools because students do not need to reimburse them. Publicly subsidised student loans are the other most used student support tools; however, this needs to be paid back and its success in supporting studies also depends on repayment conditions.
Besides grants and loans, several countries provide subsidised (sometimes even free) accommodation (e.g. Belarus, Croatia, Denmark, Greece, Luxembourg, Montenegro, Serbia, Slovakia and Ukraine) or meals (e.g. Belarus, Croatia, Greece, Serbia and Slovakia) to students, as well as travel support (e.g. Croatia, the Czech Republic and Romania). In some cases, all students are eligible for such support; in others, students from under-represented groups (e.g. students from low socio-economic backgrounds, students with disabilities or refugees) are specifically targeted. These types of measures, however, will not be discussed in the report in detail, because it is difficult to capture the weight of such – mainly in-kind – support.

**Need-based grants**

Grants may be distributed on various grounds. Criteria that determine which students can receive grants may include socio-economic circumstances and academic performance, which are the most common criteria. Participation in certain priority study programmes – these are often science, technology, engineering or mathematics (STEM) or teacher education programmes – may also be promoted through the award of grants.

While all grants are important in improving the quality of studies, grants that are allocated specifically to provide financial assistance to students will be discussed in this report. Research has long pointed to the challenges and career choices of those with a disadvantaged background. As was discussed in section 5.1, after leaving school, disadvantaged young people tend to enter the labour market, enrol in shorter courses or delay entrance to higher education. Universal and need-based grants, which do not distinguish between students except based on their assets and income, are able to lighten the financial barriers to higher education for the disadvantaged. Thus, grants are also tools for national authorities to widen access to higher education and open opportunities for low-income families.

Universal grants are allocated to all or the majority of the full-time student population. These grants do not target disadvantaged students but due to the universal nature of the support, they also benefit from it. Universal grants are most widely used in the Nordic countries (Denmark, Finland, Norway and Sweden), in Luxembourg and in Malta.

Most countries provide targeted financial support to students in need. In these countries, specific student groups are identified as beneficiaries from student support. Target groups include orphans, students with disabilities, single parents, students with health problems, under-represented groups or they are defined more broadly based on socio-economic criteria, including specific income thresholds.

Figure 5.22 depicts the proportion of full-time home students who receive universal or need-based grants during their first- or second-cycle studies in the EHEA. In most European countries, students may obtain such grants. Only Iceland, Latvia and Serbia do not provide this type of support.
Figure 5.22: Proportion of full-time home students receiving need-based or universal grants, 2016/17

A) In the first cycle

B) In the second cycle

Source: BFUG data collection.

Figure 5.22 shows that the Nordic countries, Cyprus, Luxembourg and Malta issue grants to more than half of their students in the first cycle. These countries, except Malta, provide universal grants to second cycle students as well.
In some countries, a higher share of first-cycle students receives grants than second-cycle students. In Portugal, Slovakia and the United Kingdom (Scotland), more than 10% of students are targeted by need-based grants in the first cycle, and less than 10% in the second cycle. While the current data set does not allow looking at the actual percentage point differences, the different proportions may indicate that governments make a policy choice to provide student support to a broader pool of students in the first cycle. By this measure they may aim to widen access to the first cycle of higher education for under-represented groups. A smaller percentage of students receiving need-based grants in the second cycle could also indicate that those in need do not progress in the second cycle.

**Loans**

Next to grants, publicly subsidised loans also play an important role in providing more financial resources to students. Loans have to be repaid. Loan take-up and its success in alleviating students’ financial burden depend, however, on the composition of the overall student support system and the conditions of the loan.

Figure 5.23 shows the share of first- and second-cycle home students who take out a publicly subsidised loan during their higher education studies. The highest share, more than 30%, of students take out such loans in Denmark, Finland, Iceland, the Netherlands, Sweden and the United Kingdom. In five of the systems concerned (Denmark, Finland, Norway, Sweden and the United Kingdom – Scotland) loans complement a generous universal grant system – and no fees. In the other three, all students pay high fees and grants do not exist (Iceland) or universal grants are just being phased out (the Netherlands and the United Kingdom – England).

**Figure 5.23: Proportion of home students taking out publicly subsidised loans, 2016/17**

![Map showing loan take-up](image)

Source: BFUG data collection.

In most other countries with loans, loan take up is below 10%. Exceptions to this are Belarus, Germany, Hungary and Montenegro. In Germany, where students do not pay fees, about a quarter of the students take out loans, which is linked to grants in the combined need-based grant and loan scheme ‘BAföG’. In Hungary, specific loans to cover the fees they pay can be borrowed by students who study on non-state funded places (more than 50% of the total student population), and all
students can take out the loans covering living costs. In 16 out of the 50 participating education systems, there is no publicly subsidised student loan system.

**Age limits to student support**

As described above, grants and loans are allocated to students on varying conditions. As well as socio-economic circumstances or academic merit, another criterion may influence students’ eligibility for grants – their age. This criterion is important to consider when analysing the access of mature students to higher education and countries’ funding policies related to lifelong learning.

As Figure 5.24 indicates, in slightly fewer than half of all EHEA systems (21 systems out of 50), access to students’ financial support is limited by age. In 13 higher education systems, age restrictions apply to one type of financial support (i.e. grants, loans or other type of financial support), whereas in eight systems, two or more types of support are concerned.

**Figure 5.24: Presence of age limits applicable to financial support, full-time home students, 2016/17**

**Age limits and the type of financial support concerned:**

<table>
<thead>
<tr>
<th>Country</th>
<th>Age Limit</th>
<th>Financial Support</th>
</tr>
</thead>
<tbody>
<tr>
<td>AT</td>
<td>30 or 35 years (depending on the cycle and the situation of the learner): public grants</td>
<td></td>
</tr>
<tr>
<td>AZ</td>
<td>23 years: public grants</td>
<td></td>
</tr>
<tr>
<td>BE fr</td>
<td>35 years (at the beginning of studies): public grants</td>
<td></td>
</tr>
<tr>
<td>BE nl</td>
<td>25 years: other type of financial support (child benefit for parents)</td>
<td></td>
</tr>
<tr>
<td>BG</td>
<td>35 years: publicly-subsidised loans</td>
<td></td>
</tr>
<tr>
<td>HR</td>
<td>26 years: other type of financial support (health insurance)</td>
<td></td>
</tr>
<tr>
<td>CZ</td>
<td>26 years: other type of financial support (health insurance, transportation discount, tax deductions for parents and for working students)</td>
<td></td>
</tr>
<tr>
<td>FR</td>
<td>26 or 28 years (depending on the type of support): public grants and publicly-subsidised loans (28 years at the time of the first application), other type of financial support (transportation discount)</td>
<td></td>
</tr>
<tr>
<td>DE</td>
<td>30 or 35 years (at the beginning of studies; depending on the cycle and the situation of the learner): combined grant-loan scheme</td>
<td></td>
</tr>
<tr>
<td>EL</td>
<td>36 years: other type of financial support (scholarship)</td>
<td></td>
</tr>
<tr>
<td>HU</td>
<td>40 years: public grants, publicly-subsidised loans</td>
<td></td>
</tr>
<tr>
<td>Country</td>
<td>Age Limitations</td>
<td></td>
</tr>
<tr>
<td>---------</td>
<td>-----------------</td>
<td></td>
</tr>
<tr>
<td>LI</td>
<td>32 years: public grants</td>
<td></td>
</tr>
<tr>
<td>LT</td>
<td>25 years: public need-based grant (social scholarship): in the case of orphans (when both parents passed away)</td>
<td></td>
</tr>
<tr>
<td>NL</td>
<td>30 years (at the beginning of studies): public grants, publicly-subsidised loans, other type of financial support</td>
<td></td>
</tr>
<tr>
<td>NO</td>
<td>65 years: public grants, publicly-subsidised loans</td>
<td></td>
</tr>
<tr>
<td>PL</td>
<td>25-26 (depending on the type of support): publicly-subsidised loans and other type of financial support (transportation discount)</td>
<td></td>
</tr>
<tr>
<td>RO</td>
<td>35 years: other type of financial support (scholarship)</td>
<td></td>
</tr>
<tr>
<td>SE</td>
<td>57 years (but funds decrease from the age of 47): public grants, publicly-subsidised loans</td>
<td></td>
</tr>
<tr>
<td>SI</td>
<td>27 years (at the beginning of studies): public grants and other type of financial support (health insurance)</td>
<td></td>
</tr>
<tr>
<td>SK</td>
<td>25-30 years (depending on type of support): other type of financial support (child benefit for parents, orphan's pension, health insurance, tax bonus for parents, transportation discount)</td>
<td></td>
</tr>
<tr>
<td>UK-SCT</td>
<td>60 years (at the beginning of studies): maintenance loan</td>
<td></td>
</tr>
</tbody>
</table>

Source: BFUG data collection.

Notes:
The figure refers to first- and second-cycle studies. The third cycle is not covered.

Age limitations are typically framed in two ways. Regulations either set the highest age when students can start benefitting from support (this is indicated in Figure 5.24 as 'at the beginning of studies'), or they fix the age after which students will no longer receive some or any support. The former approach applies, in particular, to publicly subsidised loans, but it may also apply to public grants. In contrast, the latter approach is most commonly applied for health insurance, transportation discount, tax deductions for parents, etc.

There are substantial cross-country differences as regards the actual age limits for being eligible for support. The lowest age limit is noted in Kazakhstan, where public grants are only accessible until the age of 23. In eight higher education systems (Croatia, the Czech Republic, Belgium – Flemish Community, France, Lithuania, Poland, Slovakia and Slovenia), access to at least some forms of support is limited to until the age of 25-29. However, in four of these systems, the age limit applies only to indirect support such as health insurance, transportation discount, tax deductions for parents.

The age of 30 or 30s are reported by Austria (public grants), Bulgaria (publicly subsidised loans), Germany (combined grant and loan scheme 'BAföG'), Greece (scholarship), Liechtenstein (public grants), the Netherlands (all types of support) and Romania (scholarship). Hungary sets the limit at the age of 40, applying it to both public grants and publicly subsidised loans. It is followed by Sweden, where grants and loans are available until the age of 57, but the amount of support decreases from the age of 47. In Norway, the age limit for the same type of support is set at the age of 65, whereas in the United Kingdom (Scotland), the age of 60 is defined as the maximum age for access to maintenance loans.

Age limitations in access to public support certainly reflect a reality and a social view that in most countries the higher education population is from a young age cohort (18-25) and they are often dependent on their families’ support. This is particularly the approach in countries providing indirect support to students’ families. In Sweden and Norway, the support policies reflect a more mature student population (see Figure 5.8). Broader age limits or no age limit at all to some sort of public support makes it possible for adults to participate in lifelong learning offered by higher education institutions without significant financial constraints.
**Fee-payers among recipients of public support**

When looking at the financial situation of students, it is also important to see to what extent fee-paying students are compensated by public financial support. Based on the Eurostudent survey, Figure 5.25 shows what percentage of students pay fees among those who benefit from public support and what percentage of those pay fees who do not receive public support among first-cycle students.

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

<table>
<thead>
<tr>
<th>Recipients of public support</th>
<th>Non-recipients of public support</th>
</tr>
</thead>
<tbody>
<tr>
<td>NL  100 99 97 92 90 90 89 86 85 83 69 67 64 63</td>
<td>PL  59 52 43 42 37 35 30 24 22 20 18 5 2</td>
</tr>
<tr>
<td>CH  100 99 97 92 90 90 89 86 85 85 70 68 65 83</td>
<td>HU  62 63 50 46 47 36 31 25 30 26 57 12 6</td>
</tr>
<tr>
<td>IS  100 99 97 92 90 96 87 94 85 85 70 68 65 83</td>
<td>TR  :</td>
</tr>
<tr>
<td>AL  100 99 97 92 90 86 85 83 69 67 64 63</td>
<td>LV  :</td>
</tr>
<tr>
<td>PT  100 99 97 92 90 86 85 83 69 67 64 63</td>
<td>RO  :</td>
</tr>
<tr>
<td>IT  100 99 97 92 90 86 85 83 69 67 64 63</td>
<td>LT  :</td>
</tr>
<tr>
<td>NO  100 99 97 92 90 86 85 83 69 67 64 63</td>
<td>DE  :</td>
</tr>
<tr>
<td>IE  100 99 97 92 90 86 85 83 69 67 64 63</td>
<td>AT  :</td>
</tr>
<tr>
<td>SI  100 99 97 92 90 86 85 83 69 67 64 63</td>
<td>CZ  :</td>
</tr>
<tr>
<td>RS  100 99 97 92 90 86 85 83 69 67 64 63</td>
<td>EE  :</td>
</tr>
<tr>
<td>GE  100 99 97 92 90 86 85 83 69 67 64 63</td>
<td>MT  :</td>
</tr>
<tr>
<td>SK  100 99 97 92 90 86 85 83 69 67 64 63</td>
<td>DK  :</td>
</tr>
<tr>
<td>HR  100 99 97 92 90 86 85 83 69 67 64 63</td>
<td>SE  :</td>
</tr>
<tr>
<td>FR  100 99 97 92 90 86 85 83 69 67 64 63</td>
<td>FI  :</td>
</tr>
</tbody>
</table>

Source: Eurostudent.

**Notes:**
Data are sorted by the percentage of fee-payers among recipients of public support in 2016/17.

Country-specific data in this figure needs to be examined with caution and together with the proportion of fee-payers and the proportion of those who receive support. In countries like the Netherlands, Switzerland, Iceland and Portugal, where all students pay fees, there is no difference in the share of fee-payers among recipients and non-recipients of support. In France, Ireland and Italy, the higher share of fee-payers among non-recipient of support reflects a policy where disadvantaged students receive a fee-waiver and a need-based grant at the same time. A different policy is followed in Hungary, Latvia, Romania and Serbia, where students who study in non-state funded places are not eligible for any or at least some support (in particular grants). For this reason, there tends to be a higher share of fee-payers among those who do not receive support. In Malta, the higher share of fee-payers among non-recipients of support may be explained by the fact that most second-cycle students have to pay fees and they do not receive the universal grant that first-cycle students do.
5.1.2.5. Improving the inclusiveness of higher education access: summary of measures supporting disadvantaged learners

Figure 5.26 summarises the measures supporting disadvantaged learners in entering higher education in the form of a scorecard indicator. All the aspects described in section 5.1.2 are taken into account in this composite indicator: 1) monitoring the student body at entry, 2) long-term quantitative objectives, 3) support provided through different access routes and 4) financial support.

**Figure 5.26: Scorecard indicator n°9:**
Measures to support the access of under-represented groups to higher education, 2016/17

![Scorecard Indicator Map](source: BFUG data collection)

**Scorecard categories**

- The following measures are undertaken to support the access to or increase the participation of under-represented groups in higher education:
  1. The composition of the student body is monitored based on gender and at least one other under-represented category at entry.
  2. There are longer-term quantitative policy objectives for the access/participation of students from under-represented groups.
  3. Under-represented student groups' access to higher education is supported in at least two of the following three ways:
     - Preferential treatment of specific groups of students during the standard admission process;
     - Learners are supported in getting the standard higher education entry qualifications;
     - Learners can access higher education without the standard higher education entry qualifications.
  4. There is financial support targeted at under-represented groups of students OR mainstream support is provided to more than 50% of students.

<table>
<thead>
<tr>
<th>2016/17</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td></td>
</tr>
<tr>
<td>20</td>
<td></td>
</tr>
<tr>
<td>20</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
</tr>
<tr>
<td>0</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

- 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.
- Data not available
As the figure shows, all education systems with available data implement at least one measure supporting the access of disadvantaged learners to higher education. Five education systems have undertaken only one out of the four outlined measures: Bosnia and Herzegovina, Georgia, Malta (financial support), Iceland (alternative access routes), and Latvia (monitoring). Most education systems are in the yellow and light green category, implementing two or three types of measures supporting disadvantaged learners. Finally, four reporting units in three countries (Austria, France and the United Kingdom) have implemented a wide range of support measures to increase the inclusiveness of their higher education systems, including monitoring, setting quantitative targets, facilitating the access of non-traditional learners through adapting their admission systems as well as providing financial support.

5.2. Attainment and completion

Higher education attainment levels depend on both participation and completion rates. In this context, higher education institutions do not only need to make sure that they have an increasing number of (and diversity among) students, but also that these students complete their studies. Increasing participation and completion are also inseparably linked within the widening participation agenda, since students coming from under-represented groups are more likely to drop out from higher education than their peers (Quinn, 2013; see also European Commission/EACEA/Eurydice, 2014).

Non-completion in higher education can be influenced by a number of factors related to the higher education institution and the individual student. At the individual level, the wrong choice of programme or study subject, insufficient motivation to meet the demands of the curriculum as well as a wide range of other constraints, including financial barriers, health problems and family reasons are among the factors related to dropping out from higher education. Structural barriers and institutional inflexibilities, e.g. the inability to serve the needs of an increasingly heterogeneous student population, may amplify individual risk settings. First-year students – and particularly first-year students from under-represented groups – are the most vulnerable to dropping out if insufficient attention is paid to their first experiences and skills development. In addition, besides these 'push' factors, 'pull' factors from the labour market may also produce early leavers from tertiary education to some extent.

This section examines current trends in attainment and completion within the EHEA as well as national policy approaches towards non-completion and drop-out.

5.2.1. Statistics on attainment and completion

Before turning to attainment rates by gender and the socio-economic background of students, it is also important to present general trends in attainment and completion. The main output of higher education is higher education attainment: the share of the population having obtained a higher education qualification.

Attainment levels are steadily rising in the EHEA (see Figure 5.27). The EHEA median value is now 40.9% for the 25-34 age group, 35.2% for the 35-44 year-olds, 28% for the 45-54 age cohort and 23.4% for the 55-64 age group. This increasing tertiary attainment according to age is the dominating pattern in almost all Bologna countries. The largest differences of more than 24 percentage points between the tertiary attainment levels of the oldest and the youngest age cohorts exist in Cyprus, Ireland, Lithuania, Luxembourg, Malta and Poland. It is only Azerbaijan where 55-64 year olds have higher tertiary attainment rates than the youngest age group.
Figure 5.27: Percentage of persons with tertiary education, by age group, 2013 and 2016

(*): the former Yugoslav Republic of Macedonia
The countries where 35-44 year olds have higher tertiary attainment rates than the youngest age groups are Finland, Iceland, and to a lesser extent Spain, Sweden and the United Kingdom. This pattern can be explained by the high share of mature students enrolled in tertiary education, particularly in Iceland, Finland and Sweden (see Figure 5.8). These data show that a substantial share of the 25-34 year olds is still studying and will obtain a tertiary qualification in the future. At the other end of the scale, tertiary attainment rates of 25-34 year olds are more than 11 percentage points higher than those of the 35-44 year olds in Bosnia and Herzegovina, the former Yugoslav Republic of Macedonia, Malta and Turkey, indicating a recent expansion in higher education in these countries.

In the youngest age group (aged 25-34), higher education attainment has reached 50% in Ukraine, Cyprus, Ireland, Lithuania, Luxembourg and Switzerland, adding the latter two to the list since the last Bologna Process Implementation Report. Higher education attainment is the lowest (below 26%) in Azerbaijan, Bosnia and Herzegovina, Italy and Romania. However, no education systems are any longer below the 20% threshold.

A comparison between tertiary attainment rates in 2013 and 2016 shows the directions of the most recent developments. In this last period, countries with the largest increases in tertiary attainment among the youngest are the former Yugoslav Republic of Macedonia, Serbia and Turkey. The countries where higher education attainment has not increased among the 25-34 year olds since 2013 are Azerbaijan, Hungary, Moldova and Spain.

Another important indicator related to higher education attainment is the completion rate itself. The completion rate shows the share of students who enter and complete their studies (graduate) in first-cycle programmes (ISCED 6), expressed as a percentage of all entrants (see Figure 5.28). Completion rates may be influenced by both the academic selectivity within higher education institutions and the selectivity in the admission procedure. Regarding the latter, in countries with more selective admission procedures student success might be higher than in countries with open access to higher education (see Orr et al., 2017).

The most reliable method to calculate completion rates is the true-cohort method in which individual students are followed through the system from entry to graduation or drop out. Unfortunately, as Figure 5.28 shows, only a limited number of countries apply such method to calculate completion rates, so data are available only for 11 education systems within the EHEA.
Among the EHEA countries for which data are available, completion rates range between 83.8 % in the United Kingdom and 51.2 % in Estonia. Besides the United Kingdom, high tertiary completion rates are observed in Denmark and Norway, where at least three quarters of all new entrants obtain a degree. In Austria, the Czech Republic and Sweden, on the other hand, completion rates are relatively low, below 60 %.

The true-cohort method also makes it possible to see whether students not completing their degree by its theoretical duration plus 3 years are still studying, or dropped out of education. Based on this information, interesting differences can be observed between education systems: while among the 42.2 % of non-completing students 18.6 % were still in education in Austria, this percentage was only 5.4 % in Estonia, with a 43.3 % of students having dropped out of education.

5.2.1.1. Gender balance

In order to add to the general picture shown by figures on attainment levels and completion rates, differences in attainment and graduation levels between different groups of students are also important to examine. Unfortunately data by parental education are not available; but the gender balance, differences based on migrant background as well as age patterns in attaining higher education degrees can be analysed.

Figure 5.29 depicts changes in the odds ratios of men over women to attain higher education degrees between 2006 and 2016. The figure shows that in the whole period, odds ratios for men were lower than 1, which means that men had lower relative chances to attain higher education than women.

Over the decade, chances of men have been progressively decreasing, reaching the lowest median odds ratio, 0.55 in 2015. However, between 2015 and 2016 this tendency stopped, and the odds ratio of men over women had not decreased further. The same pattern is visible when looking at the lowest (P25) and the highest (P75) percentile. While future data collections should determine whether this reversal of the decreasing trend is stable, currently available data indicates – also in line with data presented in section 5.1.1.2 – a slowly decreasing dominance of women in higher education.
Figure 5.29: Attainment by gender: odds ratios of men over women to attain higher education, 2006-2016

<table>
<thead>
<tr>
<th></th>
<th>P25</th>
<th>P50</th>
<th>P75</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>0.59</td>
<td>0.65</td>
<td>0.83</td>
</tr>
<tr>
<td>2007</td>
<td>0.59</td>
<td>0.68</td>
<td>0.80</td>
</tr>
<tr>
<td>2008</td>
<td>0.56</td>
<td>0.68</td>
<td>0.78</td>
</tr>
<tr>
<td>2009</td>
<td>0.54</td>
<td>0.63</td>
<td>0.76</td>
</tr>
<tr>
<td>2010</td>
<td>0.52</td>
<td>0.61</td>
<td>0.80</td>
</tr>
<tr>
<td>2011</td>
<td>0.53</td>
<td>0.61</td>
<td>0.73</td>
</tr>
<tr>
<td>2012</td>
<td>0.52</td>
<td>0.60</td>
<td>0.75</td>
</tr>
<tr>
<td>2013</td>
<td>0.50</td>
<td>0.59</td>
<td>0.70</td>
</tr>
<tr>
<td>2014</td>
<td>0.51</td>
<td>0.58</td>
<td>0.70</td>
</tr>
<tr>
<td>2015</td>
<td>0.50</td>
<td>0.55</td>
<td>0.69</td>
</tr>
<tr>
<td>2016</td>
<td>0.50</td>
<td>0.56</td>
<td>0.71</td>
</tr>
</tbody>
</table>

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

Notes:
The lines in this figure reflect the 25, 50 and 75 percentile countries showing the chances (odd-ratio) of men compared to women to attain higher education. For example, in 2016, for the median country (P50), for every 100 women attaining higher education there would only be 56 men. In 2006, there were 65 men for every 100 women.

It is also revealing to look at the percentage of women among graduates in the three main cycles of higher education. As Figure 5.30 shows, patterns are similar to those presented on Figure 5.4 on new entrants, but with some notable differences.

In more than half of the countries with available data (17), female graduates are the most over-represented in the second cycle. In 14 out of these 17 countries, their share is the lowest in the third cycle (107). In Ireland and the former Yugoslav Republic of Macedonia, the share of female graduates is the lowest in the first cycle. In addition, in almost all of these countries, women constitute the majority of graduates at all levels, which suggests a stronger female dominance overall than among new entrants. The two potential explanations for this are, first, that female dominance is decreasing over time and the graduates of 2014/15 were entrants a few years before; and second, that more men than women drop out of higher education. Nevertheless, women are still in a minority among third cycle graduates in the United Kingdom; in the first and the third cycle in Germany and at all levels in Switzerland.

In the second pattern, to be found in slightly fewer than half of the countries (14), the higher the education level, the lower the share of female graduates. In around half of these countries, female graduates are in a minority at least in the third cycle. This pattern is thus more widespread when looking at graduates than was the case regarding entrants. A potential explanation might be that compared to the first cycle, more women drop out of higher education in the second and third cycles.

Finally, in Turkey and Liechtenstein, female graduates are under-represented at all levels, but particularly in the second cycle. In Liechtenstein, where around 95% of students study abroad at tertiary level, this is mostly due to the fact that the coverage of higher education programmes is limited to mostly male-dominated fields. Nonetheless, the proportion of women is still close to 50% in the third cycle.

(107) No data is available on the percentage of female graduates in the third cycle in the Netherlands.
Figure 5.30: Percentage of female graduates in tertiary education programmes by level of education, 2014/15

(*) the former Yugoslav Republic of Macedonia

|     | SE | EE | PL | NO | LV | SK | LT | CZ | HU | SI | FR | FI | DK | BE | AT | PT | ES |
|-----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| ISCED 6 | 68.7 | 66.6 | 64.8 | 63.5 | 63.4 | 63.1 | 62.3 | 61.8 | 61.5 | 61.5 | 60.8 | 60.5 | 60.4 | 59.4 | 59.3 | 59.1 | 58.9 |
| ISCED 7 | 57.4 | 65.2 | 67.8 | 56.2 | 68.9 | 62.9 | 66.4 | 50 | 57.9 | 65.9 | 54.6 | 60.1 | 56.5 | 55.1 | 53.1 | 59.8 | 55.5 |
| ISCED 8 | 45.7 | 51.4 | 55 | 52.1 | 55.4 | 49.7 | 59.6 | 43.9 | 39.1 | 56.8 | 44.0 | 52.9 | 48.5 | 43.3 | 42.4 | 53.6 | 50.1 |

|     | CY | HR | BG | (*) | RO | RS | UK | NL | MT | LU | IT | IE | TR | DE | CH | LI | EHEA |
|-----|----|----|----|-----|----|----|----|----|----|----|----|----|----|----|----|-----|
| ISCED 6 | 58.3 | 57.9 | 57.8 | 56.9 | 56.9 | 56.4 | 56.4 | 56 | 55.6 | 54.3 | 52.5 | 51.1 | 49 | 48.3 | 48.1 | 31 | 59.0 |
| ISCED 7 | 69.6 | 61.5 | 63.5 | 59.4 | 60.8 | 60.5 | 58.4 | 57.3 | 57.9 | 52.4 | 51.9 | 54.7 | 45.5 | 53.9 | 48.5 | 27.7 | 57.9 |
| ISCED 8 | 54.6 | 56.6 | 49.9 | 58.1 | 52.3 | 52.8 | 47.0 | \ | 53.3 | 44.8 | 51.0 | 51.4 | 46.0 | 44.7 | 44.6 | 46.2 | 50.6 |

Source: Eurostat, UOE.

Notes:
Data are sorted by the percentage of female graduates in ISCED 6 programmes.
EHEA: Refers to the EHEA median, which was calculated based on countries with available data for all levels.

5.2.1.2. Students with migrant background

Indicators looking at differences in the chances of students attaining higher education by migrant background have similar limitations as Figure 5.7. In fact, data are not available by ‘migrant background’ as such; Eurostat data is limited to making differences between the foreign-born and the native-born. The indicator looks at the resident population with tertiary attainment, irrespective of the country of graduation. This means that it includes foreign-born young people who arrived in a given country after obtaining a tertiary degree. In addition, it is still not possible to evaluate the chances of second-generation immigrants, since they are classified among the native-born population.
Nevertheless, it is still interesting to examine the odds ratios of the native-born over the foreign-born to obtain a higher education degree. On Figure 5.31, when an odds ratio is higher than 1, it means that the native-born population have higher chances to attain higher education; when it is below 1, then the foreign-born population have greater odds to do so.

**Figure 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**

<table>
<thead>
<tr>
<th></th>
<th>EL</th>
<th>SI</th>
<th>CY</th>
<th>ES</th>
<th>IT</th>
<th>NL</th>
<th>IS</th>
<th>HR</th>
<th>BE</th>
<th>PT</th>
<th>NO</th>
<th>AT</th>
<th>FI</th>
<th>MT</th>
<th>FR</th>
<th>DE</th>
<th>SE</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>5.79</td>
<td>3.59</td>
<td>2.56</td>
<td>2.82</td>
<td>2.95</td>
<td>1.96</td>
<td>1.16</td>
<td>1.63</td>
<td>1.68</td>
<td>1.14</td>
<td>1.33</td>
<td>1.05</td>
<td>1.2</td>
<td>0.43</td>
<td>1.27</td>
<td>1.16</td>
<td></td>
</tr>
<tr>
<td>2016</td>
<td>5.39</td>
<td>3.58</td>
<td>3.46</td>
<td>3.32</td>
<td>3.02</td>
<td>1.90</td>
<td>1.76</td>
<td>1.63</td>
<td>1.59</td>
<td>1.54</td>
<td>1.48</td>
<td>1.38</td>
<td>1.29</td>
<td>1.28</td>
<td>1.18</td>
<td>1.03</td>
<td>1.02</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>HU</th>
<th>CH</th>
<th>ME</th>
<th>(*)</th>
<th>TR</th>
<th>CZ</th>
<th>RS</th>
<th>IE</th>
<th>EE</th>
<th>UK</th>
<th>GE</th>
<th>LU</th>
<th>PL</th>
<th>DK</th>
<th>LT</th>
<th>LV</th>
<th>EHEA</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>1.19</td>
<td>1.11</td>
<td>1.27</td>
<td>:</td>
<td>:</td>
<td>0.64</td>
<td>0.77</td>
<td>0.92</td>
<td>0.41</td>
<td>0.64</td>
<td>:</td>
<td>0.7</td>
<td>0.63</td>
<td>1.02</td>
<td>:</td>
<td>0.86</td>
<td>1.16</td>
</tr>
<tr>
<td>2016</td>
<td>0.98</td>
<td>0.97</td>
<td>0.93</td>
<td>0.92</td>
<td>0.92</td>
<td>0.90</td>
<td>0.78</td>
<td>0.76</td>
<td>0.74</td>
<td>0.67</td>
<td>0.63</td>
<td>0.61</td>
<td>0.60</td>
<td>0.53</td>
<td>0.51</td>
<td>0.44</td>
<td>1.23</td>
</tr>
</tbody>
</table>

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

**Notes:**

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

Data are not reliable for the values in italics. For more country notes, see the Glossary and Methodological Notes.

Figure 5.31 reveals that the biggest differences between the native-born and the foreign-born population in their chances to attain higher education exist in Greece, where the native-born are more than five times more likely to obtain a higher education degree. Foreign-born young people also have significantly lower chances to attain higher education in Slovenia, Cyprus, Spain and Italy. At the other end of the scale, the native-born population have much lower odds to complete higher education than the foreign-born in Denmark, Lithuania and Latvia.

When looking at changes between 2013 and 2016 in the odds ratios, the most substantial decreases (indicating increases in the relative chances of the foreign-born population) took place in Denmark and Latvia. In Denmark, while in 2013 the native-born population had higher odds to attain higher education, the situation reversed by 2016. The opposite is true for Malta: while the foreign-born had higher chances before to obtain a higher education degree, now the native-born have the higher odds. Besides Malta, increases in the odds ratios of the native-born over the foreign-born increased the most in Estonia and Iceland.
5.2.1.3. Mature students

Having information on the share of the population obtaining their tertiary education degree in adulthood is also important for understanding the position of mature students in higher education. Figure 5.32 shows large variations among countries in this regard. Education systems with the largest proportions of adults (aged 30-64) attaining their tertiary degrees in adulthood are Switzerland and the Nordic countries (see also Figure 5.8 on the share of mature students in higher education). At the lower end of the scale, the share of adults getting higher education degrees in adulthood is very low in southern and eastern European countries, with percentages below 2 in Romania and Bulgaria.

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

<table>
<thead>
<tr>
<th></th>
<th>CH</th>
<th>IS</th>
<th>SE</th>
<th>NO</th>
<th>FI</th>
<th>DK</th>
<th>UK</th>
<th>IE</th>
<th>NL</th>
<th>LV</th>
<th>SI</th>
<th>DE</th>
<th>EE</th>
<th>AT</th>
<th>PT</th>
<th>CY</th>
<th>LU</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>17.2</td>
<td>17.1</td>
<td>12.4</td>
<td>:</td>
<td>11.2</td>
<td>12.2</td>
<td>9.4</td>
<td>9.8</td>
<td>9.5</td>
<td>9.8</td>
<td>8.1</td>
<td>7.0</td>
<td>6.8</td>
<td>5.7</td>
<td>5.5</td>
<td>4.7</td>
<td>6.2</td>
</tr>
<tr>
<td>2016</td>
<td>21.8</td>
<td>20.6</td>
<td>17.4</td>
<td>13.8</td>
<td>13.4</td>
<td>13.2</td>
<td>12.1</td>
<td>11.4</td>
<td>11.0</td>
<td>10.0</td>
<td>9.5</td>
<td>7.8</td>
<td>7.3</td>
<td>6.2</td>
<td>6.0</td>
<td>6.0</td>
<td>5.9</td>
</tr>
</tbody>
</table>

|       | LT | PL | ES | FR | MT | HU | IT | HR | TR | BE | SK | CZ | (*) | EL | RO | BG | EHEA |
|-------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| 2013  | 5.6 | 5.2 | 4.3 | 4.3 | 4.4 | 3.9 | 3.9 | 2.1 | 3.1 | 3.0 | 2.8 | 2.0 | 2.4 | 1.7 | 1.9 | 1.6 | 5.4 |
| 2016  | 5.8 | 5.3 | 5.3 | 4.7 | 4.4 | 4.4 | 4.0 | 3.9 | 3.7 | 3.4 | 2.8 | 2.6 | 2.4 | 2.3 | 1.9 | 1.8 | 5.8 |

Source: Eurostat, EU-LFS.

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

Figure 5.32 also illustrates well that the share of adults obtaining tertiary degrees in adulthood has stayed relatively stable between 2013 and 2016, with increases above 3 percentage points only in Iceland, Sweden and Switzerland.

5.2.2. Policies for improving completion

After examining the complex picture of attainment and completion in the EHEA, this section provides an overview on national policies aiming to improve higher education institutions’ performance in this regard. Specifically, this section of the report examines: 1) whether education authorities collect information at all about drop-out and completion in general, and that of particular groups of students in particular; 2) whether these authorities have set any targets/quantitative objectives to be achieved in terms of improving retention or completion among disadvantaged learners; 3) what kind of policy measures are introduced in order to reduce drop-out and enhance completion; 4) whether non-formal and informal learning can contribute to the completion of studies through recognition procedures; and finally 5) whether the completion performance of higher education institutions has financial consequences for the institutions themselves.
5.2.2.1. Monitoring drop-out and completion

Collecting information on students’ drop-out and completion is essential for understanding the main trends and the potential problems of disadvantaged learners. Monitoring is most often done through the calculation of completion and/or drop-out rates. While completion rates are calculated at the end of a given cycle, drop-out rates can be potentially followed up yearly for each cohort.

As depicted on Figure 5.33, completion and/or drop-out rates are calculated and monitored systematically in the majority of EHEA countries. Completion rates are calculated at the end of each cycle in most education systems, with only Moldova, Romania and the United Kingdom monitoring completion only after the first cycle. Drop-out rates are also systematically calculated in the majority of the countries at the end of each year. Nevertheless, nine countries (Iceland, Ireland, Italy, the Netherlands, Portugal, Spain, Sweden, Switzerland and the United Kingdom) measure drop-out rates only after the first year.

Figure 5.33: Systematic measurement of completion and/or drop-out rates, 2016/17

There are nine education systems (Albania, Belgium – French Community, Bosnia and Herzegovina, Cyprus, Greece, the Holy See, Liechtenstein, Malta and Slovakia) of the EHEA where neither completion nor drop-out rates are calculated or monitored systematically.

Since 2015, some countries have introduced the measurement of completion and drop-out rates or have improved access to such information. In the Czech Republic, since 2015, the Ministry of Education, Youth and Sports has been issuing a report on developments concerning drop-out rates in different study programmes based on aggregated data from the whole public higher education system. In Romania, the National Council for Financing Higher Education measures the drop-out rate systematically, based on data from the National Student Registry. In addition, in Estonia, Portugal and Slovenia, information portals providing data on completion and drop-out have been or are in the process of being set up.
Monitoring the completion/drop-out of under-represented groups is important in order to gain a picture on potential, specific problems related to the retention and completion of disadvantaged learners. While the majority of education systems monitor specific characteristics of students during their studies and at graduation (see Figure 5.10), only a minority of these systems actually calculate completion and/or drop-out rates for under-represented groups systematically (see Figure 5.33).

5.2.2.2. Quantitative objectives and targets

Since completion is an inherent part of the widening participation agenda, it is also important to examine whether EHEA countries have set measurable targets for the completion or attainment of under-represented groups in higher education. However, even fewer countries have set such targets for retention or completion than for access or participation.

Targets on the completion of specific groups of students exist for example in the Czech Republic. Here, the target set by the Strategic Plan for Higher Education Institutions 2016-2020 is that the proportion of graduates with no higher education background (thus with parents having no higher education degree) in bachelor study programmes should be close to their share among high school graduates (MSMT, 2015).

In the United Kingdom (Scotland), while no specific socio-economic groups are targeted, there is a 'national aspiration' regarding the retention of first-year students: the aim is that the proportion of full-time first year entrants returning to study in year two should increase to 91% by 2016-17 and 93% by 2019-20 (Scottish Funding Council, 2016). As the following section will show, paying attention to the retention of first-year students is particularly important in achieving higher completion rates.

5.2.2.3. Measures aiming to enhance retention and completion

How do education systems try to reduce drop-out and enhance retention and completion? This section discusses three important questions: first, how countries aim to improve the retention of first-year students, who are the most likely to drop out of higher education; second, how financial support frameworks provide incentives for students to finalise their studies on time, and finally, what kind of targeted measures exist that pay specific attention to students from under-represented groups.

1) Improving the retention of first-year students

Research indicates that drop-out rates are the highest at the end of the first academic year. First-year students are particularly vulnerable to dropping out of higher education, since their expectations might be very different from what they actually encounter. Such mismatch can stem from the wrong choice of courses or study programme as well as the feeling of helplessness and failure at the start of higher education studies. For this reason, paying attention to newly admitted students’ experiences and skills development is of particular importance.

The majority of EHEA countries have developed national policies or have higher education institutions focusing specifically on the retention of first-year students (see Figure 5.34). Nevertheless, having national measures in this area is less common: they exist only in 14 education systems. Certainly, education systems depicted as having national measures or institutional practices targeting first-year students might have additional national measures on enhancing the retention or completion of students in general; however, the figure aims to capture the targeted nature of existing measures focusing specifically on first-year students. Accordingly, the 11 education systems depicted as having only general measures on student retention do not focus on first-year students specifically, neither at national nor at institutional level (or in the latter case, no information is available regarding the institutional level).
The three most common measures helping first-year students in adjusting to the new learning environment in higher education institutions are tutoring or mentoring programmes (by fellow students or by academic staff; they exist in 30 education systems), introductory or insertion courses (typically taking place at the beginning of the academic year; they are applied in 29 education systems), and support provided to students to acquire learning and/or organisational skills (through specific courses or individual support, in 24 systems).

Figure 5.35 shows the application of these main measures. It depicts national measures or institutional practices if they target first-year students specifically; general measures of the same nature are not taken into consideration. So for example, Luxembourg is depicted as applying one measure out of the three (tutoring), because their learning support measures are targeting all learners in general.

As the figure illustrates, slightly more than one third of the education systems report all three of the above measures. Eight education systems report two measures: these are most commonly tutoring or mentoring programmes in combination with insertion courses or learning support. Seven countries report having only one measure: these are introductory or insertion courses in Bulgaria, Belarus, Poland and Russia, tutoring or mentoring programmes in Greece and Luxembourg and learning support in Turkey. Fifteen countries have no centrally available information about the application of the above measures.
2) Motivating students to finish their studies within a defined time-frame

A common way of trying to improve completion rates is to give incentives for students to finish their studies within a limited period of time. Here, the challenge for top-level authorities is to offer flexibility to students in their study progression, but at the same time make sure that they actually complete their studies within a reasonable timeframe.

As Figure 5.36 shows, non-completion has financial consequences for students in the large majority of EHEA countries. Most commonly, steering documents define the number of (ECTS) credits students are expected to complete per semester and/or year. Usually, the expected number corresponds either to 30 credits per semester or to 60 credits per year (or both). Besides – or in some cases even in the absence of – defining a common expectation, regulations may also refer to the minimum number of credits which need to be completed by students in order to keep their financial support or to avoid paying (higher) fees. This minimum may or may not correspond to the expected number. For example, in Denmark, all study programmes have an overall frame of 60 ECTS credits per year, but alongside this general frame, higher education institutions can determine that students must complete up to 45 credits. Similarly, in Serbia, students can accumulate up to 60 ECTS credits per year, the minimum for those in state-funded places being set to 48 ECTS credits. Croatia developed a whole scale of consequences for the non-completion of credits: students are required to complete 18 ECTS in the previous year of study in order to have the right to subsidised meals; 40 ECTS per year in order to have the right to subsidised accommodation; and 45 ECTS per year to be eligible for a state scholarship. Students failing to complete at least 55 ECTS credits per year are required to co-finance their tuition fee. In Spain, while there is no expected minimum number of credits defined in general, students who would like to receive a grant need to complete a minimum of 30 ECTS credits per year.
Figure 5.36: Financial consequences for students who do not complete an expected minimum number of ECTS and/or their degree within a defined period of time, 2016/17

![Map showing financial consequences for students who do not complete their degree.](image)

Source: BFUG data collection.

Notes:

Most commonly, such financial consequences of non-completion can be that students lose their grants or have to pay (higher) fees (see Figure 5.37).

In most education systems where students have to complete a given number of credits per semester/year, non-completion already has consequences in the following academic year. Nevertheless, a few countries do allow for some flexibility: for example, in the Netherlands, students are given more than one extra year to complete the requirements without (financial) consequences. In addition, not all higher education institutions follow the same practice in every education system. While the non-completion of credits can be binding in some countries, in others, higher education institutions are given an option whether to use financial sanctions or not.

In the Flemish Community of Belgium, the financial consequences of non-completion are determined based on a system of 'learning accounts' (leerkrediet). This system is somewhat different from those based on the non-completion of a minimum number of credits, but was nevertheless placed in this category given its emphasis on credit-accumulation instead of looking at the completion of a degree. In this system, when starting a higher education programme in the first or second cycle, students receive an initial learning account of 140 credits. The number of credits for which the student registers (typically 60 credits per year) is subtracted from the account; students then earn back the credits they pass and lose those they fail. For students with a negative learning account, universities can refuse their registration at the beginning of the academic year or can ask for an increased tuition fee from them.

Besides defining the number of credits to be completed, steering documents can also stipulate the period of time within which students are expected to complete their degree. This exists in slightly more than half of all EHEA systems (see also Figure 5.36). In most of these systems, the non-completion of a degree within a defined time-frame entails financial consequences for students.
The most common financial consequence for students of not completing the number of expected credits or a degree within a given period of time is the loss of a public grant (occurs in 25 and 16 systems respectively; see Figure 5.37). It is followed by the requirement to pay a (higher) fee (17 and 13 systems), loss of a publicly subsidised loan (nine and five systems) and other financial consequences (six systems each). The latter category includes, for instance, the loss of publicly subsidised accommodation (Croatia, Montenegro and Serbia) or publicly subsidised meals (Croatia and Serbia). The reduction of public grants or publicly subsidised loans is a rather uncommon consequence, reported only by Cyprus and Ireland (grants) and Iceland (loans) as the result of the non-completion of credits.

Figure 5.37: Number of higher education systems reporting different financial consequences for students who do not complete the expected minimum number of ECTS and/or their degree within a defined period of time, 2016/17

<table>
<thead>
<tr>
<th>Financial consequences for not completing the expected minimum number of credits per semester/year</th>
<th>Financial consequences for not completing a degree within a defined period of time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loss of public grants</td>
<td>25</td>
</tr>
<tr>
<td>Reduction of public grants</td>
<td>16</td>
</tr>
<tr>
<td>Loss of publicly subsidised loans</td>
<td>6</td>
</tr>
<tr>
<td>Reduction of publicly subsidised loans</td>
<td>5</td>
</tr>
<tr>
<td>Requirement to pay a (higher) fee</td>
<td>17</td>
</tr>
<tr>
<td>Other financial consequences</td>
<td>6</td>
</tr>
</tbody>
</table>

Source: BFUG data collection.

Notes:
The figure is based on data supplied by 50 higher education systems.

3) Improving the retention and completion of disadvantaged learners

The previous two sub-sections presented measures aiming to improve completion rates for all students regardless of their gender, socio-economic background or other characteristics. Nevertheless, since non-completion is a particularly significant issue for students from under-represented groups, it is also important to examine whether education systems have developed targeted measures to improve the completion performance of disadvantaged learners.

The most common form of targeted support is the learning support provided for students with disabilities, which exists in most EHEA education systems. However, when it comes to targeted measures addressing drop-out and non-completion specifically, much fewer countries appear to have put related policies in place. It largely depends on higher education institutions themselves to pay particular attention to the retention and completion of disadvantaged learners.

Nevertheless, some education systems do provide support or incentives for higher education institutions in this endeavour. In Azerbaijan, the Ministry of Education provides technical and academic support to higher education institutions to establish special centres for students with disabilities providing psychological as well as academic support. Similarly, in Bosnia and Herzegovina, support centres for students with disabilities have been established in all higher education institutions through a Tempus project. In Poland and Sweden, higher education institutions also receive specific financial support that they can only use for providing learning support as well as guidance and mentoring for students with disabilities. Romanian authorities finance support measures for first-year students, especially for those at risk (students coming from rural areas or from low income families, Roma
students, students with disabilities, etc.). An indirect financial incentive exists in the Flemish Community of Belgium: students receiving need-based grants as well as some students with disabilities are given additional weight in the funding formula used to determine the operational budget of higher education institutions.

Specific mentoring programmes exist in Hungary and in the Netherlands. In Hungary, the HÖOK (National Student Organisation) Mentoring Programme is designed to assist those first-year students, who – because of their social circumstances – enter the higher education system with disadvantages. Candidate students are supported by a personal assistant for one academic year. In the Netherlands, top-level authorities support and encourage ‘Giving Back’ projects in which students from under-represented groups mentor other students from under-represented groups as role-models in order to improve retention among these groups of students (‘Students-4-Students’ campaign).

Quality indicators related to the retention or completion of disadvantaged learners have been developed in France, Romania and the United Kingdom (England). In France, these indicators include the share of under-represented students at each higher education level, as well as the rate of completion for need-based grant holders as compared to other students. In Romania, an additional funding allocation method, implemented from 2016, includes a set of quality indicators on social equity, aiming to stimulate universities to carry out student support actions. For piloting, an indicator has been proposed based on the completion rate of students with low socio-economic background. In the United Kingdom (England), Access Agreements include measures on retention, completion and attainment.

In Denmark, while there are no targeted measures focusing on students from under-represented groups, higher education institutions are required to offer ‘special guidance’ to students who are identified as ‘likely to drop out’, i.e. students who are delayed in their studies compared to the rated study time. Similarly, in Cyprus, higher education institutions are encouraged to provide special support to students with learning difficulties or with psychological problems in order to complete their studies. These mechanisms still identify at-risk groups, though indirectly.

5.2.2.4. Recognition of prior learning for progression in higher education studies

The recognition of prior non-formal and informal learning is not only an important instrument for widening access. If prior non-formal and informal activities are recognised by higher education institutions as parts of study programmes (in the form of credits, for example), these procedures can also help students completing their studies.

As Figure 5.38 depicts, prior non-formal and informal learning can be recognised towards the fulfilment of a higher education study programme in the majority of EHEA countries. In most education systems this is made possible by a top-level framework: laws, regulations, guidelines or policies oblige or guide higher education institutions in establishing the relevant recognition procedures. Nevertheless, such top-level frameworks do not exist everywhere: in six higher education systems, higher education institutions have recognition procedures in place without the presence of a top-level framework.
There are differences in the extent to which non-formal and informal learning can contribute to the fulfilment of a higher education study programme. In education systems where top-level steering documents define the extent of possible recognition, such procedures can most often only lead to a limited number of credits (see Figure 5.39).

Yet, there are large variations among education systems regarding such limitations. Some countries specify the maximum number of credits – for example 10 (in Liechtenstein) or 12 ECTS (in Italy) – that can be awarded on the basis of prior learning within a higher education programme. Others define the maximum amount of credits to be gained as a proportion of all credits necessary to complete a higher education programme. For example, in Portugal, one third of all credits can be gained through recognition procedures within a cycle; in Germany and Poland, this proportion is 50 %. Another group of countries do not specify the upper limit in the number of credits gained, but define parts of the study programme that have to be fulfilled without the recognition of prior learning – thus for which recognition procedures do not apply. For example, in the French Community of Belgium, 60 ECTS have to be acquired via a regular programme of studies; and in Estonia, the final thesis cannot be awarded on the basis of the recognition of prior learning.

A relatively small group of countries do not apply any limitations in the extent of possible recognition. This means that in these countries – in the Flemish Community of Belgium, Denmark, France, Luxembourg, the Netherlands and Russia – the recognition of prior learning can – at least theoretically – lead to a complete award of a higher education degree. However, in the absence of top-level monitoring, in most systems there is no available information on whether in practice degrees are issued solely based on the recognition of prior non-formal and informal learning.
Scorecard indicator n°10 on Figure 5.40 summarises information on the recognition of prior learning for both access and the progression in studies. As the figure depicts, there are only five education systems (Belgium – Flemish Community, Denmark, Finland, France and the Netherlands) in the dark green category, thus fulfilling all the requirements of the scorecard indicator. In these five systems, there are nationally established and regularly monitored procedures, guidelines or policy for the assessment and recognition of prior learning as a basis for both accessing higher education programmes and the allocation of credits towards a qualification (108).

Twelve education systems are in the light green category. In these cases, two possibilities exist. First, there could be nationally established procedures, guidelines or policy for the recognition of prior learning as a basis for both accessing higher education programmes and the allocation of credits towards a qualification, but these procedures are not monitored regularly. This is the case in Germany, Norway and Portugal (where the procedures for the recognition of prior learning for progression are not monitored), and the French Community of Belgium, Liechtenstein, Luxembourg, Spain, Sweden and the United Kingdom (with no central level monitoring). Second, there could be nationally established and regularly monitored procedures, guidelines or policy for the recognition of prior learning as a basis for either accessing higher education programmes or the allocation of credits towards a qualification, but not for both. This is the case in Austria (with a recognition framework only for accessing higher education programmes) and Estonia (with a recognition framework only for progression in studies).

(108) For definitions, see the Glossary and Methodological Notes.
Scorecard categories

- Green: There are nationally established procedures, guidelines or policy for assessment and recognition of prior learning as a basis for 1) access to higher education programmes, and 2) allocation of credits towards a qualification and/or exemption from some programme requirements, AND these procedures are monitored regularly by top-level authorities.

- Yellow: There are nationally established procedures, guidelines or policy for assessment and recognition of prior learning as a basis for 1) access to higher education programmes, and 2) allocation of credits towards a qualification and/or exemption from some programme requirements, BUT these procedures are not monitored regularly by top-level authorities. OR There are nationally established procedures, guidelines or policy EITHER for 1) OR for 2) (see above), AND these procedures are monitored regularly by top-level authorities.

- Orange: There are no specific procedures/national guidelines or policy for assessment of prior learning, but procedures for recognition of prior learning are in operation at some higher education institutions or study programmes.

- Red: No procedures for recognition of prior learning are in place EITHER at the national OR at institutional/programme level.

- White: Data not available

Notes:
Categories of the scorecard indicator have been modified since the 2015 Bologna Process Implementation Report, most importantly related to monitoring. On related definitions, see the Glossary and Methodological Notes.

The yellow category comprises education systems where there are nationally established procedures, guidelines or policy for the recognition of prior learning as a basis for either accessing higher education programmes or the allocation of credits towards a qualification, but not for both, and these procedures are not monitored regularly. This is the case in ten education systems (Hungary, Iceland, Ireland, Italy, Lithuania, Latvia, Montenegro, Poland, Russia and Switzerland); all with a framework for the recognition of prior learning for progression in studies only.

In the three education systems in the orange category, recognition procedures are in operation in higher education institutions without nationally established procedures. This is the situation in Andorra.
and Slovenia (for the recognition of prior learning for progression in studies), and in Malta (for the recognition of prior learning for both access and progression in studies).

Finally, in 19 education systems, no procedures for the recognition of prior learning are in place either at the national or at institutional/programme level. This picture looks more discouraging than the one presented in the 2015 Bologna Process Implementation Report. Yet, this does not signify that fewer countries have recognition procedures than before; it is rather that there is now a clearer understanding of what the recognition of prior non-formal and informal learning means and what kind of procedures should be in place (or are lacking) for recognition to work in practice.

### 5.2.2.5. Incentives for higher education institutions to reduce drop-out and improve completion rates

Despite the presence of various tools that can help higher education institutions to reduce student drop-out and improve completion rates, in most cases, institutions have autonomy in deciding whether they make use of such tools and measures. Nevertheless, top-level authorities can provide incentives to higher education institutions to make use of the available possibilities to improve student retention and completion. Financial incentives are the most straightforward: in this case, retention and/or completion rates are parts of a funding formula or are taken into account in performance agreements or other performance-based mechanisms.

Figure 5.41 depicts such financial incentives in EHEA countries. As the figure shows, in about one third of the EHEA countries, higher education institutions’ performance influences the institutions’ funding, either through a funding formula, or through performance-based mechanisms.

The financial consequences of students’ non-completion are closely related to mechanisms through which institutions are funded. In several systems, higher education institutions receive per capita funding only during a defined period of time, meaning that students extending their studies are not financed from the state budget. For example, in Germany, in some Länder, the global budget of higher education institutions partly depends on the number of students finishing their study within the Regelstudienzeit, i.e. a standard period of study. In the Netherlands, when a student exceeds the expected period of time for finishing a degree, the extra years are not financed by the government. A comparable situation can be observed in Slovakia, where students who exceed the standard length of study are no longer considered in the calculation of the subsidy for public higher education institutions.

Or else, state funding can also depend on the number of credits achieved by students. In Norway, for instance, public subsidies for higher education institutions are partly calculated on the basis of credits. One important part of these criteria is the number of 60 ECTS credits obtained (studiepoeng). This means that institutions where students succeed are rewarded financially, whereas institutions where students succeed less well get less funding on this specific criterion. Similarly, in Denmark, a substantial part of the state subsidies to higher education institutions is granted on the basis of the extent of passed study elements. Consequently, there is a general financial effect for institutions when students pass fewer elements than stipulated. In Croatia, the ministry calculates subsidies for higher education institutions based on the number of full-time students, in particular those students that enrol to the first year of study for the first time, and students that have completed at least 55 ECTS in the previous year of study. It follows that the completion of the above number of ECTS credits has an impact on the amount of funding. In Italy, the proportion of students completing the number of credits planned for the year is an indicator of the quality of teaching and it is used to allocate funding. In Russia, students’ non-completion of the required minimum number of credits is reflected in the monitoring of institutional effectiveness, which, in turn, influences the amount of funding provided from the state budget.
The situation depicted on Figure 5.41 is largely similar to that presented in the 2015 Bologna Process Implementation Report. Nevertheless, some education systems have adopted some form of performance-based funding since 2015. In Bulgaria, since 2016, the lower the completion rate, the lower is the number of students whose training is to be funded by the state. In Switzerland, after 12 semesters (14 semesters for medicine) without completion, students no longer count for national funding. In the Czech Republic, completion performance accounts for 15% of the whole performance-based allocation, which is 10% of total funding. In the United Kingdom (Scotland), the completion rate is part of the institutional performance to be evaluated against the Scottish Funding Council’s targets.

Figure 5.41: Impact of completion performance on higher education institutions’ funding, 2016/17

Source: BFUG data collection.

Notes:
For definitions, see the Glossary and Methodological Notes.
Cyprus is currently in the process of implementing a funding formula which will take completion rates into account.

5.2.2.6. Improving student retention and completion: summary of main measures supporting disadvantaged learners

Figure 5.42 summarises the measures supporting the retention and completion of disadvantaged learners in the form of a scorecard indicator. This composite indicator includes elements on 1) monitoring the composition of the student body during studies and at graduation, 2) quantitative objectives for the attainment/completion of students from under-represented groups, 3) general measures aiming to improve completion rates, as well as 4) targeted measures aiming to improve the completion of disadvantaged learners specifically.

In line with Bologna commitments, most of these elements require a specific focus on vulnerable or under-represented groups. While general policy measures may also enhance the retention or completion of disadvantaged learners (hence their inclusion 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 5.42: Scorecard indicator n°11: Measures to support the retention and completion of students from under-represented groups, 2016/17

Scorecard categories

- Monitoring the composition of the student body based on gender and at least one other under-represented category during studies and at graduation;
- Longer-term quantitative policy objectives for the attainment/completion of students from under-represented groups;
- Top-level measures targeting the retention of students and/or financial incentives for HEIs to improve completion rates;
- Top-level measures targeting the completion of students from under-represented groups specifically.

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.
Data not available.

As the figure illustrates, measures supporting the retention and completion of students from under-represented groups are much less common than measures supporting these groups to enter higher education. There is no education system implementing all types of the listed measures, and only 11 education systems (Azerbaijan, Belgium – Flemish Community, the Czech Republic, Cyprus, Denmark, France, the Netherlands, Poland, Sweden and the education systems of the United Kingdom) undertake three types of support measures out of the four. Most education systems are in the yellow category, thus implementing two support measures targeting the retention or completion of disadvantaged learners. Another 10 education systems implement one type of measure out of the four, therefore are placed in the orange category. Nevertheless, there are only two education systems (Albania and Georgia) not providing top-level support for the completion of under-represented groups in any of the areas analysed in this section.
5.3. Conclusions

The social dimension of higher education has been high on the agenda of the Bologna Process since the 2001 Prague Communiqué (109). And rightly so: 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 still 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. And yet, despite evidence of these trends over a number of years, only a few countries have introduced measures in recent years to improve the conditions for under-represented groups to access and complete higher education.

An area of particular concern is the recognition of prior non-formal and informal learning, both for facilitating alternative access routes to higher education, and enabling non-formal and informal learning to be recognised and credited during studies. Despite being emphasised again as an important tool by the Yerevan Communiqué (110), no education system has taken concrete action to introduce a new top-level framework for the recognition of prior learning since the 2015 Ministerial Conference.

In addition, a comparison of scorecard indicators n°9 and 11 reveals a much weaker policy focus on one of the key aspects of widening participation: enhancing the retention and completion of students from under-represented groups. Only a handful of countries have been relatively active in both areas, while the general picture is one of policy neglect.

Nevertheless, there have also been important developments in the analysed period, notably in the introduction of monitoring tools, development of performance indicators (which might even influence higher education institutions' funding), and the introduction of longer-term quantitative objectives and targets. While higher education authorities recognise the autonomy of higher education institutions, in an increasing number of countries, they are developing systems through which they can provide incentives to higher education institutions to improve the access and completion of students from under-represented groups. In some countries, systems of performance indicators and agreements have been put in place; top-level objectives have been set; and monitoring systems have been introduced. However, in most others, there is still a lot of room for improvement.

---


GLOSSARY AND METHODOLOGICAL NOTES

I. Codes, abbreviations and acronyms

I.1. Country Codes

<table>
<thead>
<tr>
<th>Code</th>
<th>Country</th>
</tr>
</thead>
<tbody>
<tr>
<td>AD</td>
<td>Andorra</td>
</tr>
<tr>
<td>AL</td>
<td>Albania</td>
</tr>
<tr>
<td>AM</td>
<td>Armenia</td>
</tr>
<tr>
<td>AT</td>
<td>Austria</td>
</tr>
<tr>
<td>AZ</td>
<td>Azerbaijan</td>
</tr>
<tr>
<td>BA</td>
<td>Bosnia and Herzegovina</td>
</tr>
<tr>
<td>BE de</td>
<td>Belgium – German-speaking Community</td>
</tr>
<tr>
<td>BE fr</td>
<td>Belgium – French Community</td>
</tr>
<tr>
<td>BE nl</td>
<td>Belgium – Flemish Community</td>
</tr>
<tr>
<td>BG</td>
<td>Bulgaria</td>
</tr>
<tr>
<td>BY</td>
<td>Belarus</td>
</tr>
<tr>
<td>CH</td>
<td>Switzerland</td>
</tr>
<tr>
<td>CY</td>
<td>Cyprus</td>
</tr>
<tr>
<td>CZ</td>
<td>Czech Republic</td>
</tr>
<tr>
<td>DE</td>
<td>Germany</td>
</tr>
<tr>
<td>DK</td>
<td>Denmark</td>
</tr>
<tr>
<td>EE</td>
<td>Estonia</td>
</tr>
<tr>
<td>EL</td>
<td>Greece</td>
</tr>
<tr>
<td>ES</td>
<td>Spain</td>
</tr>
<tr>
<td>FI</td>
<td>Finland</td>
</tr>
<tr>
<td>FR</td>
<td>France</td>
</tr>
<tr>
<td>GE</td>
<td>Georgia</td>
</tr>
<tr>
<td>HR</td>
<td>Croatia</td>
</tr>
<tr>
<td>HU</td>
<td>Hungary</td>
</tr>
<tr>
<td>IE</td>
<td>Ireland</td>
</tr>
<tr>
<td>IS</td>
<td>Iceland</td>
</tr>
<tr>
<td>IT</td>
<td>Italy</td>
</tr>
<tr>
<td>KZ</td>
<td>Kazakhstan</td>
</tr>
<tr>
<td>LI</td>
<td>Liechtenstein</td>
</tr>
<tr>
<td>LT</td>
<td>Lithuania</td>
</tr>
<tr>
<td>LU</td>
<td>Luxembourg</td>
</tr>
<tr>
<td>LV</td>
<td>Latvia</td>
</tr>
<tr>
<td>MD</td>
<td>Moldova</td>
</tr>
<tr>
<td>ME</td>
<td>Montenegro</td>
</tr>
<tr>
<td>MT</td>
<td>Malta</td>
</tr>
<tr>
<td>NL</td>
<td>Netherlands</td>
</tr>
<tr>
<td>NO</td>
<td>Norway</td>
</tr>
<tr>
<td>PL</td>
<td>Poland</td>
</tr>
<tr>
<td>PT</td>
<td>Portugal</td>
</tr>
<tr>
<td>RO</td>
<td>Romania</td>
</tr>
<tr>
<td>RS</td>
<td>Serbia</td>
</tr>
<tr>
<td>RU</td>
<td>Russia</td>
</tr>
<tr>
<td>SE</td>
<td>Sweden</td>
</tr>
<tr>
<td>SI</td>
<td>Slovenia</td>
</tr>
<tr>
<td>SK</td>
<td>Slovakia</td>
</tr>
<tr>
<td>(*)</td>
<td>The former Yugoslav Republic of Macedonia (Provisional code)</td>
</tr>
<tr>
<td>TR</td>
<td>Turkey</td>
</tr>
<tr>
<td>UA</td>
<td>Ukraine</td>
</tr>
<tr>
<td>UK-ENG</td>
<td>United Kingdom – England</td>
</tr>
<tr>
<td>UK-NIR</td>
<td>United Kingdom – Northern Ireland</td>
</tr>
<tr>
<td>UK-SCT</td>
<td>United Kingdom – Scotland</td>
</tr>
<tr>
<td>UK-WLS</td>
<td>United Kingdom – Wales</td>
</tr>
<tr>
<td>VA</td>
<td>Holy See</td>
</tr>
</tbody>
</table>
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.

---


**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.

---


**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.

---

**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).

---

**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

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-US, 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...
numeracy). 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:

4. Legislators, senior officials and managers
5. Professionals
6. Technicians and associate professionals
7. Clerks
8. Service workers and shop and market sales workers
9. Skilled agricultural and fishery workers
10. Craft and related trades workers
11. Plant and machine operators and assemblers
12. Elementary occupations
13. 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.

---

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_
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 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.

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 Albania 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 ancillary 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, Bosnia and Herzegovina, Belarus, 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, Russia, 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 ancillary 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, Denmark, Georgia, Greece, Kazakhstan, Liechtenstein, the former Yugoslav Republic of Macedonia, Moldova, Montenegro, Russia, 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.
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 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, [edu_c_enrl1ad] and [edu_u_eu_entr01] 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 stud' 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 % (and 30 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_ent02] 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

**Coverage:** No data for Greece and the United Kingdom (England, Wales and Northern Ireland).

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

**Data source:** EQAR/Eurydice survey to BFUG members, 2017.

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 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 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, 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, 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, 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, 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, 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.

Information and communication technologies: 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, 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, 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.

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,
Arts and humanities: Albania, Austria, Azerbaijan, Belgium, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Georgia, Germany, 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 Yugoslav 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 Yugoslav 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 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, 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, 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.

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, Moldova, the Netherlands, Norway, Poland, Portugal, Romania, Russia, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey, Ukraine, the United Kingdom.

Services: Austria, Albania, Azerbaijan, Belgium, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Georgia, Germany, Hungary, Iceland, 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.

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

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, Austria, Germany, Ireland, Italy, Latvia, Lithuania, Malta, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey, Ukraine, the United Kingdom.

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

Croatia, Latvia, the former Yugoslav Republic of Macedonia, Poland and Slovenia: Not reliable 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.
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 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: Malta. Too few cases: Albania.

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 month) 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 irregular 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.

**Cyprus**: 2008 - 2011: Including financial aid to students studying abroad.

**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.

**Romania**: 2008: data not available. The data published in the 2015 Bologna Implementation Report has been removed from the Eurostat database.

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

**Spain**: 2008: 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 '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, Italy, Latvia, Lithuania, the former Yugoslav Republic of Macedonia, Malta, the Netherlands, Norway, 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, Greece, Hungary, Italy, Latvia, Lithuania, the former Yugoslav Republic of Macedonia, Malta, the Netherlands, Norway, 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, Ireland, Iceland, Italy, Latvia, Lithuania, Luxembourg, the former Yugoslav Republic of Macedonia, Malta, the Netherlands, Norway, 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, 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, Lithuania, Latvia, the former Yugoslav Republic of Macedonia, the Netherlands, Norway, Poland, Portugal, Romania, Sweden, Slovakia, Slovenia, 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, Norway, Poland, Romania, 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, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey, the United Kingdom.
Services: Austria, Belgium, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Iceland, 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
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

Albania, Andorra, Armenia, Azerbaijan, Bosnia and Herzegovina, Bulgaria, the Czech Republic, Greece, France, 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.

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

Figure 7.11: 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: 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 7.12: 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: 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 7.13: 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: The criteria used to define mobile graduated students is the citizenship.

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.

Figure 7.14: 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: The criteria used to define mobile graduated students is the citizenship.

Albania Andorra, Armenia, Azerbaijan, Belarus, Bulgaria, France, Georgia, Iceland, Liechtenstein, Lithuania, 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.

Figure 7.15: 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: 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 7.16: 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

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 7.17: 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.
REFERENCES


European Commission, 2017a. Study to support the revision of the diploma supplement and analyse the feasibility of its digitalisation at European level. Luxembourg: Publications Office of the European Union.


ACKNOWLEDGEMENTS

BFUG Reporting Working Group Co-Chairs

Tone Flood Strøm
Andrejs Rauhvargers
David Crosier

Authors

David Crosier, Ralitsa Donkova, Anna Horvath, Daniela Kocanova, Anita Kremo, Teodora Parveva, Jari Riiheläinen,

with the contribution of
Benedikte Custers and Cornelia Racké

Layout and graphics

Patrice Brel

Editing

Gisèle De Lel
<table>
<thead>
<tr>
<th>BFUG CONTACTS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Albania</strong></td>
</tr>
<tr>
<td>Linda Pustina</td>
</tr>
<tr>
<td><strong>Andorra</strong></td>
</tr>
<tr>
<td>Mar Martínez</td>
</tr>
<tr>
<td><strong>Armenia</strong></td>
</tr>
<tr>
<td>Gayane Harutyunyan</td>
</tr>
<tr>
<td><strong>Austria</strong></td>
</tr>
<tr>
<td>Gottfried Bacher</td>
</tr>
<tr>
<td>Stephan Dulmovits</td>
</tr>
<tr>
<td><strong>Azerbaijan</strong></td>
</tr>
<tr>
<td>Shahin Bayramov</td>
</tr>
<tr>
<td><strong>Belarus</strong></td>
</tr>
<tr>
<td>Igor Titovich</td>
</tr>
<tr>
<td><strong>Belgium/Flemish Community</strong></td>
</tr>
<tr>
<td>Magalie Soenen</td>
</tr>
<tr>
<td>Noel Vercruysse</td>
</tr>
<tr>
<td><strong>Belgium/French Community</strong></td>
</tr>
<tr>
<td>Caroline Hollela</td>
</tr>
<tr>
<td><strong>Bosnia and Herzegovina</strong></td>
</tr>
<tr>
<td>Aida Duric</td>
</tr>
<tr>
<td>Petar Marić</td>
</tr>
<tr>
<td><strong>Bulgaria</strong></td>
</tr>
<tr>
<td>Ivana Radonova</td>
</tr>
<tr>
<td><strong>Business Europe</strong></td>
</tr>
<tr>
<td>Irene Seling</td>
</tr>
<tr>
<td><strong>Croatia</strong></td>
</tr>
<tr>
<td>Ana Tecilazić Goršić</td>
</tr>
<tr>
<td><strong>Cyprus</strong></td>
</tr>
<tr>
<td>Andreas Papoulas</td>
</tr>
<tr>
<td><strong>Czech Republic</strong></td>
</tr>
<tr>
<td>Zuzana Poláková</td>
</tr>
<tr>
<td><strong>Denmark</strong></td>
</tr>
<tr>
<td>Jonas Husum Johannesen</td>
</tr>
<tr>
<td><strong>Estonia</strong></td>
</tr>
<tr>
<td>Janne Pukk</td>
</tr>
<tr>
<td><strong>Education International</strong></td>
</tr>
<tr>
<td>Andreas Keller</td>
</tr>
<tr>
<td><strong>European Commission</strong></td>
</tr>
<tr>
<td>Klara Engels-Perenyi</td>
</tr>
<tr>
<td><strong>European Association for Quality Assurance in Higher Education (ENQA)</strong></td>
</tr>
<tr>
<td>Maria Kelo</td>
</tr>
<tr>
<td><strong>European Quality Assurance Register (EQAR)</strong></td>
</tr>
<tr>
<td>Colin Tück</td>
</tr>
<tr>
<td><strong>European Students Union (ESU)</strong></td>
</tr>
<tr>
<td>Caroline Sundberg</td>
</tr>
<tr>
<td><strong>European University Association (EUA)</strong></td>
</tr>
<tr>
<td>Michael Gaebel</td>
</tr>
<tr>
<td>Henriette Stoebbe</td>
</tr>
<tr>
<td><strong>European Association of Institutions in Higher Education (EURASHE)</strong></td>
</tr>
<tr>
<td>Michal Karpisek</td>
</tr>
<tr>
<td><strong>Sogeti</strong></td>
</tr>
<tr>
<td>Florian Pallaro</td>
</tr>
<tr>
<td><strong>EUROSTUDENT</strong></td>
</tr>
<tr>
<td>Kristina Hauschildt</td>
</tr>
<tr>
<td><strong>Finland</strong></td>
</tr>
<tr>
<td>Maija Innola</td>
</tr>
<tr>
<td><strong>The former Yugoslav Republic of Macedonia</strong></td>
</tr>
<tr>
<td>Borcho Aleksov</td>
</tr>
<tr>
<td><strong>France</strong></td>
</tr>
<tr>
<td>Hélène Lagier</td>
</tr>
<tr>
<td><strong>Georgia</strong></td>
</tr>
<tr>
<td>Tamar Sanikidze</td>
</tr>
<tr>
<td>Maia Margvelashvili</td>
</tr>
<tr>
<td><strong>Germany</strong></td>
</tr>
<tr>
<td>Peter Greisler</td>
</tr>
<tr>
<td><strong>Greece</strong></td>
</tr>
<tr>
<td>Panagiota Dionysopoulou</td>
</tr>
<tr>
<td><strong>Holy See</strong></td>
</tr>
<tr>
<td>Friedrich Bechina</td>
</tr>
<tr>
<td><strong>Hungary</strong></td>
</tr>
<tr>
<td>János Görföl</td>
</tr>
<tr>
<td>Ernő Keszei</td>
</tr>
<tr>
<td><strong>Iceland</strong></td>
</tr>
<tr>
<td>Una Vidarsdottir</td>
</tr>
<tr>
<td><strong>Ireland</strong></td>
</tr>
<tr>
<td>Joseph Gleeson</td>
</tr>
<tr>
<td><strong>Italy</strong></td>
</tr>
<tr>
<td>Paola Castellucci</td>
</tr>
<tr>
<td><strong>Kazakhstan</strong></td>
</tr>
<tr>
<td>Yekaterina Boiko</td>
</tr>
<tr>
<td><strong>Latvia</strong></td>
</tr>
<tr>
<td>Daiga Ivsina</td>
</tr>
<tr>
<td>Andrejs Rauhvargers</td>
</tr>
<tr>
<td><strong>Liechtenstein</strong></td>
</tr>
<tr>
<td>Daniel Miescher</td>
</tr>
<tr>
<td><strong>Lithuania</strong></td>
</tr>
<tr>
<td>Eglė Remesienė</td>
</tr>
<tr>
<td>Laura Stračinskienė</td>
</tr>
<tr>
<td><strong>Luxembourg</strong></td>
</tr>
<tr>
<td>Corinne Kox</td>
</tr>
<tr>
<td><strong>Malta</strong></td>
</tr>
<tr>
<td>Tanya Sammut-Bonnici</td>
</tr>
<tr>
<td><strong>Moldova</strong></td>
</tr>
<tr>
<td>Nadejda Velisco</td>
</tr>
<tr>
<td><strong>Montenegro</strong></td>
</tr>
<tr>
<td>Mubera Kurpejović</td>
</tr>
<tr>
<td>Biljana Mišović</td>
</tr>
<tr>
<td><strong>The Netherlands</strong></td>
</tr>
<tr>
<td>Tessa Bijvank</td>
</tr>
<tr>
<td><strong>Norway</strong></td>
</tr>
<tr>
<td>Tone Flood Strøm</td>
</tr>
<tr>
<td><strong>Poland</strong></td>
</tr>
<tr>
<td>Bartlomiej Banaszak</td>
</tr>
<tr>
<td><strong>Portugal</strong></td>
</tr>
<tr>
<td>Ana Mateus</td>
</tr>
<tr>
<td><strong>Romania</strong></td>
</tr>
<tr>
<td>Cezar Haj</td>
</tr>
<tr>
<td>Antonela Toma</td>
</tr>
<tr>
<td>Cristina Ghitulică</td>
</tr>
<tr>
<td><strong>Russian Federation</strong></td>
</tr>
<tr>
<td>Nadezda Kamynina</td>
</tr>
<tr>
<td><strong>Serbia</strong></td>
</tr>
<tr>
<td>Katarina Jocić</td>
</tr>
<tr>
<td><strong>Slovak Republic</strong></td>
</tr>
<tr>
<td>Jozef Jurkovič</td>
</tr>
<tr>
<td><strong>Slovenia</strong></td>
</tr>
<tr>
<td>Erika Rustija</td>
</tr>
<tr>
<td>Country</td>
</tr>
<tr>
<td>---------------------</td>
</tr>
<tr>
<td>Spain</td>
</tr>
<tr>
<td>Sweden</td>
</tr>
<tr>
<td>Switzerland</td>
</tr>
<tr>
<td>Turkey</td>
</tr>
<tr>
<td>Ukraine</td>
</tr>
<tr>
<td>United Kingdom –</td>
</tr>
<tr>
<td>England, Wales and</td>
</tr>
<tr>
<td>Northern Ireland</td>
</tr>
<tr>
<td>France</td>
</tr>
<tr>
<td>Germany</td>
</tr>
<tr>
<td>Latvia</td>
</tr>
<tr>
<td>Lithuania</td>
</tr>
<tr>
<td>Luxembourg</td>
</tr>
<tr>
<td>Italy</td>
</tr>
<tr>
<td>Norway</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Sogeti</td>
</tr>
<tr>
<td>EUROSTUDENT</td>
</tr>
<tr>
<td>EACEA/Eurydice</td>
</tr>
</tbody>
</table>

**BOLOGNA SECRETARIAT**

Gayane Harutyunyan