



The European Higher Education Area in 2012:

Bologna Process Implementation Report



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FOREWORD



This report has been prepared for the 2012 Bucharest Ministerial Conference – the first such event since the launch of the European Higher Education Area in 2010. This conference is taking place at a difficult time for Europe, with unemployment reaching record levels in many parts of the continent, and youth unemployment being a particular concern. It is a timely moment to ask how the Bologna Process in higher education can help in finding solutions to the crisis, and to assess progress after a decade of effort in implementing reforms.

First of all, as the report shows, the Bologna Process has achieved remarkable results over its first decade, driving positive change in European higher education. The foundations of the European Higher Education Area are now in place, enabling better quality education with greater opportunities for mobility for all. The Bologna Process is a European success story of which we should be proud.

However, there is much more to be done. Precisely because we are living through a time of crisis, I am convinced that now is the moment to step up both the pace and the direction of change.

The Bologna Process has provided a framework for common efforts to reform and modernise our higher education systems. We now need to ensure that our efforts deliver real benefits on the ground, to students, to staff, to the economy and to society more widely. We must strive for continued improvement in quality, stimulate mobility, ensure the relevance for our labour markets of the higher education offered, and above all we must significantly develop opportunities for greater numbers of students to access higher education.

Why is this agenda so important? Firstly, Europe needs more graduates. Future jobs are going to require people with more and better skills, and if we wish to be competitive on the global stage, we need to pursue a common agenda to implement the full range of reforms that have been agreed to compete in a global knowledge economy. This is what lies at the heart of the European Union's Europe 2020 strategy, and it is also vital for economic regeneration and sustainability of the wider continent of Europe. This strategy will be empty if education and higher education reform are not addressed seriously. Our citizens need to be able to develop their potential if our countries are to fulfil theirs.

This report delivers clear messages on the challenges ahead. It draws on authoritative qualitative and quantitative information from each country, combining the contributions of all formerly separate stocktaking organisations (Eurydice, Eurostat, Eurostudent) under the guidance of the Bologna Follow Up Group in a single report. I think the result is a great success. The clear, comparative view of how higher education reforms and modernisation have been addressed at national level provides material that will be used in our higher education debates across Europe well beyond the Bucharest Ministerial Conference.

The Conference marks a defining moment in the Bologna Process - moving from intergovernmental agreements, from sometimes hasty system adaptations and reactions, to sound and comparable implementation. We will continue to work together to achieve our common objectives.

The road to follow laid down in the Bucharest Ministerial Communiqué needs to be followed throughout the European Higher Education Area. I can promise the full support of the European Commission on this journey.

A handwritten signature in blue ink, appearing to read 'A. Vassiliou', with a long horizontal flourish extending to the right.

Androulla Vassiliou
Commissioner responsible for
Education, Culture, Multilingualism and Youth

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EXECUTIVE SUMMARY

The Bologna Process and its objectives for 2020

The Bologna Process has transformed the face of European higher education. Indeed all countries have made significant changes that have enabled the European Higher Education Area to emerge, and which have laid the ground for higher education that is serving an increasing range of societal demands; higher education structures have been modified, quality assurance systems developed, mechanisms to facilitate mobility established, and a range of issues for the social dimension of higher education identified. The scale of a project that, on the basis of voluntary cooperation, agrees and implements common objectives for the higher education systems of 47 countries is unprecedented.

However, conscious of the fact that the second decade of the present millennium has given rise to new challenges, the ministers, gathering at Leuven/Louvain-la-Neuve in 2009, broadly stated the issues that need to be addressed in a changing environment. They called for a quality higher education and set the following four main goals for the present decade:

- finalizing the structural reform and deepening its implementation through a consistent understanding and use of the developed tools;
- implementing quality higher education, connected with research and lifelong learning and promoting employability;
- making the social dimension become a reality by ensuring that the student body entering and completing higher education reflects the diverse student body of Europe's populations;
- ensuring that at least 20 % of those graduating in the European Higher Education Area (EHEA) have had a study or training period abroad ⁽¹⁾.

The report

The report, which reflects the framework of the Leuven/Louvain-la-Neuve Communiqué, is the result of a joint effort by Eurostat, Eurydice as well as by Eurostudent and has been overseen by the Bologna Follow-up Group and more specifically by a working group established by the latter. In line with the specific mission and methodology of the aforementioned data collectors, the report describes the state of implementation of the Bologna Process in 2012 from various perspectives and with data ranging from 2010 to 2011 as well as with earlier trends data for some statistical figures. Thus the report provides statistical data as well as contextualized information and it compares social and economic data on student life. Statistical evidence is complemented by normative system descriptors as well as by an analysis of how the system works. The former scorecard indicators have been newly revised by the Bologna Follow-up Group and integrated into the report as Bologna indicators.

Those former scorecard indicators carry value judgements expressed through the use of the dark green, light green, yellow, orange and red colour scheme. As compared with previous exercises, the colour dark green is less prevalent in some action lines than before. This is due to the fact that a more

(1) The Bologna Process 2020 – The European Higher Education Area in the new decade. Communiqué of the Conference of European Ministers Responsible for Higher Education, Leuven and Louvain-la-Neuve, 28-29 April 2009.

nanced insight has been used as a yardstick in the measurement of the action lines or that the scope of the indicator has been extended.

The report is divided into seven chapters:

1. Context of the European Higher Education Area
2. Degrees and Qualifications
3. Quality Assurance
4. Social dimension in higher education
5. Effective outcomes and employability
6. Lifelong Learning
7. Mobility

Read transversally these chapters provide answers to three sets of questions:

- Who gains access to higher education and how does this happen?
- How is higher education provision organised and what is the progression between cycles? What is the experience of student life like while the student is in the system?
- How does the student benefit from higher education? What are the results of higher education?

The following paragraphs will attempt to provide answers to these three sets of questions by extracting information from the seven chapters of the report. This method has also been chosen to show how the social dimension underpins the various objectives and action lines of the Bologna Process. The social dimension is not a specific or separate action line.

Preliminary remark: financing higher education

The reporting exercise takes place amidst a financial crisis so that the question of financing higher education has become of utmost importance. Levels of public expenditure vary considerably within the European Higher Education Area and the response to the financial crisis has not been a uniform one. Countries can be presented in three groups: in the first group there was no decrease - and in some countries there was even an increase - in public expenditure on tertiary education; in the second group there was a decrease that was not larger than 5 %, and in the third group of countries there was a considerable decline in public expenditure. When the three groups are taken together, it is evident that there has been an overall decline in higher education expenditure ⁽²⁾.

Access into higher education

One of the objectives of the Bologna Process is to increase the number and diversity of the student population. It should be recalled that the social dimension has been defined as equitable access to and successful completion of higher education by the diversity of populations.

⁽²⁾ For more details see Chapter 1, section 1.3.

In terms of access into higher education, enrolments in higher education increased between 1999 and 2009, although this development was not uniform ⁽³⁾. Moreover, figures show that during the first decade of the Bologna Process more women than men entered higher education. However, this figure needs adjusting by a look at particular study fields. Women dominate in the education field, in veterinary science and in health and in welfare. Men, on the other hand, are predominant in computing, engineering, engineering trades and transport services ⁽⁴⁾.

This general increase in participation rates is offset by a relatively low participation rate of first generation migrants in higher education in some countries. This particular phenomenon, however, is not only linked to access and admission problems; the explanation can be found at earlier education levels, since pupils with a migrant background are more likely to leave school early ⁽⁵⁾. Several higher education systems formally identify under-represented groups and target them by a range of policy actions (e.g. financial support schemes, special admission regimes and guidance and counselling services). These groups are defined on the basis of various criteria, including ethnicity and/or migrant status, gender, geography (rural versus urban and/or deprived versus wealthy areas) or age (mature versus typical HE student). However, regardless of the policy approach only a few countries refer to quantitative targets to be reached ⁽⁶⁾.

The objective to increase the size and diversity of the student population is also linked with the objective to extend admissions criteria so that all those who have the capacity to follow higher education studies are provided with an opportunity to do so, regardless of their prior formal learning achievements. This entails establishing alternative access routes to higher education based on the recognition of the knowledge and skills acquired outside formal learning contexts. The figures show that the higher education systems in the countries of Western Europe are characterized by higher flexibility in terms of their entry qualification requirements than other EHEA countries. However, even in these countries, it is seldom more than one in ten students, who have entered higher education through an alternative pathway. Available data also show that delayed transition students and students characterised by a low education/social background frequently use non-traditional access routes to higher education ⁽⁷⁾.

Facilitating study progression through Bologna structures, processes and instruments

The Bologna Process has induced change at systems level through the implementation of trust building tools aimed at increasing transparency across national jurisdictions and at bringing about convergence of systems. These instruments include: the three-cycle system and the ensuing development of an overarching qualifications framework, the European Credit Transfer System (ECTS) with the issuing of the Diploma Supplement and quality assurance.

The commitment to adopt easily readable and comparable degrees and to **establish three cycles** is now being implemented in 47 countries. In 26 countries the share of students studying in programmes corresponding to the Bologna two-cycle system is 90 % and in 13 other countries 70-89 % of students study in programmes corresponding to the Bologna system. In some countries, the share of students enrolled in such programmes is still small because of the late introduction of legislative changes. However, nearly all countries still have integrated programmes in those fields that prepare

⁽³⁾ For more details see Chapter 1, section 1.1.

⁽⁴⁾ For more details see Chapter 4, section 4.1.

⁽⁵⁾ For more details see Chapter 4, section 4.1.

⁽⁶⁾ For more details see Chapter 4, section 4.2.

⁽⁷⁾ For more details see Chapter 4, section 4.3.

professionals in the regulated professions for which the EU directive 2005/36/EC and/or national legislation requires 5-6 years of studies: medicine, dentistry, pharmacy, architecture and veterinary medicine and to a lesser extent engineering, law, theology and teacher training ⁽⁸⁾.

The share of first-cycle degree holders that actually continue their studies in the second cycle shows sharp differences across the EHEA. While in the majority of countries either 10-24 % continue their studies in the second cycle, in thirteen systems the share is between 75-100 %. In those countries, the high levels of direct progression between the first and second cycle could be an indication that the first cycle may not yet have been developed as a qualification giving access to the labour market ⁽⁹⁾.

As far as **national qualifications frameworks** are concerned, they should have been implemented and prepared for self-certification against the overarching Qualifications Framework for the European Higher Education Area by 2012. Nine countries claim they have fulfilled all the ten steps as formulated by the EHEA Working Group on Qualifications frameworks and another group of countries stand a good chance of joining those. However, the qualifications frameworks, which categorise learning outcomes into knowledge, skills and competence (or what the student is expected to know, understand and be able to do), do not distinguish between intended outcomes, as they are laid down in the study programme description, and what the learner has achieved in terms of learning outcomes; in other words, their implementation will also involve linking learning outcomes with the way student performance is assessed. Nor are qualifications frameworks formally linked to recognition procedures and decisions, be it for academic or professional purposes ⁽¹⁰⁾.

Student participation and performance in higher education depend on a variety of factors. The most important issue is the extent to which systems are able to meet students' needs, ensuring that their financial situation does not constitute a barrier either to access or to study progression, and providing them with adequate services to support them along their study paths. It is noteworthy that those students who are most content with their financial situation tend to be those largely supported through parental contributions to their income.

A look at the implementation of **ECTS** as a transfer and accumulation system shows that it is almost completed. Yet, linking credits with learning outcomes is not completed and in some cases other compatible credit systems are used instead of ECTS. Moreover, ECTS credits can be allocated for different purposes thus rendering an understanding of the diplomas difficult ⁽¹¹⁾.

As far as **quality assurance** is concerned the indicators have been newly devised and focus on the stage of external quality assurance, the level of student participation in external quality assurance and the level of international participation. Generally speaking, the outcomes confirm the impressive changes since the inception of the Bologna Process; the development of quality assurance has been rapid and there have been a number of major milestones in European cooperation. However, with regard to stakeholder participation in external quality assurance, there is still some way to go before students systematically participate in all relevant processes. Moreover, the level of international participation in quality assurance is highly uneven across the EHEA. Furthermore, it should be noted that quality assurance, mainly focuses on teaching /learning while student support services and research are excluded. Compliance of the institutional recognition procedures with the legal framework of the Lisbon Recognition Convention are also beyond the current scope of quality assurance. The report furthermore shows that despite the importance attached by ministers in the Bergen communiqué 2005 to enhance the mutual recognition of accreditation or quality assurance decisions

⁽⁸⁾ For more details see Chapter 2, section 2.1.

⁽⁹⁾ For more details see Chapter 2, section 2.1.

⁽¹⁰⁾ For more details see Chapter 2, section 2.2.1.

⁽¹¹⁾ For more details see Chapter 2, section 2.2.2.

many countries remain reluctant to devolve responsibility for external quality assurance beyond national boundaries ⁽¹²⁾.

All in all, the considerations above corroborate the achievements of the Bologna Process so far. Notwithstanding the different methods used for producing this report, it appears that the tools are mostly, formally in place. However, their successful implementation depends on them being used in a systemic way. The findings of the report suggest that the implementation of ECTS, student centred learning, qualifications frameworks, internal quality assurance all depend on the successful implementation of learning outcomes and on linking the different action lines. Moreover, the putting in place of the three-cycle structure needs completing.

Student participation and performance in higher education depend on a variety of factors. The most important issue is the extent to which systems are able to meet students' needs, ensuring that their financial situation does not constitute a barrier either to access or to study progression, and providing them with adequate services to support them along their study paths. Eurostudent tables show that those students who are most content with their financial situation tend to be those largely supported through parental contributions to their income ⁽¹³⁾.

With regard to financial arrangements, the report demonstrates a remarkable diversity of fee and support systems in operation across the European Higher Education Area. The realities vary from situations where no students pay fees to those where all pay fees, and from situations where all students receive support to those where few receive financial support. Moreover, both the relative (in-country) and absolute (between-country) levels of fees and support are also extremely diverse across countries. Thus students across the EHEA are studying in very different economic conditions, and this needs to be borne in mind in European policy discussions on study completion and mobility issues ⁽¹⁴⁾.

Effective outcomes and employability

Access to higher education is not enough. That is why this report also looks at study outcomes. Currently available data, despite gaps, point towards large differences between EHEA countries. Moreover, a common understanding and the definition of a strategy of how to improve completion rates in the EHEA is yet to emerge. So far, only a small minority of countries have adopted comprehensive national strategies addressing non-completion, and in some countries there are no targeted measures to tackle this problem.

The outcome of higher education is measured here by attainment and completion rates as well as by the labour market prospects of graduates. Completion rates are monitored at national and /or institutional levels in most countries. This data is used for the preparation of annual statistics, efficiency analyses, admission planning and dialogue with the stakeholders. However, there are limits to the data available on a comparative level. Completion data available for 22 countries of the EHEA show that around three in four higher education entrants complete their studies with graduation. It can be argued that the implementation of the two-cycle structure and the introduction of ECTS have eased the situation. Furthermore, re-entering higher education at a later stage is facilitated through credit-point systems.

Generally speaking, over the last decade men were less likely to attain higher education than women. However, women are still slightly underrepresented among doctoral graduates.

⁽¹²⁾ For more details see Chapter 3.

⁽¹³⁾ For more details see Chapter 4, section 4.4.

⁽¹⁴⁾ For more details see Chapter 4, section 4.4.

One strong indicator for the fairness of a higher education system is to what extent educational attainment is passed down through generations. It has been shown that the educational level of parents strongly influences educational attainment, though data also show that this relationship has been diminishing. In most EHEA countries, however, the relative chances for students with highly educated parents to attain higher education are between two and five times higher than for students whose parents have a medium educational level. In fact, the parents' educational background exerts a stronger influence on the students' chances to attain higher education than a migrant background ⁽¹⁵⁾.

In terms of employment, the average figures for the years 2006 – 2010 show that the higher the level of education, the lower the unemployment ratio among young people is. However, a closer look reveals that the unemployment ratio of recent graduates is considerably higher than that of more experienced young people in many countries. In addition, on average, around one fifth of young people with higher education qualifications are employed in jobs not usually requiring a higher education qualification. These points may be signs for transition problems between higher education and the labour market. It should be noted though that the data available reflect the ISCED 5A and 5B nomenclature and do not permit to shed a proper light on the effectiveness of the three-cycle degree structure ⁽¹⁶⁾. Therefore, the relevance of the first cycle for the labour market and its impact on social advancement is an issue that will need further exploring in the next reports.

Lifelong learning

Higher education is but one element in lifelong learning. Despite the fact that lifelong learning has been one of the central themes of the Bologna Process, policy documents are scarce. Only in a few countries steering documents covering higher education include a definition of lifelong learning. Even where such documents exist, it is difficult to establish what activities fall under its concept. The European Universities Charter on Lifelong Learning, developed by the European University Association (EUA) and to which the ministers refer to in the Leuven/Louvain-la-Neuve communiqué, should help to further define the concept.

In the absence of an exhaustive understanding of the concept the provision most strongly associated with lifelong learning includes either non-formal courses offered by higher education institutions alongside their formal degree programmes, or degree programmes provided under various arrangements different from traditional full-time schemes. The report shows that the needs of non-traditional learners are addressed with more attention in some countries of the EHEA. For example, despite the fact that the majority of countries have put in place flexible study options targeting non-traditional learners, in several countries such flexible study paths require higher private financial investment than traditional full-time study programmes ⁽¹⁷⁾.

Moreover, in around two-thirds of the countries there is an official student status other than the status of a full-time student, the most common alternative being the status of a part-time student. Age is a significant factor in the students decision to pursue their studies on a part-time basis, with older students (aged thirty and above) being more likely to study part-time than younger ones. Available data also indicate that in around half of the Bologna countries it is possible for mature students to have their prior learning recognised for access into higher education or for progression through the system ⁽¹⁸⁾. However, the recognition of prior learning is often subject to various limitations and can rarely lead to the award of complete higher education qualifications.

⁽¹⁵⁾ For more details see Chapter 4, section 4.1.

⁽¹⁶⁾ For more details see Chapter 5.

⁽¹⁷⁾ For more details see Chapter 6, section 6.4.2.

⁽¹⁸⁾ For more details see Chapter 6, section 6.5.

Enhancing mobility

For the first time in the Bologna Process, a quantitative target has been set for student mobility: by 2020 at least 20 % of graduates in the EHEA should have had a study or training period abroad. Statistical data, however, are not yet sufficiently reliable to measure the achievement of this target. Nevertheless considerable methodological improvements have been established, which will facilitate better and more comprehensive mobility data, particularly in the field of credit mobility, and a more comprehensive picture should emerge in the coming years ⁽¹⁹⁾.

The data currently available, focusing mostly on degree mobility, shows that the majority of Bologna countries have an incoming and outward mobility rate inside the EHEA of less than 10 %, with more than half of the Bologna countries having values below 5 %. Combining the existing data with more comprehensive mobility data will facilitate a better evaluation of overall performance in relation to the benchmark in future ⁽²⁰⁾.

The report has also shown that there are perceived and real obstacles to mobility, which must be dealt with in the coming years. This is all the more important, because the perception and impact of such obstacles varies by social background. If left unchecked, increases in mobility rates may lead to a new dimension of social disparity.

Countries also express a desire for more balanced mobility, and indeed the current data shows imbalanced mobility flows between particular countries and continents. The reasons for imbalance in mobility are very wide-ranging, and some – such as economic disparities between countries – cannot be easily addressed. However, obstacles related to administrative and legal issues, and in particular to the recognition of study periods abroad, are still very commonly reported ⁽²¹⁾.

The information gaps and obstacles to student mobility are often echoed in discussion of staff mobility. Conceptually, there is a lack of clarity regarding which staff should be considered in future statistical data collections, and at European level the only reliable statistical information available is collected on staff exchanges within the Erasmus programme. The main obstacles to staff mobility cited by countries are language knowledge, legal issues and personal circumstances ⁽²²⁾.

The report shows that many countries and institutions have dramatically expanded provision of joint programmes since the Bologna Process began. These joint programmes offer a clear structure in which mobility periods are more easily integrated and recognised, and where European higher education takes a tangible form in institutional reality. However, while there are now many joint programmes, there are still few joint degrees, as legislative and administrative obstacles remain. Moreover, only a small proportion of students are able to participate in joint programmes ⁽²³⁾.

⁽¹⁹⁾ For more details see Chapter 7.

⁽²⁰⁾ For more details see Chapter 7, section 7.2.

⁽²¹⁾ For more details see Chapter 7, sections 7.2.4 & 7.3.4.

⁽²²⁾ For more details see Chapter 7, section 7.4.

⁽²³⁾ For more details see Chapter 2, section 2.1.4.

INTRODUCTION

The Bologna context

The Bologna Declaration was signed in 1999 by ministers responsible for higher education from 29 European countries. This set in motion the most significant European cooperation process ever to take place in the field of higher education. Reforms have now affected countries within and beyond Europe, and the number of official signatory countries has risen to 47 with Kazakhstan the most recent state to join ⁽²⁴⁾.

The Bologna Process: from Sorbonne to Leuven/Louvain-la-Neuve, 1998-2009

Mobility of students and teachers	Mobility of students, teachers, researchers and administrative staff	Social dimension of mobility	Portability of loans and grants Improvement of mobility data	Attention to visa and work permits	Challenges of visa and work permits, pension systems and recognition	Benchmark of 20 % by 2020 for student mobility
A common two-cycle degree system	Easily readable and comparable degrees	Fair recognition Development of recognised Joint degrees	Inclusion of doctoral level as third cycle	QF-EHEA adopted National Qualifications Frameworks launched	National Qualifications Frameworks by 2010	National Qualifications Frameworks by 2012
		Social dimension	Equal access	Reinforcement of the social dimension	Commitment to produce national action plans with effective monitoring	National targets for the social dimension to be measured by 2020
		Lifelong learning (LLL)	Alignment of national LLL policies Recognition of Prior Learning (RPL)	Flexible learning paths in higher education	Role of higher education in LLL Partnerships to improve employability	LLL as a public responsibility requiring strong partnerships Call to work on employability
Use of credits	A system of credits (ECTS)	ECTS and Diploma Supplement (DS)	ECTS for credit accumulation		Need for coherent use of tools and recognition practices	Continuing implementation of Bologna tools
	European cooperation in quality assurance	Cooperation between quality assurance and recognition professionals	Quality assurance at institutional, national and European level	European Standards and Guidelines for quality assurance adopted	Creation of the European Quality Assurance Register (EQAR)	Quality as an overarching focus for EHEA
Europe of Knowledge	European dimensions in higher education	Attractiveness of the European Higher Education Area	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	Enhance global policy dialogue through Bologna Policy Fora
1998 Sorbonne Declaration	1999 Bologna Declaration	2001 Prague Communiqué	2003 Berlin Communiqué	2005 Bergen Communiqué	2007 London Communiqué	2009 Leuven/ Louvain-la-Neuve Communiqué

⁽²⁴⁾ Budapest-Vienna Declaration on the European Higher Education Area, 12 March 2010.

The chart outlines the main milestones of the ministerial conferences within the Bologna Process up to 2009. It illustrates that several main themes can be followed throughout the first decade. These include a common degree system, a European system of credits, mobility, cooperation in quality assurance, national qualifications frameworks, lifelong learning, employability and the social dimension of higher education.

The Leuven/Louvain-la-Neuve Communiqué ⁽²⁵⁾ sets the agenda for the new decade, with a new target for mobility in 2020, and clear goals for the other main action lines. 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 that was launched with the Budapest-Vienna Declaration of March 2010 (see Glossary and Methodological Notes for the list of official signatory countries).

Report outline

This integrated report has been prepared for the European Ministerial Conference in Bucharest, Romania, on 26-27 April 2012.

The report provides a snapshot of the state of implementation of the Bologna Process from various perspectives using data collected in the first half of 2011. It provides both qualitative information and statistical data and covers all main aspects of higher education reforms aiming at a well-functioning European Higher Education Area.

The report is a successor to the Bologna Process Stocktaking Reports and has been developed as a fully collaborative exercise between the Bologna Follow-up Group (BFUG) and Eurostat, Eurostudent and Eurydice, commonly referred to within the process as "the data collectors".

Qualitative information was gathered through a questionnaire addressed to BFUG members which was submitted, after consultation with all relevant national actors, by the Bologna representatives in 45 countries between January and May 2011. Information for the former Yugoslav Republic of Macedonia and Russia is partial due to non completion of the questionnaire. For the United Kingdom and Belgium, two responses each were submitted. England, Wales and Northern Ireland is therefore treated as separate higher education system to that of Scotland, and the Flemish and French Communities of Belgium are also considered as distinct higher education systems. The questionnaire covered all topics addressed in this report with the exception of mobility. Information on mobility was gathered by the BFUG mobility working group, in cooperation with the data collectors in autumn 2010. The reason for this earlier collection is that the information was required to enable the mobility working group to elaborate a strategy for mobility in the EHEA.

The report is based mainly on official information about legislation, regulations and national policies, which is complemented by statistical data collected by Eurostat and survey data from the European student population provided by Eurostudent. Eurostat data is extracted from the UOE, LFS and EU-SILC data collections ⁽²⁶⁾. Moreover, Eurostat undertook a specific data collection for the EHEA countries that are not part of regular data gathering exercises. Eurostudent data is taken from the Eurostudent IV dataset which is analysed in detail in Eurostudent, 2011: Social and Economic Conditions of Student Life in Europe.

⁽²⁵⁾ The Bologna Process 2020 – The European Higher Education Area in the new decade. Communiqué of the Conference of European Ministers Responsible for Higher Education, Leuven and Louvain-la-Neuve, 28-29 April 2009.

⁽²⁶⁾ For more details see Glossary and Methodological Notes.

The work of the data collectors has been overseen by the Bologna Follow - up Group, and specifically by a working group established to guide all aspects of this reporting process. The group has been co-chaired by Germain Dondelinger (Luxembourg) and Andrejs Rauhvargers (Latvia). Close collaboration has also been established with the BFUG working groups on mobility, social dimension, international openness, qualifications frameworks and recognition. Contact was not developed with the working group responsible for monitoring transparency tools as it was agreed that this topic was beyond the scope of the report.

The report is divided into seven thematic chapters that each has an introduction presenting the relevance of the topic in the Bologna Process and the objectives agreed upon, the contribution of BFUG working groups to the report, and an outline of the chapter contents.

1. CONTEXT OF THE EUROPEAN HIGHER EDUCATION AREA

The 47 countries in the European Higher Education Area (EHEA) have to implement policies in very different contexts. This first chapter of the report sets the scene for the coming comparison showing the differences between countries that are united in the EHEA. It provides an understanding of the different structures, sizes and conditions under which higher education institutions function.

Chapter outline

The structure of the chapter is the following. First, it looks at the size of the student population in the EHEA countries as well as enrolment trends in tertiary education for the 18-34 years old. It also examines whether demographic projections are taken into account in higher education steering documents. Second, the chapter categorises higher education institutions and shows the diversity in the different countries. Finally, it compares the level of public expenditure on higher education in the EHEA, as well as changes before and after the economic crisis.

1.1. Student population

The size of the student population is very diverse in the 47 countries of the EHEA. Total numbers shown in Figure 1.1 vary between 754 in Liechtenstein and 9 909 160 in Russia (academic year 2008/09). Russia alone takes up more than 25 % of the student population of the whole EHEA, while students from the five countries with the highest number of tertiary education students (Russia, Turkey, Ukraine, Germany, and the United Kingdom) represent more than 50 %. France, Poland, Italy and Spain also have more than 1 500 000 students, while there are less than 200 000 students in 14 countries (out of those where data is available). This illustrates well the diversity of contexts within the EHEA.

Figure 1.1: Number of students enrolled in tertiary education by ISCED level, 2008/09

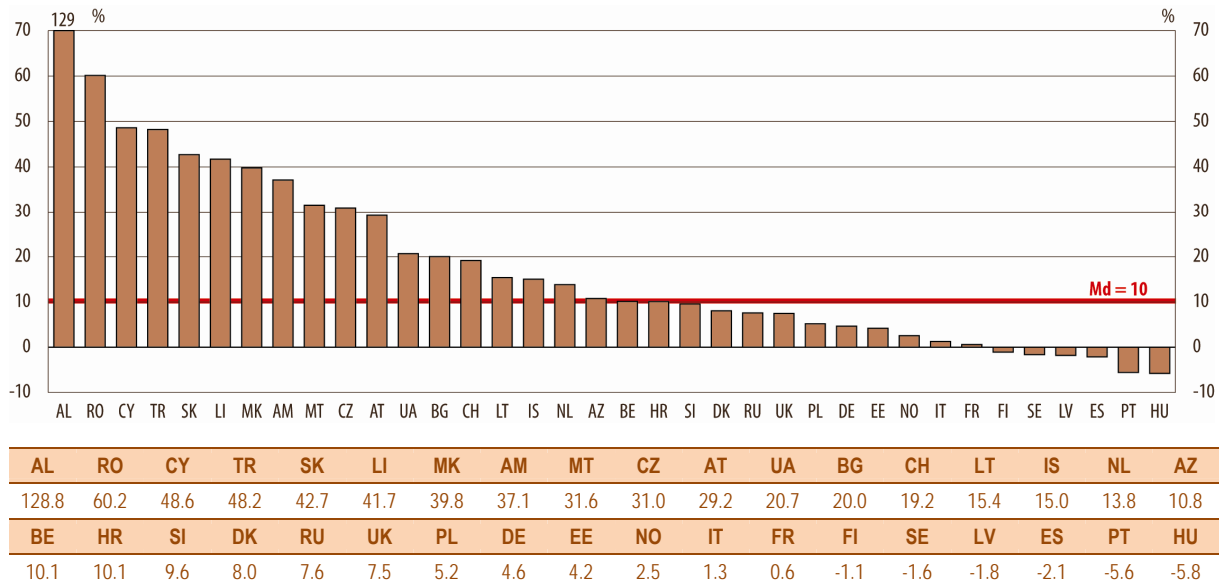
Number	RU	TR	UA	DE	UK	FR	PL	IT	ES	RO	NL	BE	SE
TOTAL	9909160	2924281	2798693	2438600	2415222	2172855	2149998	2011713	1800834	1098188	618502	425219	422580
ISCED 5A	7513119	2013638	2364541	1998060	1806862	1548740	2096200	1966014	1472132	1069723	609868	205507	377191
ISCED 5B	2244125	874697	399332	440540	526667	552397	21304	6300	251491	573	885	207207	25478
ISCED 6	151916	35946	34820	:	81693	71718	32494	39399	77211	27892	7749	12505	19911
Number	CZ	HU	PT	AT	FI	BG	AL	SK	DK	CH	NO	LT	IE
TOTAL	417573	397679	373002	308150	296691	274247	242590	234997	234574	233488	219282	210744	182609
ISCED 5A	360029	358445	357325	258519	275777	242574	223032	222519	198786	165680	211095	146422	126794
ISCED 5B	32638	32323	398	31160	122	27724	17450	2061	28725	48732	1258	61383	48494
ISCED 6	24906	6911	15279	18471	20792	3949	2108	10417	7063	19076	6929	2939	7321
Number	AZ	AM	HR	MD	LV	SI	EE	MK	CY	IS	MT	LI	
TOTAL	180276	154639	139069	135147	125360	114391	68399	65200	30986	16919	10352	754	
ISCED 5A	142903	121444	92230	116084	102211	76318	42915	62836	17451	16312	9650	724	
ISCED 5B	35644	31803	43737	17205	21124	36079	23019	2135	13092	325	628	:	
ISCED 6	1729	1392	3102	1858	2025	1994	2465	229	443	282	74	30	

Notes: Reference year for Albania is 2009/10.

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

Concerning the change in the total student population between 2003/04 and 2008/09, the picture remains rather mixed (see Figure 1.2). There was a slight decline in student numbers in six countries in these five years, while the number of students grew considerably in Albania. Romania, Cyprus, Turkey, Slovakia and Liechtenstein also registered an increase of more than 40 %. In general, the student population increased by more than 10.4 % in half of the EHEA countries in this period.

Figure 1.2: Change in the total number of students enrolled in tertiary education between 2003/04 and 2008/09



Notes: Albania: from 2003/04 to 2009/10.

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

Certainly, changes in the student population depend on many factors, for example on demographic changes. Therefore, trends in enrolment – the number of students measured as a proportion of the relevant population – need to be examined as well. Such trends confirm the above findings concerning the growth in student numbers. As Figure 1.3 shows, tertiary education participation increased by a third between 1999 and 2009 across all countries, reflecting the continuing move towards the "massification" of higher education. Growth in participation rates, however, is uneven across countries. In countries with the highest absolute growth in student numbers, the participation rates have also increased in the 18-34 age group by more than 50 %. A number of other countries experienced a more uneven development, hitting a peak in the mid-2000s and having slightly decreasing higher education participation since then. Only Spain exhibits a continuous decrease in participation rates throughout the decade.

Figure 1.3: Enrolment in tertiary education for the 18-34 years old (% of the total population), 1999-2009

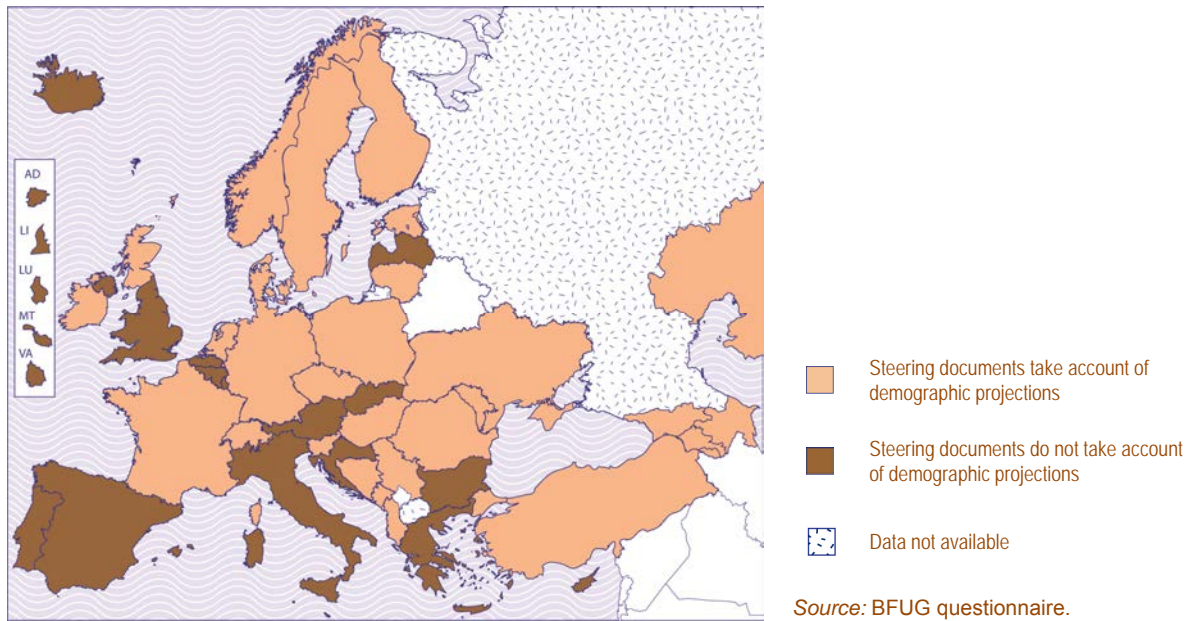


Notes: Data are sorted by enrolment in tertiary education in 2009.

Source: Eurostat, UOE data collection.

Demographic changes and the varying number of students also have to be taken into consideration when designing higher education policies and goals. Figure 1.4 shows that in around 60 % of countries, steering documents for higher education explicitly take account of demographic projections. On the one hand, many countries are concerned about the decreasing number of young people and how such changes will affect higher education participation and funding. On the other hand, several countries prepare for the increasing skills needs of an ageing population and the entry of non-traditional learners into higher education.

Figure 1.4: Demographic projections in steering documents for higher education policy, 2010/11



Source: BFUG questionnaire.

1.2. Higher education institutions

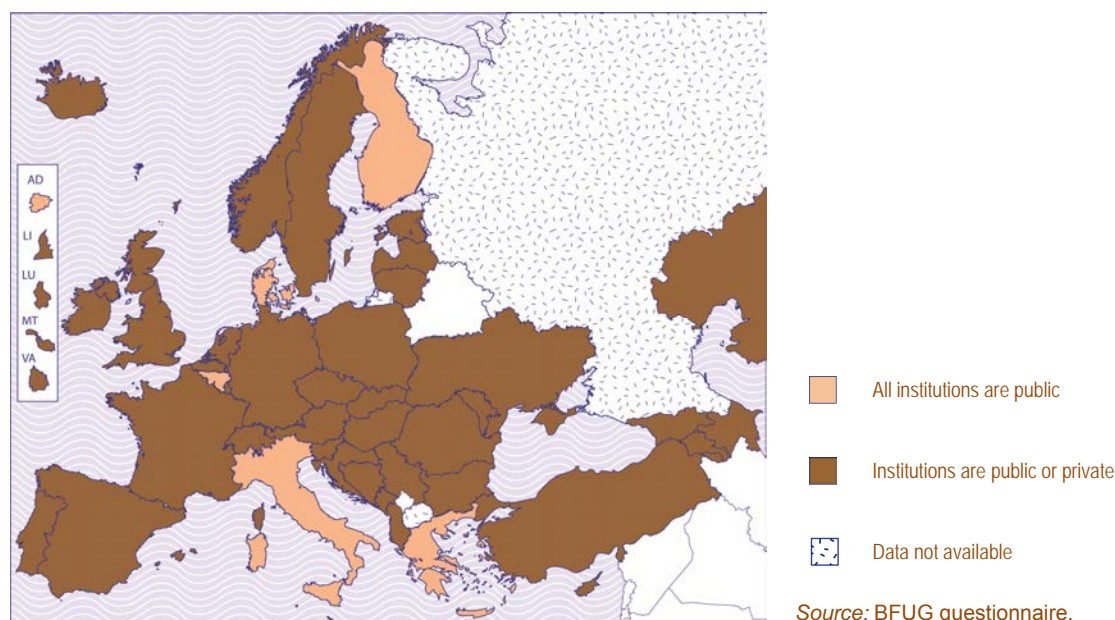
The type and number of higher education institutions also vary among the EHEA countries. Higher education institutions can be academically or professionally oriented; can be publicly or privately founded and funded; or there might be other distinctions applied in a given country context.

First, higher education institutions can be academically or professionally oriented. However, this distinction is increasingly not clear-cut. In many countries, old differences between academically and professionally oriented institutions still exist formally, but – partly due to the Bologna Process – actual differences are diminishing or have ceased to exist altogether. For example, in many cases, both academically and professionally oriented institutions can offer academic and professional programmes. This also means that while there might be a (formal) distinction between the institutions, there are no differences between the degrees awarded. In other cases, there might be no distinction between institutions, but there could still be a difference between the orientations of the study programmes. Therefore, it is very difficult to create a clear typology of countries along this dimension. For this reason, such a typology is not included in this report.

A second possible distinction to be made is between public and private higher education institutions. This distinction refers mainly to the source of funding: whether higher education institutions are financed primarily from public or private sources (for a detailed definition, see the Glossary and methodological notes). This also means that privately founded higher education institutions funded mainly by the state or from public sources are considered as public institutions here.

Figure 1.5 shows in which countries the distinction between public and private institutions applies. As the figure shows, there are both public and private higher education institutions in the vast majority of the EHEA countries. However, the weight of private institutions within a country might differ. Whereas some countries have more private institutions than public ones, in several others the number of private institutions is fairly small in comparison to public higher education institutions. All institutions are considered public in six education systems (Andorra, Belgium (French Community), Denmark, Finland, Greece and Italy).

Figure 1.5: Types of higher education institutions: public or private (source of funding), 2010/11



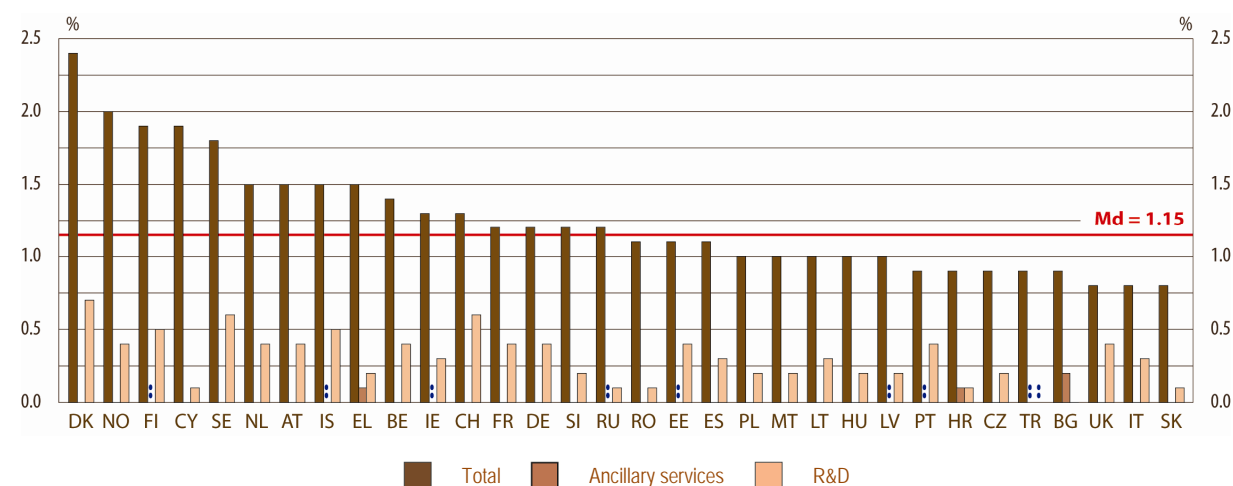
1.3. Public expenditure on higher education

Since European higher education institutions are funded predominantly by public sources, it is also interesting to compare public expenditure on higher education in the EHEA. This section is devoted to such a comparison based on Eurostat indicators. Alone, none of the indicators presented below can provide a sufficient basis for comparing EHEA countries; but taken together they provide a broad overview of similarities and differences. It has to be noted, however, that since the latest available data in the UOE (UNESCO-UIS/OECD/Eurostat) data collection is from 2008, these indicators do not yet reflect the effects of the economic crisis, although it has had a significant impact on the levels of public funding (see EACEA/Eurydice, 2011b). For this reason, additional data compiled in accordance with the classification on COFOG (Classification of the Functions of Government) will be examined towards the end of this section (on differences between UOE and COFOG data, see the Glossary and methodological notes).

One indicator of public spending on tertiary education is the public expenditure per GDP ratio. This indicator "represents the share of available income generated in an economy which is allocated to higher education" (Eurostat & Eurostudent 2009, p. 75). As Figure 1.6 shows, in 2008, annual public expenditure on higher education was the highest in Denmark and Norway in comparison to the countries' GDP (more than 2 %). This annual public expenditure was the lowest in Slovakia (0.78 % of the GDP). The EHEA median spending on higher education was 1.15 % of the GDP.

Together with the total public expenditure on tertiary education, Figure 1.6 also depicts direct expenditure designated for ancillary services and for R&D activities. Direct expenditure on ancillary services is a rather minor part of the total expenditure in all countries, while R&D spending can take up almost half of the total expenditure on tertiary education, as it does in Switzerland (49 %), Portugal (47 %) and the United Kingdom (46 %). In countries where R&D spending is high, the share of core education spending is lower (core education spending is the part of total expenditure that remains after subtracting expenditure on ancillary services and R&D). Core education spending also includes support given to students, which will be shown in detail in Figure 4.20. The share of this support has an influence on the level of overall expenditure; for example, support given to students is a considerable proportion of public expenditure on education in both Denmark and Norway.

Figure 1.6: Annual public expenditure on tertiary education as a % of GDP, 2008



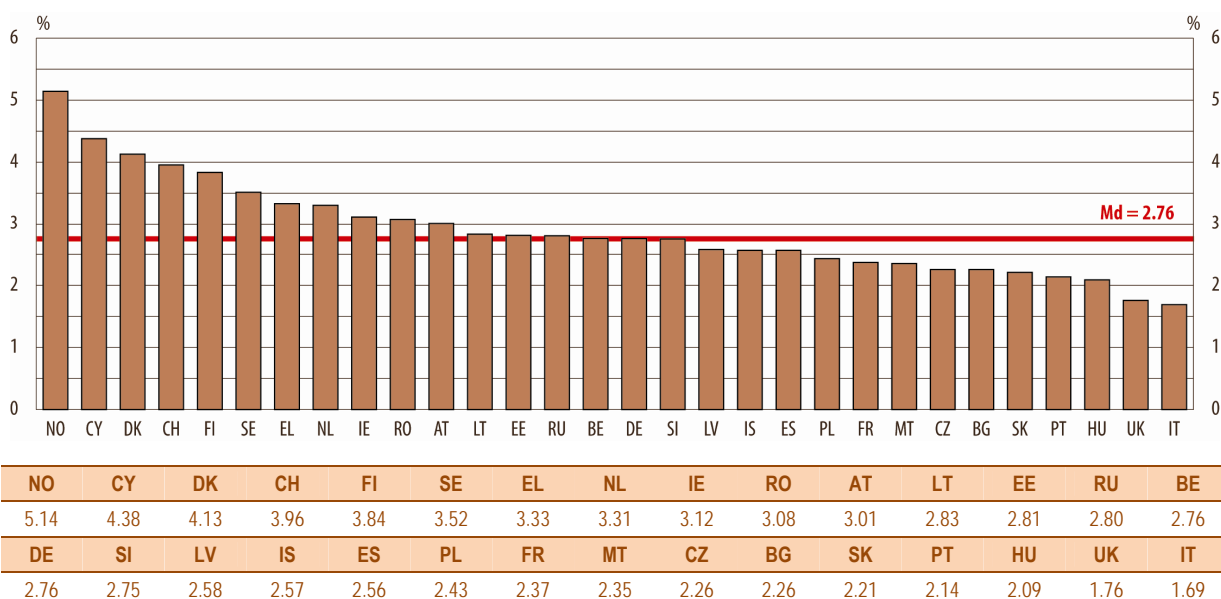
	DK	NO	FI	CY	SE	NL	AT	IS	EL	BE	IE	CH	FR	DE	SI	RU
Total	2.41	2.05	1.89	1.86	1.82	1.52	1.49	1.49	1.48	1.37	1.32	1.29	1.25	1.22	1.21	1.18
Ancillary services	0.00	0.01	:	0.01	0.00	0.00	0.01	:	0.11	0.02	:	0.00	0.04	0.02	0.00	:
R&D	0.74	0.41	0.52	0.14	0.62	0.44	0.40	0.52	0.22	0.38	0.33	0.63	0.40	0.36	0.17	0.06
	RO	EE	ES	PL	MT	LT	HU	LV	PT	HR	CZ	TR	BG	UK	IT	SK
Total	1.12	1.11	1.07	1.04	1.04	1.03	1.02	1.00	0.95	0.94	0.93	0.91	0.86	0.84	0.84	0.78
Ancillary services	0.00	:	0.00	0.00	0.00	0.00	0.04	:	:	0.08	0.01	:	0.19	0.00	0.02	0.04
R&D	0.11	0.45	0.27	0.16	0.17	0.27	0.19	0.20	0.44	0.06	0.18	:	0.02	0.39	0.34	0.11

Notes: Russia: 2009; Romania: 2007; Turkey: 2006; Greece: 2005.

Source: Eurostat (UOE data collection).

Public expenditure on higher education can also be compared to other national expenditure. Figure 1.7 shows annual public expenditure allocated to tertiary education as a percentage of total public expenditure. The countries with the highest share of tertiary education spending are Norway (5.14 %), Cyprus (4.38 %) and Denmark (4.13 %), while the countries where the smallest percentage of the budget is allocated to higher education in comparison to other countries are Italy (1.69 %) and the United Kingdom (1.76 %). The median spending on tertiary education in the EHEA is 2.76 % of the budget.

Figure 1.7: Annual public expenditure on tertiary education as a % of total public expenditure, 2008

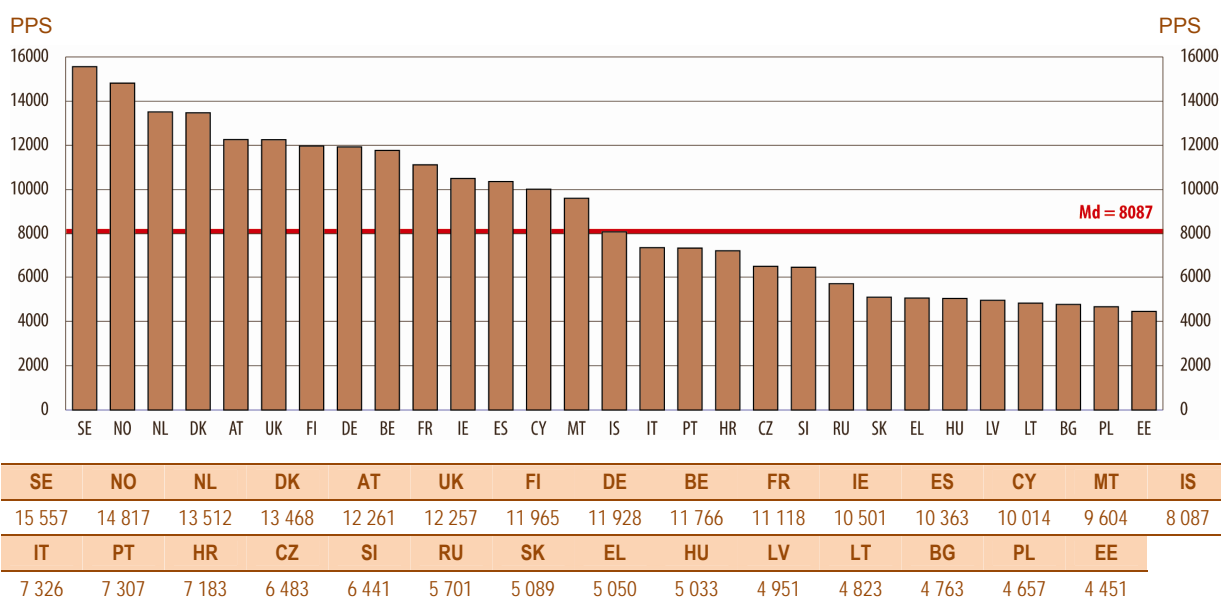


Notes: Russia: 2009; Romania: 2007; Greece: 2005.

Source: Eurostat, (UOE data collection).

A third indicator of public spending on tertiary education is the annual total expenditure on tertiary educational institutions per full-time equivalent (FTE) student. This indicator "reflects the financial investment of a country in relation to the size of the student population" (Eurostat & Eurostudent 2009, p. 77). According to Figure 1.8, the annual total expenditure per full-time equivalent student is the highest in Sweden, Norway, the Netherlands and Denmark (more than 13 000 PPS Euros), and the lowest in Latvia, Lithuania, Bulgaria, Poland and Estonia (less than 5 000 PPS Euros). The median value for the EHEA is 8 087 PPS Euros.

Figure 1.8: Annual public expenditure on tertiary educational institutions per full-time equivalent student in Euros PPS, 2008

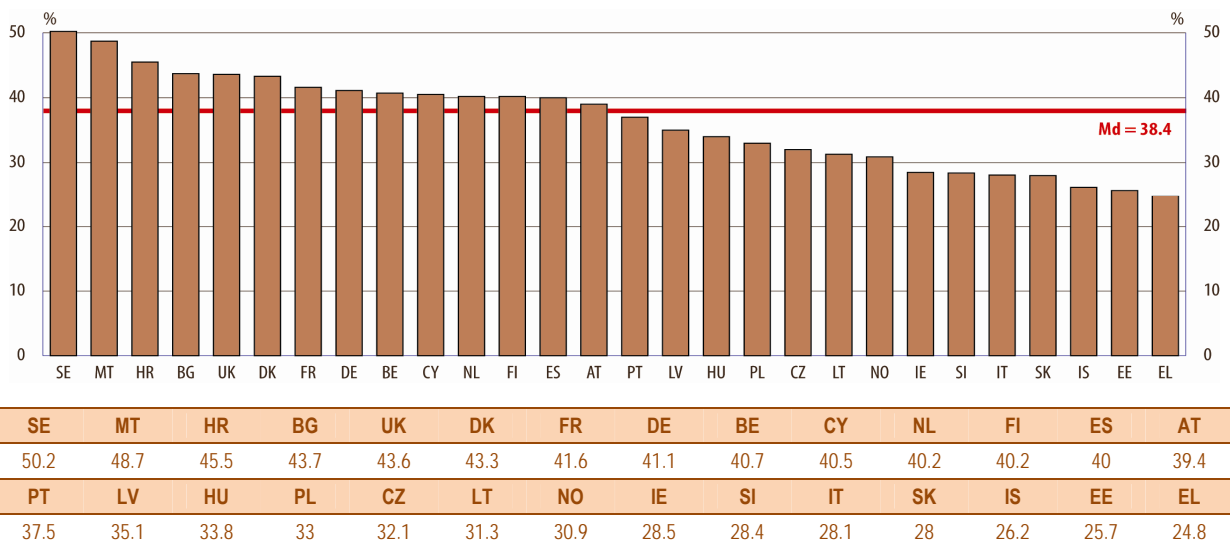


Notes: Russia: 2009; Ireland: 2007; Hungary: 2006; Greece: 2005.

Source: Eurostat (UOE data collection).

However, these data have to be interpreted with caution. The information indicates a positive relationship between the expenditure per student ratio and a country's wealth (measured as GDP per capita). One way of controlling for such differences in wealth is to look at the expenditure per student ratio relative to the GDP per capita (both in PPS Euros). As Figure 1.9 reveals, while the picture does not change for some countries (for example, Sweden still appears to be spending the most per FTE student), a few low-GDP countries (e.g. Croatia and Bulgaria) make a more substantial financial effort in comparison to their wealth than other countries with a higher GDP per capita.

Figure 1.9: Annual public expenditure on tertiary educational institutions per full-time equivalent student in Euros PPS relative to the GDP per inhabitant in Euros PPS, 2008



Notes: Ireland: 2007; Hungary: 2006; Greece: 2005.

Source: Eurostat.

Nevertheless, these indicators only show a static comparison between countries for the year 2008. In order to get a more comprehensive picture on public expenditure on tertiary education, we should also examine its changes over time in the different countries. This is all the more important in light of the recent economic crisis. The Eurydice report on the *Modernisation of Higher Education in Europe* shows that several countries introduced budgetary cuts from 2008/09 to 2009/10. These cuts were the most severe in Ireland, Latvia and Iceland (EACEA/Eurydice 2011b, p. 41). However, from 2009/10 to 2010/11, higher education spending increased in the majority of countries, partly due to the adoption of stimulus packages. Nevertheless, some countries, notably Iceland, Ireland and Greece made major budget cuts in that year (EACEA/Eurydice 2011b, p. 42).

Taking a cumulative approach (adding together all cuts from 2008 onwards), the European University Association (EUA) reports even more severe cuts in higher education budgets (EUA, 2011a). According to the report and the EUA website, major cuts have been felt in Hungary, Greece, Iceland, Italy, Ireland, Latvia and the United Kingdom⁽²⁷⁾. In addition, several other countries have experienced at least moderate cuts (EUA 2011a, pp. 2-4; EUA, 2011b).

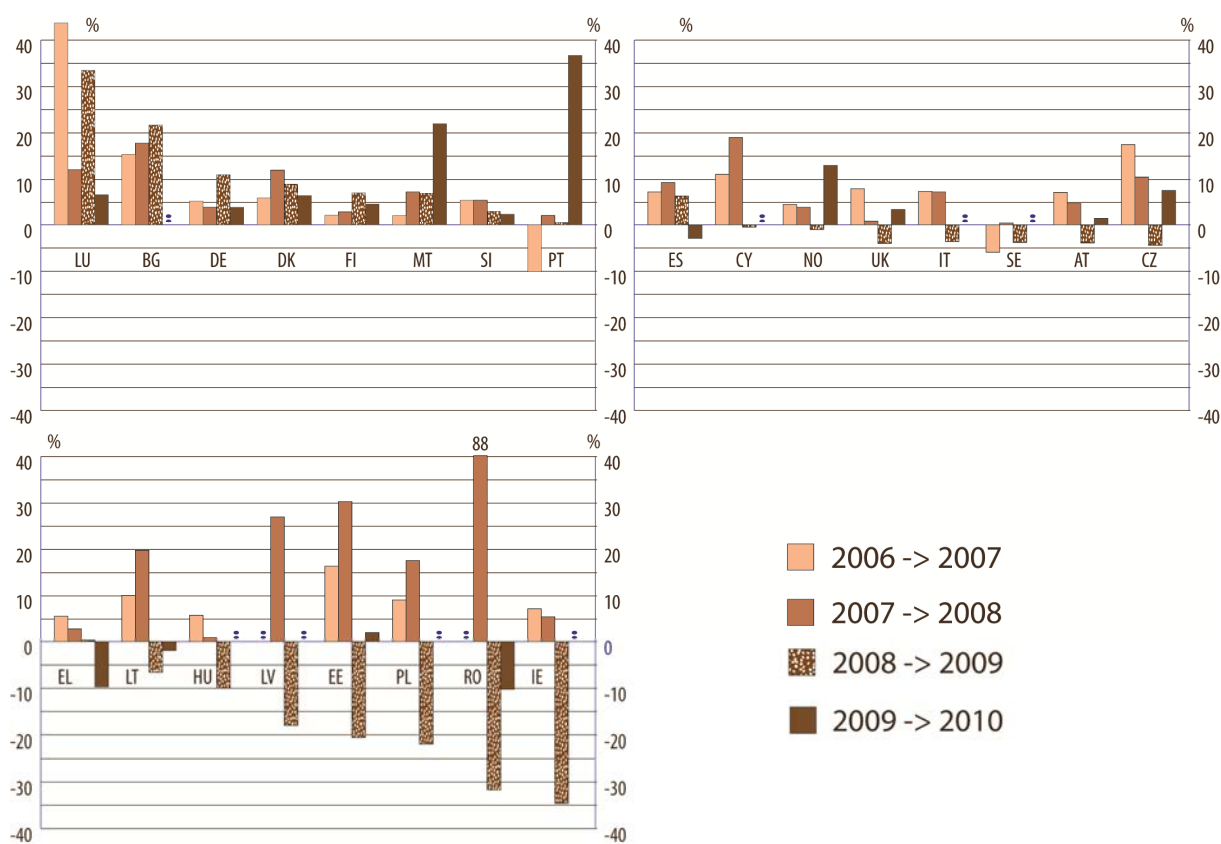
Nevertheless, having cuts in higher education budgets does not necessarily mean fewer resources in higher education. In some cases (e.g. in the United Kingdom (England, Wales and Northern Ireland), public expenditure is replaced by private contributions (e.g. from graduates by fees). Such reductions in public expenditure are different from expenditure cuts that do not involve any new, offsetting funding streams.

⁽²⁷⁾ Data is for the United Kingdom as a whole. However, there have been no budget cuts in Scotland.

Moreover, introducing budget cuts in higher education was not a uniform response to the crisis in Europe. For this reason, Figure 1.10 examines the changes in public expenditure in four yearly intervals (2006 to 2007, 2007 to 2008, 2008 to 2009, and where available, 2009 to 2010). Since no data is available for 2009 and 2010 in the UOE data collection, data compiled in accordance with the classification on COFOG were used for this analysis. Unfortunately, data is available for fewer countries in this database.

On Figure 1.10, countries are presented in three groups. In the first group of countries, there was no decrease in public expenditure on tertiary education after the crisis (neither from 2008 to 2009 nor from 2009 to 2010). Instead, public expenditure on tertiary education increased considerably in some of them in at least one of the post-crisis years, especially in Luxembourg, Bulgaria, Malta and Portugal (though in the latter case, there was a relatively large decrease before the crisis, from 2006 to 2007).

Figure 1.10: Yearly changes in the public expenditure on tertiary education between 2006 and 2010



	LU	BG	DE	DK	FI	MT	SI	PT	ES	CY	NO	UK
2006-2007	43.7	15.4	5.3	5.8	2.3	2.2	5.5	-10.1	7.3	11.1	4.6	7.6
2007-2008	12.1	17.8	4.1	12.1	3.0	7.3	5.5	2.2	9.3	19.0	4.3	0.8
2008-2009	33.5	21.7	11.0	9.4	7.1	7.0	3.1	0.5	6.4	-0.5	-0.9	-3.5
2009-2010	6.7	:	3.7	6.5	4.7	22.0	2.5	36.7	-2.9	:	12.7	3.5
	IT	SE	AT	CZ	EL	LT	HU	LV	EE	PL	RO	IE
2006-2007	7.4	-5.9	7.2	17.5	5.6	10.1	5.8	:	16.4	9.1	:	7.2
2007-2008	7.3	0.4	4.8	10.5	2.9	19.8	1.0	27.1	30.3	17.6	88.3	5.5
2008-2009	-3.6	-3.8	-3.9	-4.4	0.3	-6.6	-10.0	-18.5	-20.6	-22.0	-31.7	-34.6
2009-2010	:	:	1.6	7.6	-9.7	-1.9	:	:	2.1	:	-10.2	:

Notes: Within each group, data are sorted by the degree of change between 2008 and 2009.

Source: Eurostat (national accounts, government finance statistics, COFOG).

In the second group of countries, while public expenditure on tertiary education decreased after 2008 (at least for one year), this was not larger than 5 % and/or was offset by an increase in the other post-crisis year.

Finally, public expenditure on tertiary education decreased considerably in the third group of countries. The decline was the biggest in Ireland (34.6 % from 2008 to 2009) and Romania (31.7 % from 2008 to 2009 and 10.2 % between 2009 and 2010). Nevertheless, public expenditure in Romania grew considerably before the crisis (88.3 % between 2007 and 2008), which can be partly explained by the significant increase in the student population (see Figure 1.2). Some other countries in this group also experienced a relatively high growth of tertiary education expenditure before the crisis.

These data illustrate well that countries have responded differently to the crisis and the following recession with regard to public expenditure on tertiary education. Nonetheless, the median change for the year between 2008 and 2009 was negative, showing a 2.2 % decline of public expenditure on tertiary education.

Conclusions

EHEA countries have to implement reforms in very different contexts. Student numbers vary enormously. In addition, while demographic changes are of concern to most countries, some face relatively big increases in the student population, while others can anticipate a decrease. Such differences can have an impact on the main goals and the speed of higher education reform.

Differences also exist regarding the orientation and funding of higher education institutions. While all higher education institutions are funded primarily from public sources in some countries, there is a larger proportion of private institutions in others. In addition, levels of public expenditure also vary within the EHEA. Similarly, responses to the recent economic crisis also differ in the region: while public expenditure increased considerably in some countries after 2008, there have been significant budget cuts in others. Yet, the result of the crisis has been an overall decline in public higher education expenditure.

2. DEGREES AND QUALIFICATIONS

The Bologna context

Adoption of a system of easily readable and comparable degrees with the aim of promoting European citizens employability and the international competitiveness of the European higher education system is among the core action lines of the Bologna Declaration itself. The Trends I report prepared before the adoption of the Bologna Declaration in 1999 demonstrated the vast variety of higher education systems in Europe: Bachelor-Master systems in some countries; long (four-six year) programmes leading to a diploma roughly equivalent to a Master's degree in others; some systems having several levels not compatible with the Bachelor-Master systems (EUA, 1999). The main conclusion of the report, which was shared by the signatories of the Bologna Declaration, was that greater transparency and trust among higher education systems was needed if Europe's global attractiveness and competitiveness were to improve. Trends I also showed that there is a potential for convergence of European higher education systems to two-cycles (Bachelor-Master) of a duration of three-four years and one-two years respectively with a pre-degree level existing in some countries (EUA, 1999).

The Bologna Declaration thus called for the adoption of a system essentially based on two main cycles – undergraduate and graduate – and stipulated requirements for access to the second cycle: "Access to the second cycle shall require successful completion of first-cycle studies, lasting a minimum of three years" ⁽²⁸⁾. Some countries had already adopted the two-cycle structure by 2001 ⁽²⁹⁾. At their conference in Berlin in 2003, ministers concluded that comprehensive restructuring was under way and committed themselves to having at least started the implementation of the two-cycle system by 2005 ⁽³⁰⁾. Due to the importance of research as an integral part of higher education across Europe, ministers in Berlin also considered it necessary to go beyond the focus on two main cycles of higher education and to include the doctoral level as the third cycle. Ministers also decided on the undertaking to elaborate an overarching framework of qualifications for the European Higher Education Area (EHEA) and asked the BFUG in this context to explore how shorter higher education might be linked to the first cycle of a qualifications framework.

At the time of the 2005 Bergen conference of ministers, the Bologna degree system was being implemented on a large scale and more than half of the students were enrolled in two cycles in most countries. However, there were still obstacles to access between cycles. While the following years saw some progress, the 2009 Stocktaking Report nevertheless concluded that many first-cycle graduates faced difficulties when seeking admission to the second cycle. Some of these difficulties were related to the reality that not all first cycle-degrees provide direct access to the second cycle, and greater transparency was therefore recommended.

Joint programmes and degrees have emerged and been encouraged in the post Bologna European higher education landscape. Already in their Prague Communiqué in 2001, ministers called for an increase in degree curricula offered in partnership by institutions from different countries and leading to a recognised joint degree in order to promote the European dimension of higher education ⁽³¹⁾. The launch of the Erasmus Mundus programme by the European Commission in 2004 gave additional

⁽²⁸⁾ The Bologna Declaration of 19 June 1999.

⁽²⁹⁾ Towards the European Higher Education Area. Communiqué of the meeting of European Ministers in charge of Higher Education, Prague, 19 May 2001.

⁽³⁰⁾ Realising the European Higher Education Area. Communiqué of the Conference of Ministers responsible for Higher Education, Berlin, 19 September 2003.

impetus to the development of joint master programmes, as a means of making European higher education more attractive in Europe and the wider world.

Progress towards more convergent degree structures has been facilitated by a number of pre-existing "tools" that were introduced to the Bologna process to foster transparency and mutual recognition. Notably the European Credit Transfer and Accumulation System (ECTS) and the Diploma Supplement (DS) have been central to implementation of Bologna reforms since the beginning of the process. In addition, national qualifications frameworks have been added as a third tool to help develop greater transparency in the European Higher Education Area.

ECTS was mentioned in the 1999 Bologna Declaration in the context of credit transfer, "as a proper means of promoting the most widespread student mobility" with a view to assign credits to foreign students ⁽³²⁾. However, it also went beyond that: "Credits could also be acquired in non-higher education contexts, including lifelong learning, provided they are recognised by receiving universities concerned" ⁽³³⁾. In their Prague Communiqué, ministers sent a clear message that "a credit system such as the ECTS or one that is ECTS-compatible, providing both transferability and accumulation functions, is necessary" ⁽³⁴⁾. Ministers stressed in Berlin in 2003 that ECTS should not only be used for credit transfer, but also for accumulation ⁽³⁵⁾, and in Bergen in 2005 they agreed on indicative credit ranges for the first two cycles.

The Diploma Supplement, which was developed by the European Commission, the Council of Europe and UNESCO in the 1990s, is a standardised template containing a description of the nature, level, context, content and status of the studies completed by the individual noted on the original diploma. The Berlin Communiqué states that the goal of the Diploma Supplement is to increase the transparency of education acquired for the purposes of securing employment and facilitating academic recognition for further studies. In Berlin, the ministers agreed that from 2005 all graduates should receive the Diploma Supplement automatically and free of charge.

The third tool to have been introduced and developed in the Bologna process is the national qualifications framework (NQF). It is a tool for describing and clearly expressing the differences between qualifications in all cycles and levels of education. At the 2005 Bergen summit, ministers adopted the overarching Framework for Qualifications of the European Higher Education Area (FQ-EHEA) and committed to the development of national qualifications frameworks that should refer to the three-cycle structure and use generic descriptors based on learning outcomes, competences and credits. The adoption of the European Qualifications Framework for Lifelong Learning (EQF) in 2008 for the European Union member states has given further emphasis to the orientation on learning outcomes, credits and the profile of qualifications. Ideally NQFs work in close conjunction with both ECTS and the Diploma Supplement.

Recognition has been at the heart of the Bologna Process since its inception, and has received focused attention throughout the process. Ensuring fair recognition in practice as well as in theory is a *sine qua non* for the successful functioning of the European Higher Education Area.

⁽³¹⁾ Towards the European Higher Education Area. Communiqué of the meeting of European Ministers in charge of Higher Education, Prague, 19 May 2001.

⁽³²⁾ The Bologna Declaration of 19 June 1999.

⁽³³⁾ Ibid.

⁽³⁴⁾ Towards the European Higher Education Area. Communiqué of the meeting of European Ministers in charge of Higher Education, Prague, 19 May 2001.

⁽³⁵⁾ Realising the European Higher Education Area. Communiqué of the Conference of Ministers responsible for Higher Education, Berlin, 19 September 2003.

BFUG Working Groups on Qualification Frameworks and Recognition

The 2009-2012 Working Group on Qualifications Frameworks was mandated to take forward and make recommendations on the main policy issues related to qualifications frameworks. Meanwhile, this report focuses on the progress made in establishing national qualifications frameworks. Close cooperation between the Reporting Working Group and the Qualifications Frameworks Working Group has ensured that these complementary tasks have been taken forward in a clear and coherent manner.

The 2009-2012 Recognition Working Group was tasked to follow up on the recommendations of analysis of the national action plans on recognition with a view to make recognition of qualifications and credits more coherent across the EHEA, and to improve recognition with other parts of the world. Cooperation has been particularly easy to establish as Andrejs Rauhvargers, the co-chair of the Reporting Working Group is also the chair of the Recognition Working Group and a co-author of this report.

Chapter outline

This chapter deals with the basic structures and tools of the Bologna Process and with recognition. The first section is devoted to the implementation of the three-cycle degree structure. The second section covers the Bologna tools – National Qualifications Frameworks, ECTS, and the Diploma Supplement. Section 3 covers the implementation of the Lisbon Recognition Convention ⁽³⁶⁾.

2.1. Bologna structures

2.1.1. Structure and implementation of first and second cycles (BA and MA)

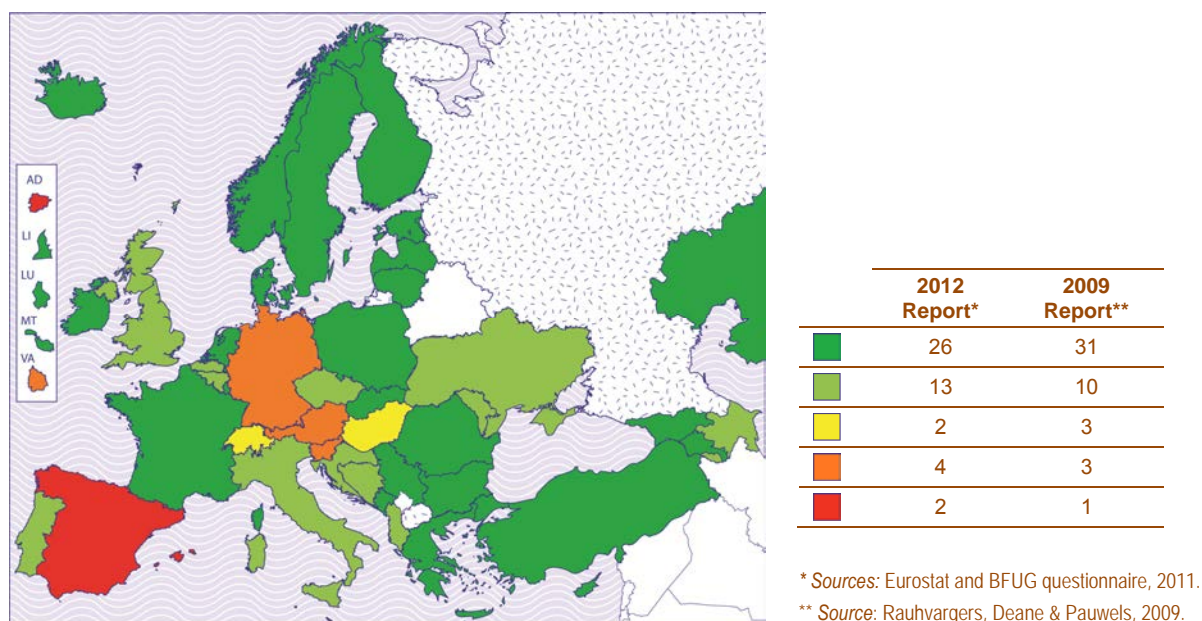
The commitment to adopt easily readable and comparable degrees and to establish a two-cycle system are mentioned as the two first action lines in the 1999 Bologna Declaration originally signed by 29 countries and now being implemented in the 47 countries constituting the European Higher Education Area. The stage of implementation of the two cycles has been an important indicator in all the three Bologna Stocktaking exercises in 2005 (Stocktaking Working Group, 2005), 2007 (Stocktaking Working Group, 2007) and 2009 (Rauhvargers, Deane & Pauwels, 2009) as well as in the Bologna Process Independent Assessment in 2010 (CHEPS & INCHER-Kassel & ECOTEC, 2010). The overarching qualifications framework for the EHEA adopted in 2005 sets credit ranges: 180-240 ECTS credits for the first cycle and 90-120 credits with at least 60 credits at second-cycle level.

This section considers how successful the implementation of the two cycles has been, as well as the typical models of the two-cycle system that have emerged. It also analyses the situation regarding access between Bologna cycles as well as implementation of the third cycle and linking short studies to the first Bologna cycle.

A first glance at the outcomes of this indicator in 2009 and 2012 suggests that the picture has hardly evolved. However, one important explanation for this apparent finding is that in 2009 country answers were based on progress in adoption of legislation introducing the Bologna model, whereas in 2012 the country distribution is based on statistical data showing the share of students actually studying in Bologna model programmes.

⁽³⁶⁾ Convention on the Recognition of Qualifications concerning Higher Education in the European Region, Lisbon, 11 April 1997.

Figure 2.1: Scorecard indicator n°1: Stage of implementation of the first and second cycle, 2010/11



Scorecard categories

- At least 90 % of all ⁽³⁷⁾ students are enrolled in a two-cycle degree system that is in accordance with the Bologna principles
- 70-89 % of all students are enrolled in a two-cycle degree system that is in accordance with the Bologna principles
- 50-69 % of all students are enrolled in a two-cycle degree system that is in accordance with the Bologna principles
- 25-49 % of all students are enrolled in a two-cycle degree system that is in accordance with the Bologna principles
- less than 25 % students are enrolled in a two-cycle degree system that is in accordance with the Bologna principles
OR
 Legislation for a degree system in accordance with the Bologna principles has been adopted and is awaiting implementation

Notes: The indicator is defined as the share of students studying in the programmes belonging to the Bologna model (in %).
 Eurostat data is reflecting the situation in 2009/10. Where Eurostat data was not available scores were estimated from results of the BFUG survey.
 Eurostat provides a single value for the United Kingdom.

In just over half of the countries, the share of students studying in programmes corresponding to the Bologna two-cycle system is more than 90 %, and between 70-89 % in another quarter of the countries. At the same time nearly all countries still have integrated long programmes in those fields which prepare for regulated professions and for which the EU directive 2005/36/EC ⁽³⁸⁾ and/or national legislation requires five-six years of studies: medicine, dentistry, pharmacy, architecture and veterinary medicine and to a lesser extent engineering, law, theology, psychology, teacher training. More rare examples are arts, sciences, and others. Although integrated long programmes have been kept, there has generally been an impact of the Bologna Process even here, with learning outcomes orientations being developed, and tools such as ECTS and the Diploma Supplement being implemented.

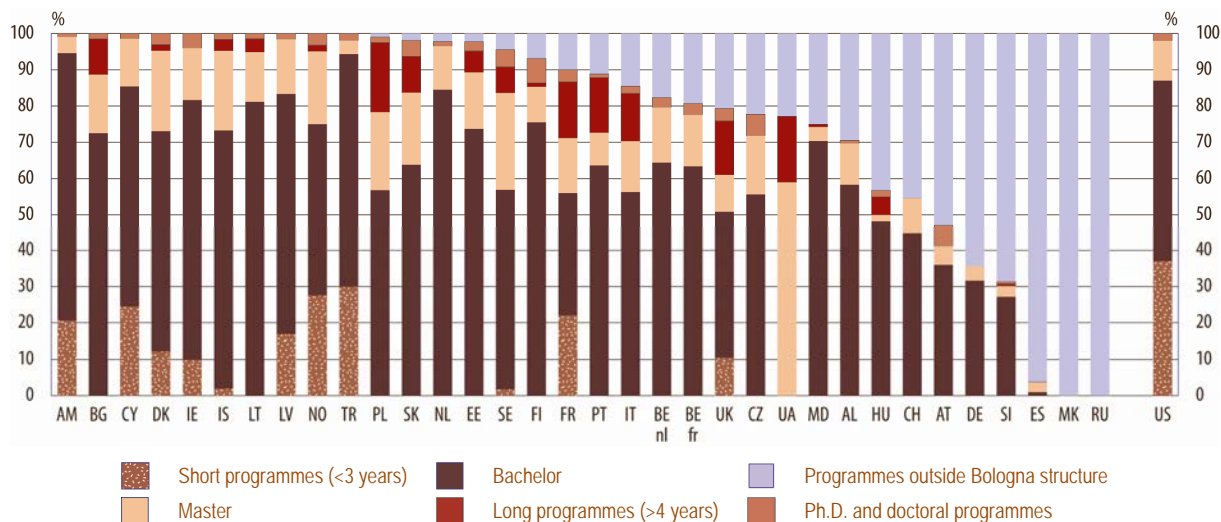
In some countries, especially in Andorra and Spain, but also Austria, Germany, the Holy See and Slovenia, the share of students enrolled in programmes corresponding to the Bologna two-cycle

⁽³⁷⁾ "All" = All students who could be involved in the 2-cycle system i.e. NOT those in doctoral programmes and NOT those in short higher education programmes. Students of ALL study fields are taken into account.

⁽³⁸⁾ Directive 2005/36/EC of the European Parliament and of the Council of 7 September 2005 on the recognition of professional qualifications. Official Journal of the European Union, L255/22, 30.9.2005.

system is relatively low. This is either because the legislative changes stipulating a transfer to Bologna structures were adopted relatively late, or the deadlines to set the reforms in practice were set relatively late. In these countries, implementation of practical reforms has thus started relatively recently and it will still take some years for the students enrolled under the previous system to graduate.

Figure 2.2: Percentage of students enrolled in programmes following the Bologna three-cycles structure, by cycle, 2008/09



Source: Eurostat.

Figure 2.2 illustrates that ten of the 34 higher education systems for which data is available had all students enrolled in programmes following the Bologna-cycles structure. At the other extreme, four countries, Austria (47 %), Germany (36 %), Slovenia (31 %) and Spain (4 %) had less than half of their students following programmes within the Bologna-cycles structure. In two countries – the former Yugoslav Republic of Macedonia and Russia – programmes were in 2008 still not following the Bologna degree structures.

Short (less than three years) programmes existed in 11 countries, with enrolments representing between 2 % (in Iceland and Sweden) and 30 % (in Turkey) of total student numbers. This marks a significant difference between European systems and the US system, where 37 % of students were enrolled in programmes of less than three years.

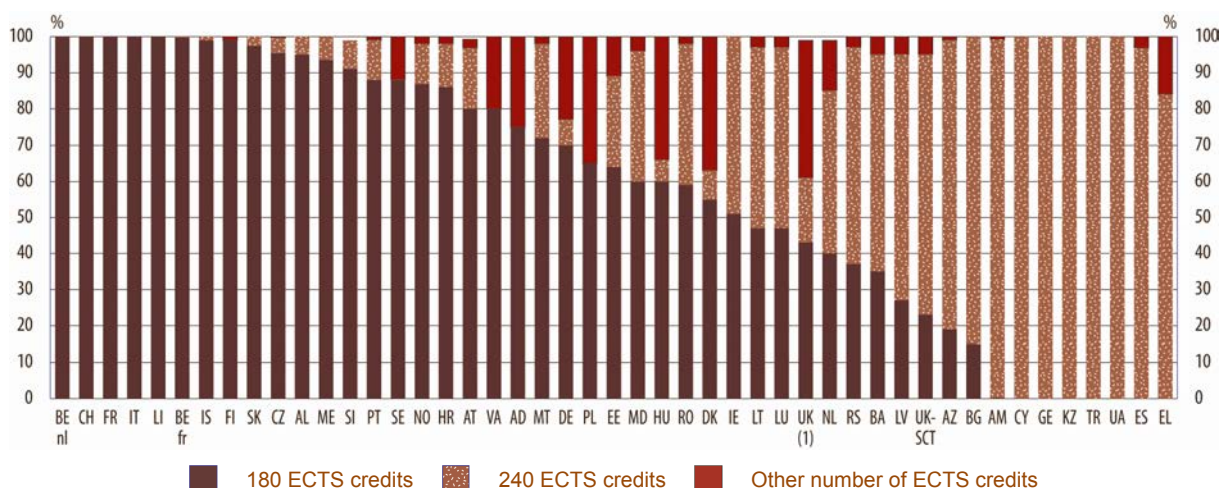
In more than three quarters of the countries there are long programmes covering the first two cycles. The percentage of students enrolled in this type of programmes ranged from 1 % in Finland and Moldova to 19 % in Poland.

Most common models and typical credit ranges of ECTS in the first cycle

Figure 2.3 shows the share of programmes having a workload of 180 ECTS, 240 ECTS credits or another number of credits. Data on the share of students enrolled in these programmes have also been collected. They confirm the same trends and have therefore not been presented separately.

There is no single model of first-cycle programmes in the EHEA. Most countries have a combination of 180 ECTS and 240 ECTS and another duration in the first cycle. A unique 180 ECTS Bachelor model exists only in the Flemish Community of Belgium, France, Italy, Liechtenstein and Switzerland. While Finland also shows a strong predominance of the 180 ECTS model, the data covers the situation at universities only and the professional higher education system is not included. The 180 ECTS model also dominates – with more than 75 % of programmes – in 14 more higher education systems.

Figure 2.3: Share of first cycle-programmes having workload 180 ECTS credits, 240 ECTS credits or other number of credits, 2010/11



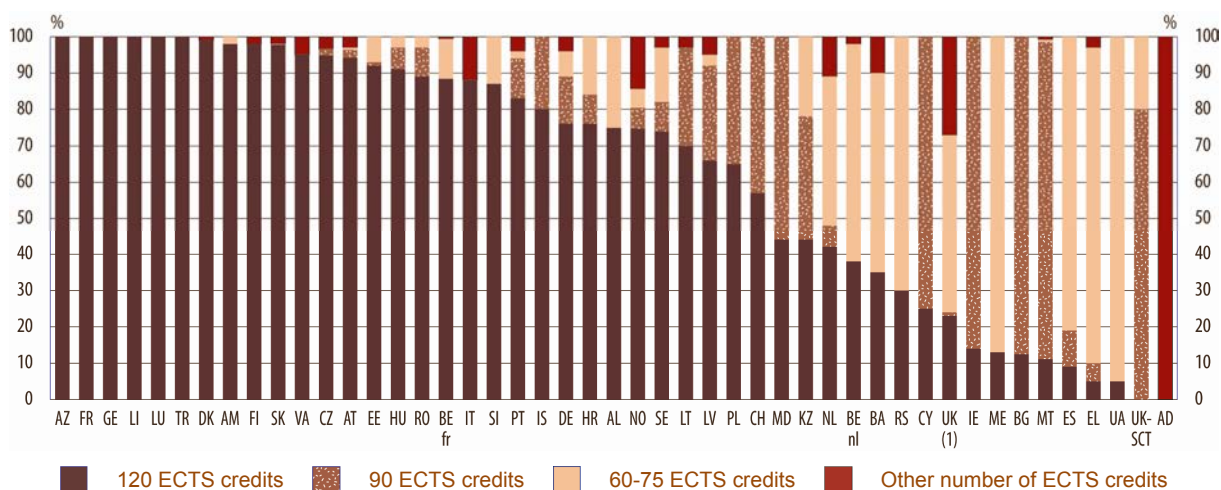
Source: BFUG questionnaire.

UK (1) = UK-ENG/WLS/NIR

A unique 240 ECTS model is found in Armenia, Cyprus, Georgia, Kazakhstan, Turkey and Ukraine, and is prevailing in more than 75 % of programmes in Azerbaijan, Bosnia and Herzegovina, Bulgaria, Greece, Spain and Latvia. The Netherlands should also be added to this group, because while the share of programmes of 240 ECTS programmes is around 45 %, the share of students in this model is 70 %.

Most common models and typical credit ranges of ECTS in the second cycle

Figure 2.4: Share of second-cycle (master) programmes with a workload of 60-75, 90, 120 or another number of ECTS credits, 2010/11



Source: BFUG questionnaire.

UK (1) = UK-ENG/WLS/NIR

In the second cycle (Figure 2.4), the 120 ECTS model is by far the most widespread, being present in 42 higher education systems. It is the sole model in Albania, Armenia, Azerbaijan, France, Georgia, Liechtenstein, Luxembourg and Turkey, and is used in more than 75 % programmes in a further 18 systems. The 60-75 ECTS model is present in 27 countries and dominates in eight systems. The 90 ECTS model is less widespread: while it is present in 21 systems, in only six of them – Bulgaria, Cyprus, Ireland, Moldova, Spain and the United Kingdom (Scotland) – does it represent at least 50 % of programmes. In 17 higher education systems, there are also programmes with a workload other than 60-75, 90 or 120 ECTS credits. However, with the exception of Andorra, these programmes do

not exceed 10 % of provision. The above tendencies were also confirmed by the data on the shares of students enrolled in second-cycle programmes.

There is no single model of both first and second-cycle programmes in the EHEA: in the first cycle, most countries have a combination of 180 ECTS and 240 ECTS and/or another duration. In the second cycle, the most common model is 120 ECTS. The 180+120 ECTS credits ("3+2") model is therefore the most widespread, but a number of other combinations are also present in the EHEA.

Programmes outside the typical Bologna models

31 higher education systems confirm the existence of degree programmes outside the typical Bologna 180-240 ECTS first-cycle model. Typically, these are integrated/long programmes leading either to a first or a second-cycle degree and which, in some countries, can still be better characterised by duration in years rather than credits. In most of these countries, the programmes outside the Bologna first-cycle model are in the fields of medicine, dentistry, veterinary medicine, nursing and midwifery and in most cases involve 1-8 % of the student population. In addition to the above fields of studies, integrated programmes are also mentioned by a small numbers of systems (between two and seven, depending on the discipline) in engineering, architecture, theology, teacher training, arts, law and pharmacy.

The typical length of integrated programmes leading to regulated professions is usually chosen according to the requirements of national legislation and the EU directive 2005/36/EC in the EU/EEA countries. In general, it is 300-360 ECTS/five-six years depending on the regulated profession in question. Some countries also mention shorter programmes which either prepare for certain professions or are intermediate qualifications in programmes leading to a first-cycle degree. The length of such programmes can vary between 60 ECTS (one year) to 180 ECTS (three years). The most common length of short-cycle programmes seems to be 120 ECTS credits (two years), as mentioned by Andorra, the French Community of Belgium, Croatia, Denmark, Norway and Sweden.

Deviation from the typical Bologna models also takes place in some cases where programmes leading to regulated professions are rearranged into first and second cycles. In those cases, the combined length of the first and second cycle is usually chosen according to the requirements the particular professions. As a result, in Belgium, Bulgaria, Denmark, Finland, Iceland, Luxembourg, the Netherlands, Ukraine and the United Kingdom, some second-cycle programmes are longer than usual – up to 180 ECTS credits mainly in medicine, dentistry, pharmacy, veterinary medicine, architecture, law or theology.

Access to the next cycle

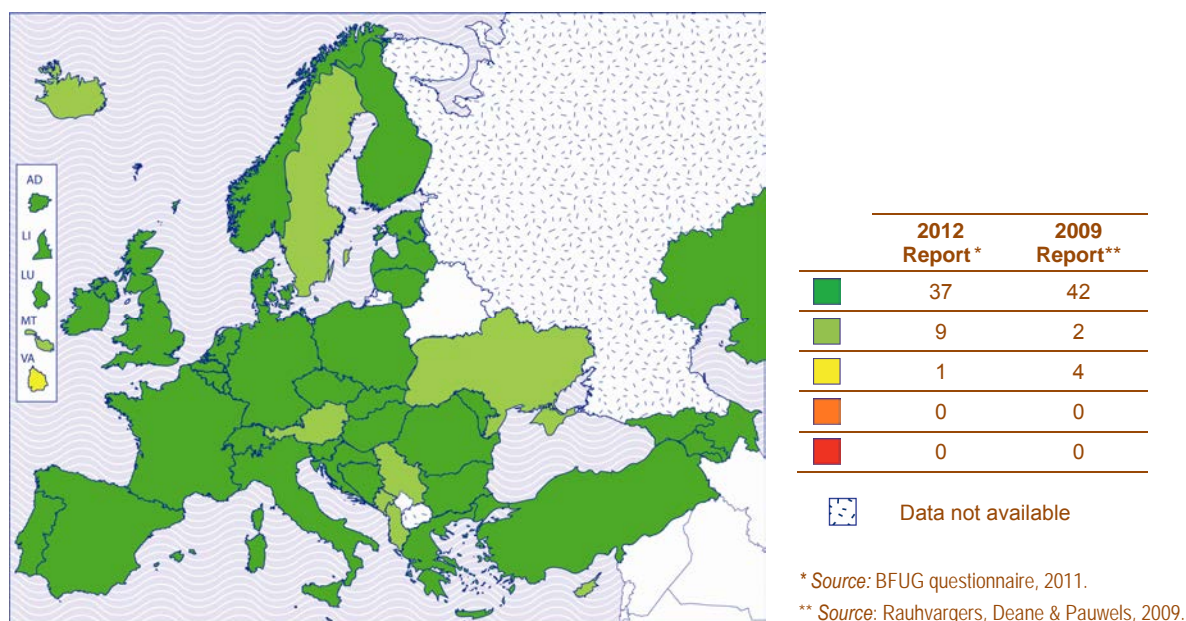
The Bologna Declaration emphasises that the first-cycle degree is a requirement for access to the second cycle. In the Berlin Communiqué of 2003, ministers responsible for higher education clarified that "First-cycle degrees should give access, in the sense of the Lisbon Recognition Convention, to second-cycle programmes. Second-cycle degrees should give access to doctoral studies" ⁽³⁹⁾. Yet, two years later in Bergen, ministers admitted that, "there are still some obstacles to access between cycles" ⁽⁴⁰⁾ and in 2007 in London that, "efforts should concentrate in future on removing barriers to access and progression between cycles" ⁽⁴¹⁾.

⁽³⁹⁾ Realising the European Higher Education Area. Communiqué of the Conference of Ministers responsible for Higher Education, Berlin, 19 September 2003.

⁽⁴⁰⁾ The European Higher Education Area – Achieving the Goals. Communiqué of the Conference of European Ministers Responsible for Higher Education, Bergen, 19-20 May 2005.

⁽⁴¹⁾ London Communiqué: Towards the European Higher Education Area: responding to challenges in a globalised world, 18 May 2007.

Figure 2.5: Scorecard indicator n°2: Access to the next cycle, 2010/11*



Scorecard categories

- All first-cycle qualifications give access to second-cycle programmes and all second-cycle qualifications give access to at least one third-cycle programme without major transitional problems (42)
- There are some (less than 25%) first-cycle qualifications that do not give access to the second cycle, **or** some second cycle-qualifications that do not give access the third cycle
- There are some (less than 25 %) first-cycle qualifications that do not give access to the second cycle **and** some second-cycle qualifications that do not give access to the third cycle
- A significant number (25-50 %) of first and/or second-cycle qualifications do not give access to the next cycle
- Most (more than 50 %) first and/or second-cycle qualifications do not give access to the next cycle **OR** there are no arrangements for access to the next cycle

Note: Access to the next cycle is defined as the right of qualified candidates to apply and to be considered for admission (definition used in the Lisbon Recognition Convention). The indicator measures the percentage of first-cycle programmes that give access to at least one second-cycle programme. Scoring criteria are given in the table above.

In the vast majority of countries, all first-cycle programmes theoretically give access to the second cycle. Yet, in some countries, there are either some (less than 25 %) first-cycle qualifications that do not give access to the second cycle (Albania, Sweden and Ukraine) or some second-cycle qualifications that do not give access to the third cycle (Austria, Cyprus, Iceland, Montenegro, Malta and Serbia).

All second-cycle programmes qualify graduates for direct access to third-cycle studies in an overwhelming number of higher education systems. In 11 countries (Austria, Belgium (French Community), Croatia, Cyprus, Denmark, the Holy See, Iceland, Ireland, Malta, Montenegro and Serbia) this is not the case for all second-cycle programmes, but still for 75-100 %. In addition to second-cycle graduates with Master degrees, the holders of long integrated programme qualifications (300 and more ECTS credits) are also admitted.

Even if access is provided in the understanding of the Lisbon Recognition Convention, countries have mentioned several reasons why not all first-cycle programmes give direct access to the second-cycle, and this is often related to a binary differentiation between "academic" and "professional" programmes

leading to a requirement that holders of professional first-cycle degrees are required to follow bridging programmes. Indeed in several countries, there may be no second-cycle programmes that provide direct continuation of some or all professional first-cycle programmes. Thus, while there may be theoretical access to second-cycle programmes, in practice students are faced with additional requirements to gain admission to the second cycle.

Ireland presents another example where theoretical access may not grant immediate access to the second cycle with the existence of different categories of bachelor programme - ordinary bachelor and bachelor honours. Only the latter are considered for immediate transition to the second cycle while graduates with an ordinary bachelor degree have to follow special progression routes to the second cycle.

The results of this scorecard indicator for access show that access issues are still alive. There is a clear difference between theoretical access and actual admission, and therefore a new discussion of the issue of access and admission might be needed to clarify whether the additional measures for admission to the second cycle should be seen as instruments to widen access or as obstacles to admission.

Regulation of progression between first and second cycle

When it comes to practical measures, access to the next cycle may require sitting additional examinations, taking additional courses or having a mandatory work experience, see Figure 2.6.

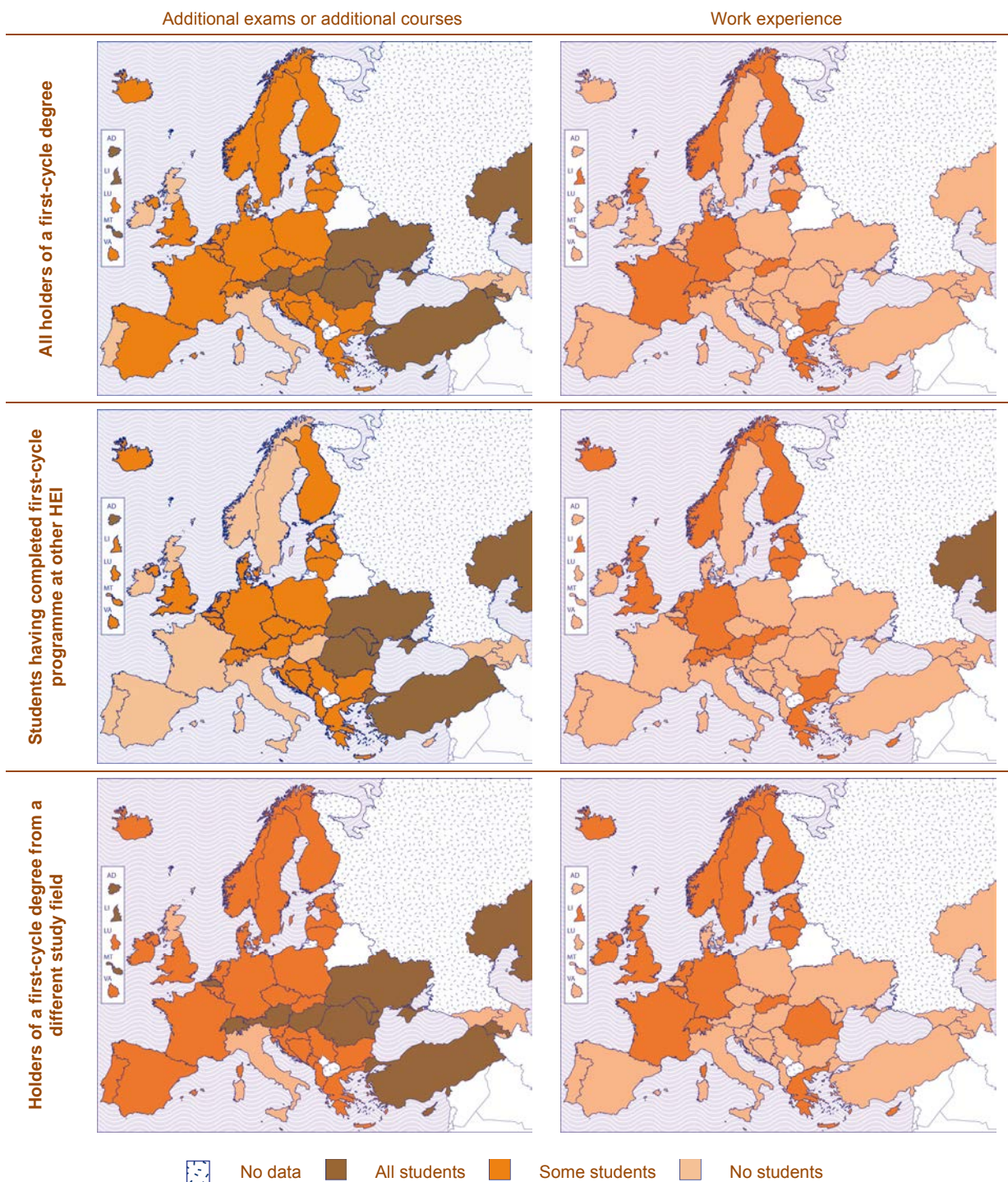
Requirement to take additional examinations or courses. Despite the general tendency towards easier access to the next cycle, it is nevertheless commonplace to find additional courses or examinations being required of some or all students. In six countries, all students have to sit entrance exams or to take additional courses, even if they follow in the same field of studies. In a further 27 countries some students have to do so.

All or some holders of a first-cycle degree from a different higher education institution seeking access to second-cycle studies have to sit additional exams or complete courses in 21 higher education systems. Moreover, in the vast majority of countries, all or some holders of first-cycle degrees in a different field of study have to take additional examinations or to complete additional courses. In countries with binary higher education systems such as Belgium, Denmark and the Netherlands, bridging courses or examinations are seen as widening access to further studies. Here, the learning outcomes of the professional first-cycle degrees may not be suitable for a second-cycle programme and thus a bridging system opens a learning path for those students.

Requirement to have work experience. The requirement to have work experience is less common than bridging measures. In more than half of the countries, there is no requirement at all for work experience for access to second-cycle studies. In approximately half of the countries some applicants holding a first-cycle degree from another higher education institution or in a different field of studies may be required to demonstrate previous work experience. In more than a quarter of countries, higher education institutions may require work experience for entering particular programmes. Cyprus, Denmark, Germany and Romania specify that work experience is required only if the chosen Master programmes are experience based (e.g. MBA). Estonia and Finland state that work experience is mainly required for admission to Master's programmes at professional higher education institutions.

(42) Compensatory measures required for students coming from another study field will not be counted as "major transitional problems".

Figure 2.6: Requirement to sit exams or take additional courses for holders of a first-cycle degree to be admitted to a second-cycle programme, 2010/11



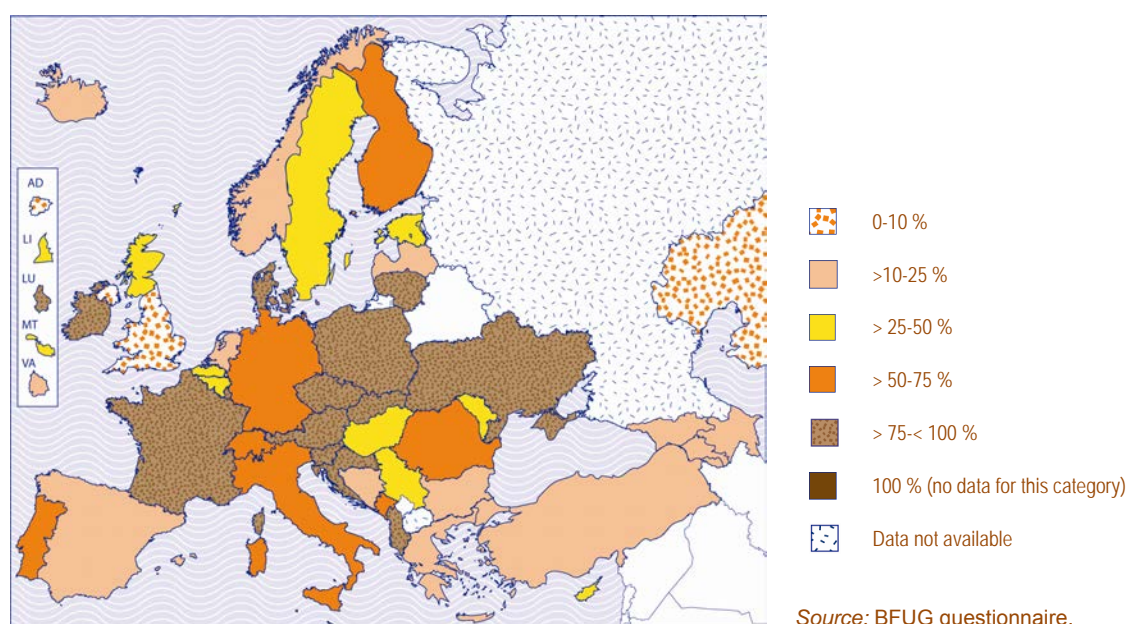
Source: BFUG questionnaire.

Share of first-cycle graduates who actually continue their studies in the second cycle. The formal possibilities to be admitted to the next cycle of studies have been monitored by the BFUG since the first Stocktaking report in 2005. For the first time, this report also looks at actual numbers of students moving from the first to the second cycle. The shares of the holders of first-cycle degrees that actually continue studies in the second cycle differ greatly (see Figure 2.7). While in the majority of countries either 10-24 % or 25-50 % continue their studies in the second cycle, in 13 systems the share is between 75-100 %. The Czech Republic reports that this tendency has gone too far with almost every student going on to the second cycle.

At the other end of the spectrum, Andorra, Kazakhstan and the United Kingdom (England, Wales and Northern Ireland) report that 0-10 % of the students continue in the second cycle.

Some additional country comments are relevant to understand this picture more fully. In Andorra and Cyprus, large cohorts of students take the second cycle abroad. Austria, the French Community of Belgium, Estonia, Finland, Germany and Montenegro report that first-cycle graduates from universities choose second-cycle studies much more often than their counterparts from professional higher education institutions who tend to enter the labour market with their first degree. Other countries link the high share of students continuing in the second cycle with the fact that the labour market still does not properly accept Bachelor graduates (Croatia) or with shrinking employment possibilities caused by the economic crisis (Italy).

Figure 2.7: Share of first-cycle students continuing studies in a second-cycle programme after graduation from the first cycle (within two years), 2010/11



2.1.2. Short-cycle higher education programmes

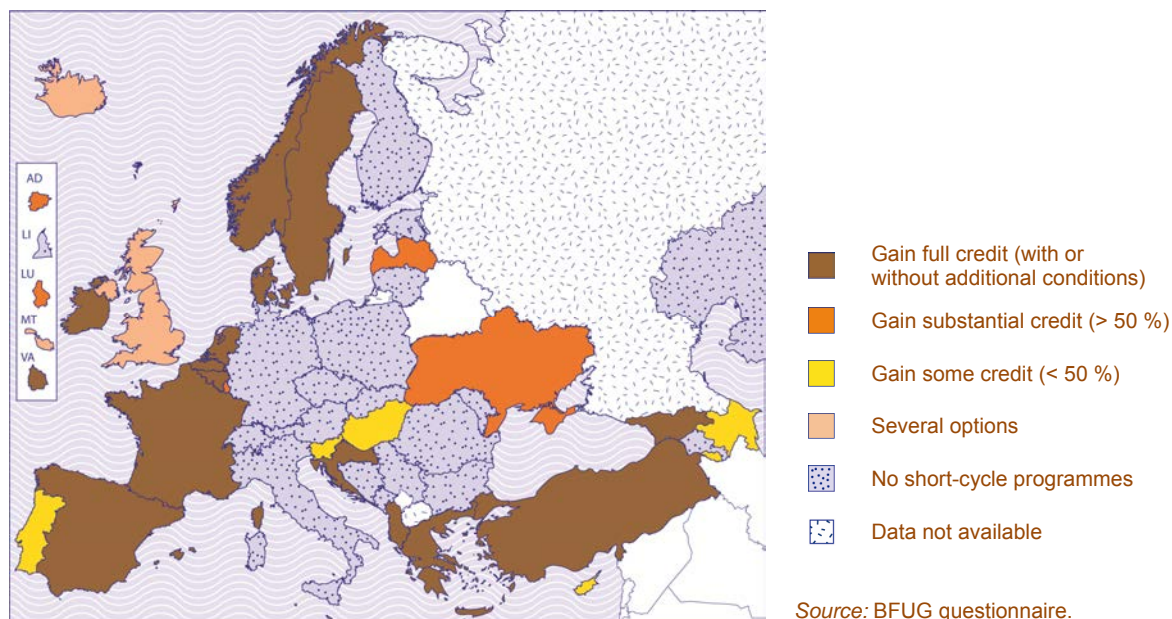
In the 2003 Berlin Communiqué, ministers asked for further exploration of, "whether and how shorter higher education may be linked to the first cycle of a Qualifications Framework for the EHEA" ⁽⁴³⁾. Short programmes were accommodated in the EHEA Qualifications Framework through additional provision for a short cycle within or linked to the first cycle. Overall short-cycle programmes linked to the first cycle exist in around half of the countries. Most of those countries consider the short-cycle programmes as part of higher education provision, with the exception of Azerbaijan, Cyprus, Greece, Portugal and Slovenia, which consider these programmes as part of tertiary but not higher education.

When continuing studies in a first-cycle programme, short-cycle graduates can often gain full credit for their studies (see Figure 2.8). In some countries, full credit is granted but only when continuing in professional first-cycle programmes. In Norway and Sweden as well as in professional higher education programmes in Denmark, short studies are built into the first cycle while in the Flemish Community of Belgium, Iceland, Latvia and the United Kingdom, full credit is possible if there is agreement between the institution providing the short-cycle programme and the institution where the

⁽⁴³⁾ Realising the European Higher Education Area. Communiqué of the Conference of Ministers responsible for Higher Education, Berlin, 19 September 2003.

Bachelor programme is taught. In Iceland and the United Kingdom, there are several kinds of short-cycle programmes with different possibilities for credit within the first-cycle programme.

Figure 2.8: Gaining credits towards bachelor programme in the same field for previous short-cycle studies, 2010/11



2.1.3. Third-cycle programmes

The estimated share of second cycle graduates who go on to studies in the third cycle is in most countries either in the interval of 5-10 % or 10-15 %. The smallest shares are 0.8 % in Malta and 3 % in Ukraine, and the highest shares reach over 20 % (Moldova, Serbia and Switzerland,) and even over 30 % in the cases of Austria and France.

Ten countries report that there are also possibilities for holders of first-cycle degrees to enter third-cycle programmes. Selection is based on certain criteria and an individual decision is required. In most cases only 0-2.5 % of first-cycle degree holders are actually admitted to third cycle programmes. Doctoral studies for holders of first-cycle degrees are often also longer, and Denmark and Finland report that the path may include acquiring a second-cycle degree during the process.

In nine countries all or most doctoral programmes are structured, while 14 countries characterise their situation as a mixture of structured programmes and traditional supervision-based independent research. The traditional model dominates in a further 11 systems. In the French Community of Belgium, doctoral studies include 60 ECTS of research training sanctioned by a research certificate in addition to supervised research, while in the United Kingdom (Scotland) one of the options for students is to develop the doctoral programme after a one-year taught Master course.

Doctoral schools appear to have seen a rapid development across the European Higher Education Area and now exist in 30 higher education systems. In many cases, doctoral schools are organised for training doctoral students within one discipline or a group of related disciplines. In this way, the individual specialisation of doctoral candidates in their subjects is accompanied by a cross-curricular study programme that aims to develop general competences. Two categories of doctoral schools exist in the French Community of Belgium: Graduate Colleges which are discipline-specific and Graduate Schools which are thematically structured.

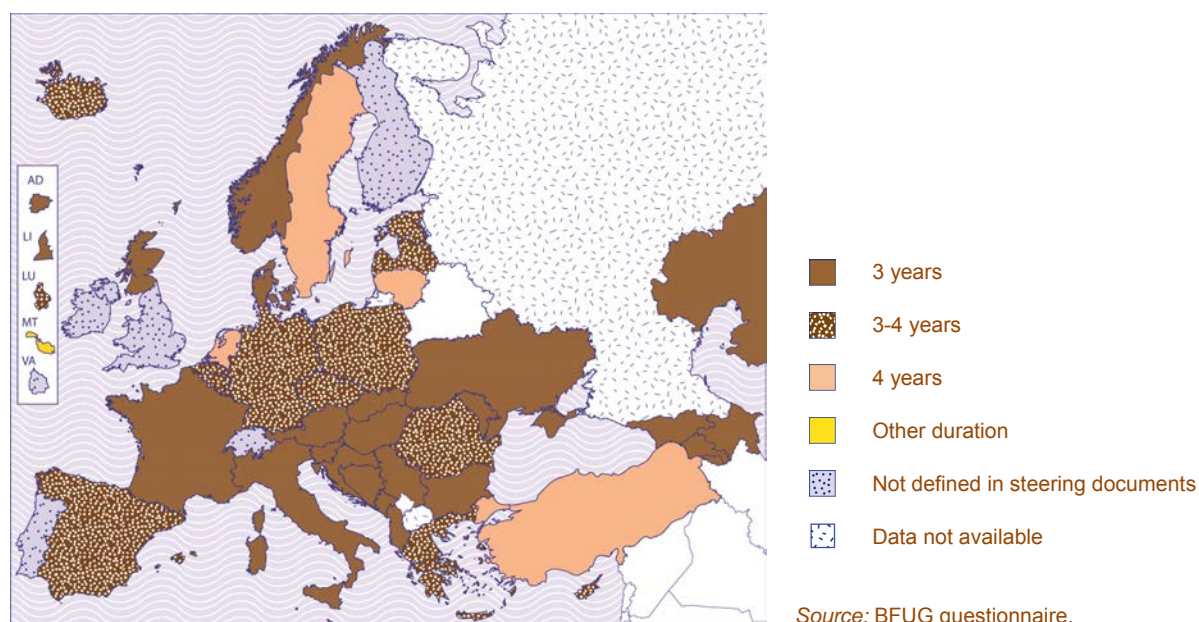
In Austria, another version of doctoral schools combines doctoral candidates who undertake research on a particular topic or theme and are trained by a team of scientists.

The Netherlands and Norway are examples of countries where large doctoral schools may be organised nationally in parallel with doctoral training at individual higher education institutions. In other countries, doctoral schools are organised by universities themselves. In the United Kingdom (England, Wales and Northern Ireland), the main model is institution wide doctoral schools but in Scotland, depending on the size of the institution, doctoral schools may be either discipline-specific, or organised at faculty or institutional level. In several countries, third-cycle programmes may also lead to industrial or business-oriented doctoral degrees (Denmark), professional doctoral degrees (Ireland, Romania and the United Kingdom) or PhDs in the arts (Sweden). Azerbaijan has kept the two tier doctoral system where a second doctoral degree can be earned in four-five years of post-PhD research.

There is considerable overlap between the concepts "structured programme" and "doctoral school", and the taxonomy is still evolving. However, evidence from the European University Association's Council for Doctoral Education suggests that there is a large degree of common understanding that institutions need to engage actively in setting up programmes with structures beyond the traditional "master-apprentice" model and that there is a need for additional coordinating, strategic units often subsumed under the term "doctoral schools". Implementation and concepts may vary, but the overall goal of increased institutional responsibility for doctoral education is shared across the continent.

As shown in Figure 2.9, the most typical prescribed duration of full-time doctoral programmes is three years while in eight countries it is three-four years. Four countries make no attempt to define or regulate the length of doctoral studies. Actual duration is estimated to be between three and four years in most countries.

Figure 2.9: The length of full-time third-cycle programmes defined in the national steering documents, 2010/11

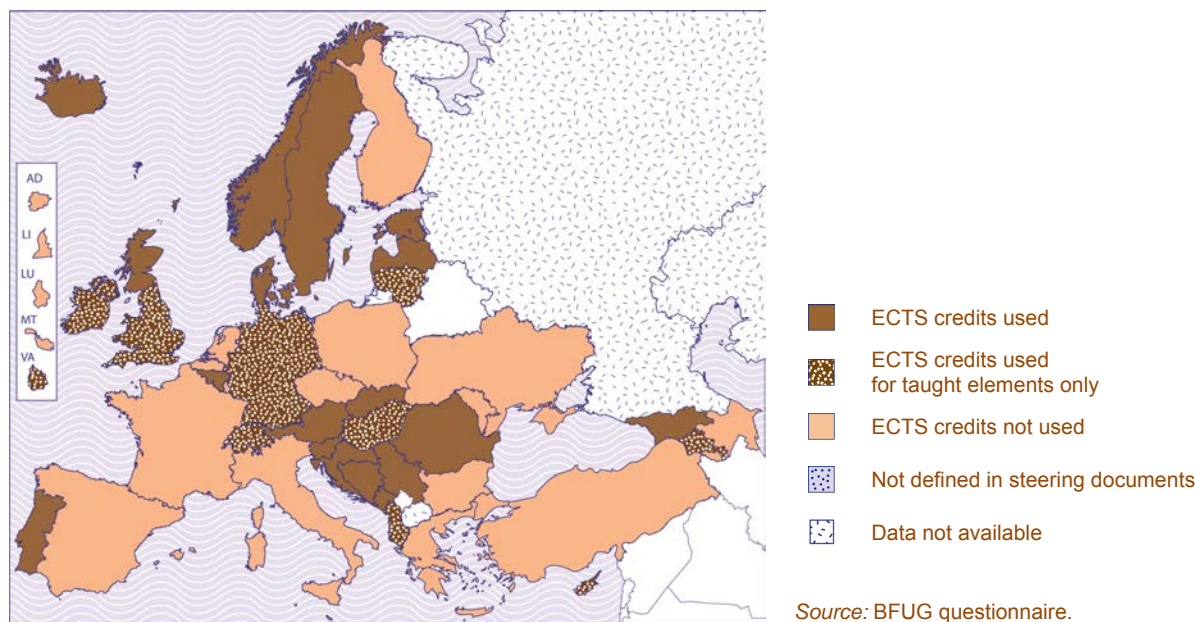


All countries that have a qualifications framework include doctoral studies. The information submitted for this report also suggests that the use of ECTS in doctoral studies is growing over time. Currently, 18 systems use ECTS for the whole doctoral studies (see Figure 2.10) and another 10 systems for taught courses only. 18 other countries do not require ECTS to be used in doctoral education.

Overall, the results suggest that the development of doctoral studies as the third cycle of studies is progressing. There are more countries where structured doctoral studies are the predominant model of doctoral training. Doctoral schools are being established at both institutional and in some countries also at national level and they follow no single model. Doctoral schools can be organised more as structures ensuring an organisational framework for structured doctoral studies. Alternatively, they

may also be established to facilitate multidisciplinary studies, providing the necessary transversal skills, and/or a platform for cooperation of doctoral students. A third possibility is that they are established to provide an overarching structure for taught courses in the third cycle.

Figure 2.10: Use of ECTS credits in doctoral programmes, 2010/11



2.1.4. Joint degrees and programmes

Already in their Prague Communiqué in 2001, ministers called for an increase in degree curricula offered in partnership by institutions from different countries and leading to a recognized joint degree in order to promote the European dimension of higher education⁽⁴⁴⁾. Programmes developed jointly by several universities from different countries and awarding joint degrees have the potential to stimulate developments in various Bologna action lines. For instance, joint degrees require joint curriculum development, joint quality assurance and joint decisions regarding mutual recognition of parts of programmes acquired at partner institutions. For joint programmes and joint degrees to be successful, partner institutions can make use of the Bologna tools such as ECTS, Diploma Supplement, qualifications frameworks and a learning outcomes orientation, thus also fostering the implementation of these tools (Tauch & Rauhvargers, 2002)

Several reports consider that the greatest problem is how to award joint degrees. One difficulty is that national legislation may not mention joint degrees at all. If this is the case, joint programmes and joint degrees have to fulfil all the same rules as standard programmes and qualifications, and the specific characteristics of joint programmes and degrees are not acknowledged. While institutions require autonomy to develop innovative joint programmes, the different procedures required for matters such as curriculum development and quality assurance need consideration and support at national level.

For this reason at their Berlin Conference in 2003, the ministers responsible for higher education stated that they agree to engage at the national level to remove legal obstacles to the establishment and recognition of such degrees and to actively support the development and adequate quality assurance of integrated curricula leading to joint degrees⁽⁴⁵⁾. Currently, 35 countries report that their

⁽⁴⁴⁾ Towards the European Higher Education Area. Communiqué of the meeting of European Ministers in charge of Higher Education, Prague, 19 May 2001.

⁽⁴⁵⁾ Realising the European Higher Education Area. Communiqué of the Conference of Ministers responsible for Higher Education, Berlin, 19 September 2003.

legislation allows both the establishment of joint programmes and the award of joint degrees. Armenia, Croatia, Cyprus and the Holy See report that legislation regarding joint degrees lacks clarity, in effect allowing joint programmes to operate but not allowing joint degrees to be awarded. In eight countries, (Bulgaria, Finland, Ireland, Kazakhstan, Liechtenstein, Moldova, Switzerland and Ukraine) legislation does not address joint programmes or joint degrees at all, and this often leads to difficulties both in establishing joint programmes and awarding joint degrees in practice (Tauch & Rauhvargers, 2002).

Country estimates of the percentage of higher education institutions awarding joint degrees and involved in joint programmes are shown in Figures 2.11 and 2.12. The situation varies greatly in different countries. In five countries, the share of institutions involved in joint programmes and awarding joint degrees is between 75 and 100 %.

Figure 2.11: Estimated percentage of institutions that participate in joint programmes, 2010/11

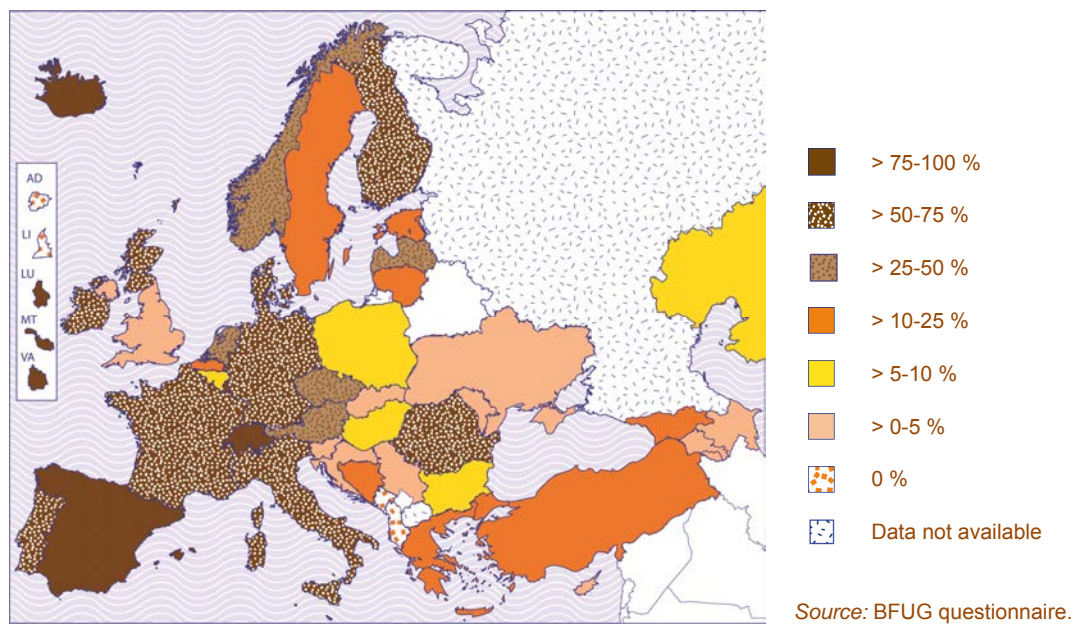
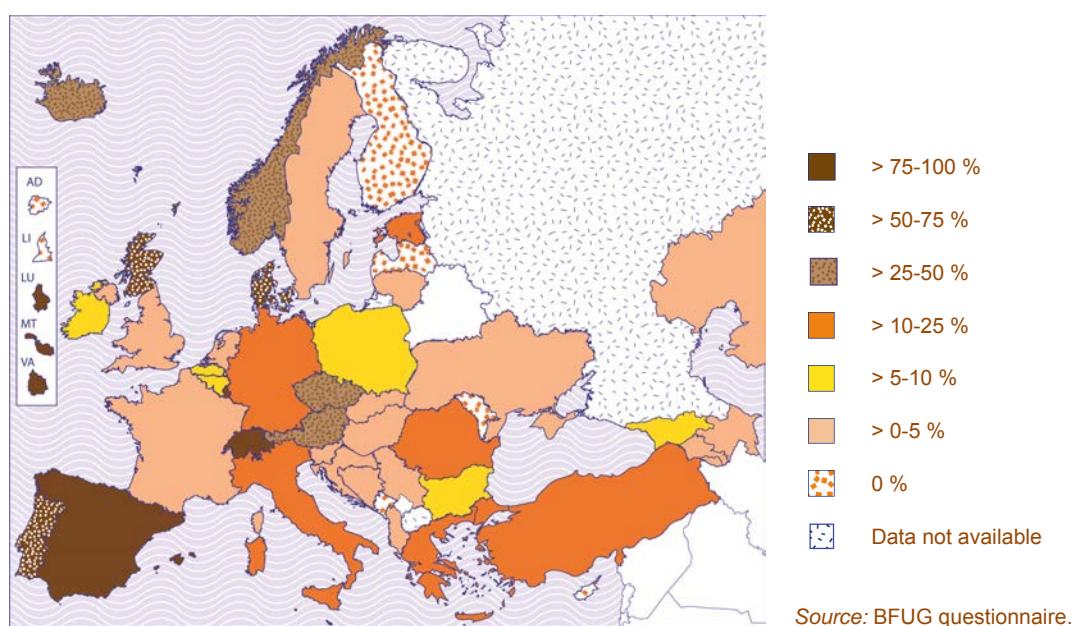


Figure 2.12: Estimated percentage of institutions that award joint degrees, 2010/11



At the other end of the scale are Albania, Andorra, Liechtenstein and Montenegro where there are no joint programmes at all. A further ten higher education systems have only 0-5 % of their higher education institutions involved in joint programmes. In Andorra, Cyprus, Finland, Latvia and Moldova, higher education institutions are involved in joint programmes but do not award joint degrees, although in Latvia legislation allows joint degrees to be awarded since August 2011.

In many countries participation in joint programmes is more widespread than the award of joint degrees. This tendency is observed even in countries where the percentage of higher education institutions involved in joint programmes is 50-75 %. Six countries report that there were no graduates from joint programmes in 2009/10. The highest estimated shares of students in joint programmes and those graduating with a joint degree are in the United Kingdom (Scotland) and the Holy See – over 10 % – followed by Austria with 5-7.5 %, and Bosnia and Herzegovina, Luxembourg, Kazakhstan and Spain, with 2.5-5 %.

Countries estimate that the most popular fields of study for joint programmes/degrees are mathematics and sciences, engineering and technologies as well as economics and business. Next come studies of world regions or countries, law, humanities, health sciences, education, plus culture and arts. Languages, social sciences, agriculture and forestry, as well as interdisciplinary programmes are also mentioned in this respect.

The main conclusions are that more countries have reviewed their legislation in order to allow and encourage joint degrees and that more students are involved in joint programmes. However, students of joint programmes are not always awarded a joint degree.

Although reliable data to assess implementation of joint programmes and degrees is lacking, it appears that the picture across the EHEA is very uneven, with none or few institutions involved in some countries, while nearly all institutions may offer at least one joint programme in others.

2.2. Bologna tools

2.2.1. National qualifications frameworks

Qualifications frameworks came into the Bologna agenda between 2001 and 2003. At that time, just a few qualifications frameworks existed in Europe – in Ireland, the United Kingdom and, at an experimental phase, in Denmark. Between 2001 and 2003, several Bologna policy seminars were organised on qualifications frameworks which concluded that establishing qualifications frameworks describing qualifications in terms of level, workload, learning outcomes, and profile should be useful both at national level and at the level of the EHEA. Qualifications frameworks had the potential to make higher education systems more transparent, providing common reference points for levels of qualifications, and also strengthening links between qualifications and learning outcomes.

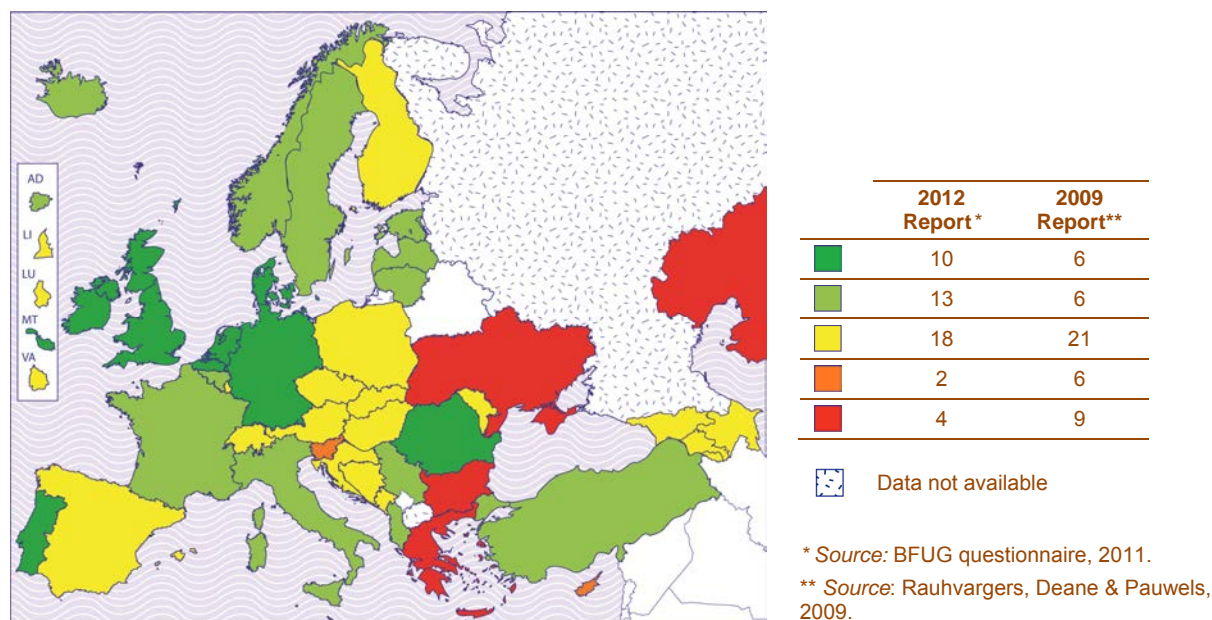
In Berlin in 2003, ministers in their communiqué encouraged the member states "to elaborate a framework of comparable and compatible qualifications for their higher education systems, which should seek to describe qualifications in terms of workload, level, learning outcomes, competences and profile" ⁽⁴⁶⁾. Ministers also undertook to elaborate an overarching framework of qualifications for the EHEA. Two years later in Bergen, ministers adopted the overarching qualifications framework for the EHEA and committed themselves to elaborating national frameworks for qualifications compatible with the overarching framework for qualifications in the EHEA by 2010 ⁽⁴⁷⁾. However, due to the long

⁽⁴⁶⁾ Realising the European Higher Education Area. Communiqué of the Conference of Ministers responsible for Higher Education, Berlin, 19 September 2003.

⁽⁴⁷⁾ The European Higher Education Area – Achieving the Goals. Communiqué of the Conference of European Ministers Responsible for Higher Education, Bergen, 19-20 May 2005.

time needed to carry out the change towards learning outcomes-based programmes and qualifications, as well as carrying out self-assessment procedures with the involvement of foreign experts, the 2010 deadline proved to be unrealistic. Ministers in Leuven/Louvain-la-Neuve in 2009, stated: "We aim at having them [i.e. NQFs] implemented and prepared for self-certification against the overarching Qualifications Framework for the EHEA by 2012" ⁽⁴⁸⁾.

Figure 2.13: Scorecard indicator n°3: Implementation of national qualifications frameworks, 2010/11*



Scorecard categories

- Step 10: The Framework has self-certified its compatibility with the Qualifications Framework for the European for Higher Education Area
- Steps 7-9:
 - 9. Qualifications have been included in the NQF
 - 8. Study programmes have been re-designed on the basis of the learning outcomes included in the NQF
 - 7. Implementation of the NQF has started with agreement on the roles and responsibilities of higher education institutions, quality assurance agency(ies) and other bodies
- Steps 5-6:
 - 6. The NQF has been adopted in legislation or in other high level policy fora
 - 5. Consultation / national discussion has taken place and the design of the NQF has been agreed by stakeholders
- Step 4: The level structure, level descriptors (learning outcomes), and credit ranges have been agreed
- Step 3-1:
 - 3. The process of developing the NQF has been set up, with stakeholders identified and committee(s) established
 - 2. The purpose(s) of the NQF have been agreed and outlined
 - 1. Decision to start developing the NQF has been taken by the national body responsible for higher education and/or the minister

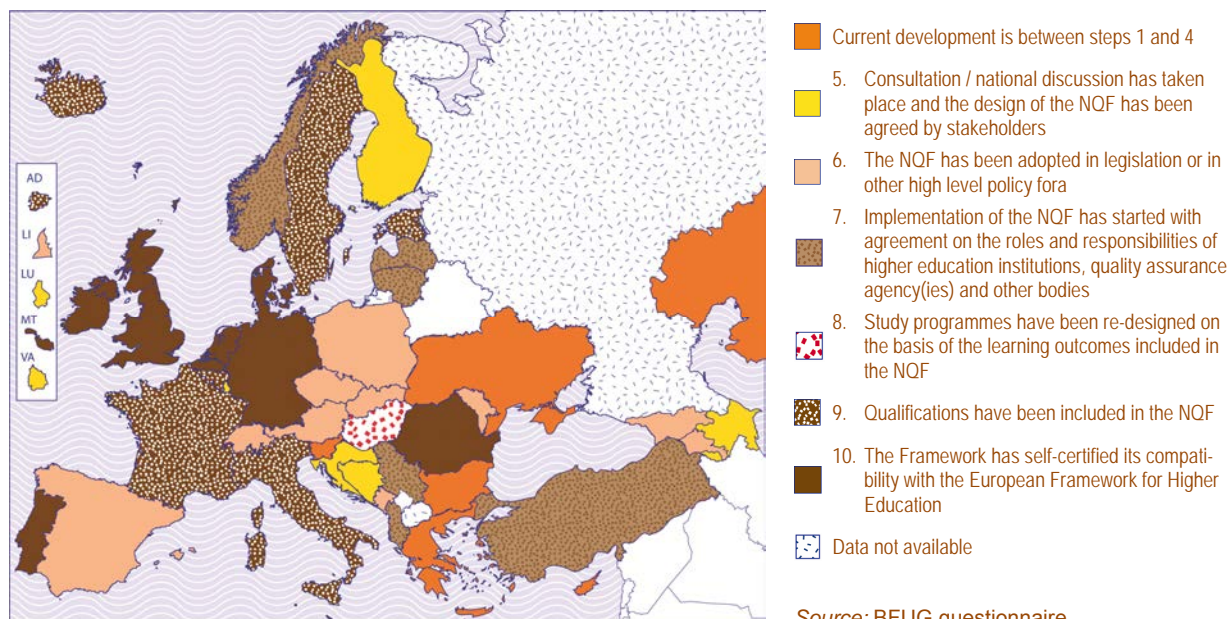
Note: Indicator is defined as the current state in implementation of the national qualifications framework. The state of implementation was measured against the ten steps of implementation of NQF defined by the EHEA qualifications frameworks working group. To keep the same scoring criteria as in 2009 the 10 steps of NQF implementation are transformed into stocktaking scores as shown.

The Flemish Community of Belgium, Denmark, Germany, Ireland, Malta, the Netherlands, Portugal, Romania and the United Kingdom (both England, Wales, Northern Ireland and Scotland) have fulfilled all the 10 steps in implementation of qualifications frameworks. Another group of 13 higher education systems have a good chance to join the first group in the course of 2012. Those countries have to

⁽⁴⁸⁾ The Bologna Process 2020 – The European Higher Education Area in the new decade. Communiqué of the Conference of European Ministers Responsible for Higher Education, Leuven and Louvain-la-Neuve, 28-29 April 2009.

complete the self-certification procedure, while some of them also need to complete the re-design of programmes on the basis of learning outcomes – and that will take more time and effort. The next group of 18 countries that are in the yellow zone have adopted the NQF in legislation or in other high level policy fora or, as in the case of Azerbaijan, Bosnia and Herzegovina, Croatia, Finland, the Holy See and Luxembourg have so far completed the initial and fundamental discussions with all stakeholders. Cyprus and Slovenia have prepared and agreed the proposal on the level structure, level descriptors and credit ranges and are therefore in the orange zone. Bulgaria, Greece, Kazakhstan and Ukraine are in the very first stages of implementation and have yet to draft and agree on the proposal of a NQF structure.

Figure 2.14: Progress in development of national qualifications frameworks according to the 10 steps, 2010/11



The main focus at the moment is clearly on fulfilling the steps required for a national qualifications framework to be established. For many countries, there is still a considerable amount of effort and work required to meet agreed commitments. Redesigning study programmes and linking them with learning outcomes takes time and effort, as does including qualifications in the qualifications framework and carrying out the final step of self-certification. However, even when these tasks are completed, the work will not end, because making qualifications frameworks work in practice is more challenging than developing the structures. This will be one of the main challenges for the 47 members of the EHEA in the years to come.

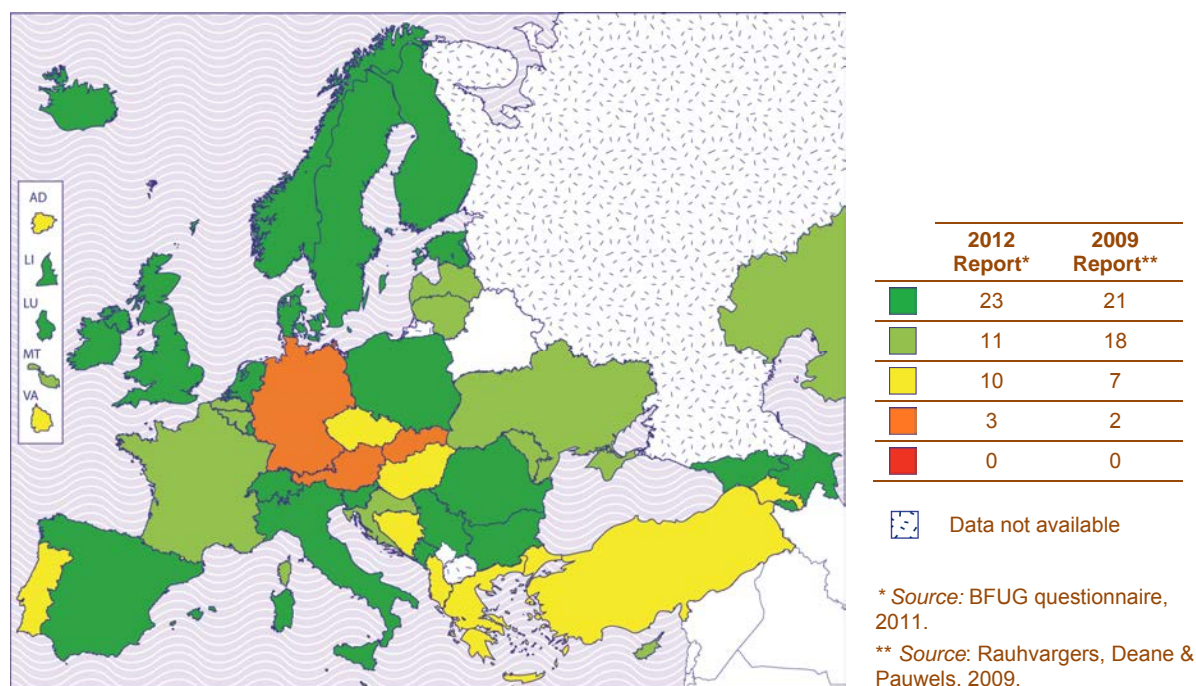
2.2.2. ECTS, learning outcomes and student centred learning

The European Credit Transfer and Accumulation System (ECTS) is a student-centred credit system based on the student workload required to achieve specified learning outcomes. It was originally set up in 1989 in order to facilitate the recognition of periods of study abroad. More recently, it has been developing into an accumulation system to be implemented in all programmes at institutional, regional, national and European levels. Credit accumulation, i.e. the allocation of credit points to each component of a study programme and determining the total number of credits needed for completion of the programme, is a practice that is steadily developing across the EHEA.

Proper implementation of ECTS is very important for reaching Bologna goals. Its use for accumulation makes programmes more transparent, and it facilitates the use of learning outcomes earned at another institution at home or abroad, but also those earned outside the system of formal education.

Proper implementation of ECTS is one of the Bologna action lines that requires much effort. In the early stages the main challenge was the transformation of ECTS from a credit transfer system to a transfer and genuine accumulation system. Currently, the most demanding issue is to link all programme components with learning outcomes. This is also reflected in the results of the scorecard indicator on ECTS.

Figure 2.15: Scorecard indicator n°8: Stage of implementation of ECTS system, 2010/11*



Scorecard categories

- ECTS credits are allocated to all components of all HE programmes, enabling credit transfer and accumulation AND ECTS credits are demonstrably linked with learning outcomes
- ECTS credits are allocated to all components of more than 75 % of HE programmes, enabling credit transfer and accumulation AND ECTS credits are demonstrably linked with learning outcomes
OR
 Credits are allocated to all components of all HE programmes using a fully ECTS compatible credit system enabling credit transfer and accumulation AND credits are demonstrably linked with learning outcomes
- ECTS credits are allocated in 50-75 % of all HE programmes AND ECTS credits are demonstrably linked with learning outcomes **OR**
 ECTS credits are allocated to all components of more than 75 % of HE programmes enabling credit transfer and accumulation, but ECTS credits are not yet linked with learning outcomes
- ECTS credits are allocated in at least 49 % of HE programmes **OR**
 a national credit system is used which is not fully compatible with ECTS
- ECTS credits are allocated in less than 49 % of HE programmes **OR**
 ECTS is used in all programmes but only for credit transfer

34 countries are in the dark or light green categories, indicating that ECTS is very strongly established. Moreover, there are no countries where ECTS credits are allocated in less than 50 % of programmes, although there are three countries, Austria, Germany and Slovakia, where the number is close to 50 %. Ten countries are in the yellow zone with ECTS credits allocated either in 50-75 % of all programmes and demonstrably linked to learning outcomes, or ECTS used in more than 75 % of programmes but not yet linked to learning outcomes.

Overall, implementation of ECTS as a transfer and accumulation system in the sense of quantifying students' work appears to be almost completed. Nevertheless in seven countries – Andorra, Austria,

France, Germany, Greece, the Holy See and Turkey – ECTS credits are used for transfer and accumulation in 50-74 % programmes (Figure 2.16), so the work there is far from being complete.

A comparison of Figures 2.16 and 2.17 shows that linking credits with learning outcomes has been implemented to a far lesser extent than the use of ECTS for credit transfer and accumulation. Indeed it is the linking of credits with learning outcomes that hinders the full implementation of ECTS. Only in 19 higher education systems (Figure 2.17) are all parts of programmes comprehensively and systematically linked to learning outcomes while there are nine systems – Austria, the French and Flemish Communities of Belgium, Bosnia and Herzegovina, the Czech Republic, Germany, the Holy See, Portugal and Ukraine – where all parts of programmes are linked with learning outcomes in less than 50 % of programmes. In three countries – Albania, Hungary and Slovakia – parts of programmes are not linked to learning outcomes at all.

Figure 2.16: Share of programmes using ECTS credits for accumulation and transfer for all elements of study programmes, 2010/11

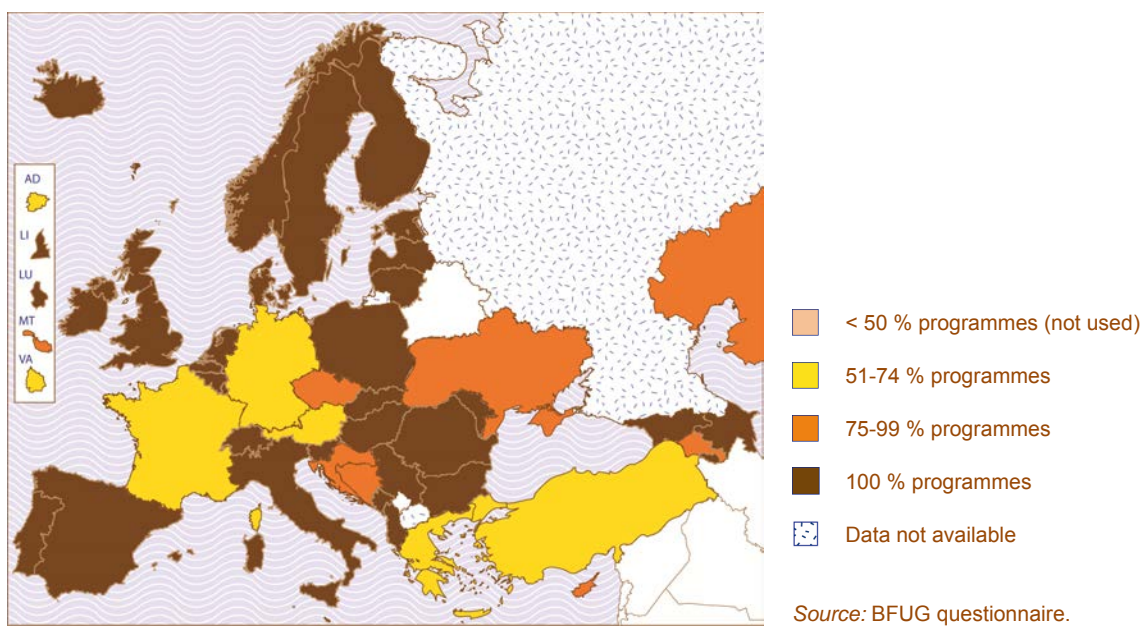
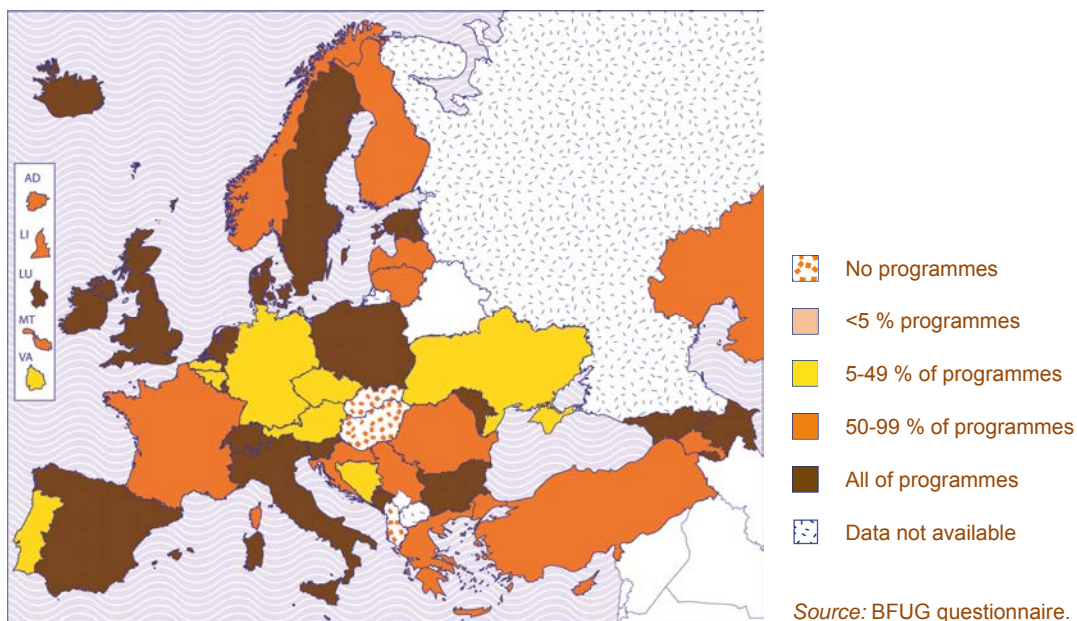


Figure 2.17: Extent to which ECTS credits are linked with learning outcomes in higher education programmes, 2010/11



Comparing the Figures 2.16 and 2.17 shows that there is much work still to be done in linking all parts of programmes with learning outcomes. This has been implemented to a far lesser extent than the use of ECTS for credit transfer and accumulation. It is the linking of credits with learning outcomes that hinders the full implementation of ECTS: only in 19 higher education systems (Figure 2.17) are all parts of programmes comprehensively and systematically linked to learning outcomes while there are nine systems – Austria, the French and Flemish Communities of Belgium, Bosnia and Herzegovina, the Czech Republic, Germany, the Holy See, Portugal and Ukraine – where all parts of programmes are linked with learning outcomes in less than 50 % of programmes. In three countries – Albania, Hungary and Slovakia – parts of programmes are not linked to learning outcomes at all.

Credit allocation. Credit systems have evolved significantly in recent years. The main stages have been credit allocation on the basis of student-teacher contact hours, to allocation of credits on the basis of student workload, and now the trend is towards allocation of credits based on both student workload and learning outcomes.

The new approach means that credits are allocated on condition that the student has performed a certain quantified learning and can demonstrate the expected learning outcomes. The survey results show that in half of the systems (24) higher education institutions allocate credits to students on the basis of a combination of workload and learning outcomes. Azerbaijan, Malta and the United Kingdom (England, Wales, Northern Ireland and Scotland) are systems where credits are awarded only on the basis of learning outcomes. Nine systems (Andorra, Austria, the Flemish Community of Belgium, Denmark, Germany, Greece, Liechtenstein, Slovakia and Switzerland) allocate credits based on student workload only. The fact that some countries where components of programmes are linked with learning outcomes in all or most programmes (Andorra, Denmark, Liechtenstein and Switzerland) allocate credits on the basis of workload only suggests that achieving the planned learning outcomes is *sine qua non*, while the number of credits is calculated on the basis of workload.

In most countries, there is a certain measure of hours of student work per credit: it is generally within an interval between 25 and 30 hours. Four countries (Croatia, the Czech Republic, Norway and Romania) do not have a prescribed measure of hours per credit but higher education institutions are nevertheless encouraged to use ECTS. In Bosnia and Herzegovina, Latvia, Montenegro and Turkey, the number of contact hours, which varies from ten (Bosnia and Herzegovina) to a maximum of 13 (Latvia), is set in addition to the standard measure of student work. It should also be recognised that some countries that only recently started using credits have created credit systems that are suitable for credit accumulation. However, making them useful for credit transfer is still a challenge.

The main conclusions on the allocation of credits are the following: It is positive that no country allocates credits on the basis of contact hours only. However, there are a number of countries that still base credit allocation on student workload only, mainly because there are few programmes where all components are linked with learning outcomes. Overall, the implementation of ECTS as a transfer and accumulation system has gained ground, but making sense of the system in the context of a more learning outcomes-oriented approach remains a significant challenge.

Understanding and usage of learning outcomes

Definition of learning outcomes. Most countries follow two well-known and non-antagonistic patterns of definitions of learning outcomes. One comes from the EHEA overarching framework: what the student is expected to know, understand and be able to do (Adam, 2006) (e.g. Andorra, Azerbaijan, the French Community of Belgium, Bosnia and Herzegovina, Cyprus, Finland, Malta, Turkey and the United Kingdom (England, Wales and Northern Ireland)). The other is drawn from the

EQF for LLL "knowledge, skills and competences" ⁽⁴⁹⁾ (e.g. Denmark, Latvia, Montenegro, Norway and Slovenia). These definitions are then in some countries further sub-divided into more categories. There are some countries, however, that have not yet agreed upon a national definition of learning outcomes (e.g. Germany, Liechtenstein, the Netherlands and Switzerland). There are also other definitions which appear compatible with the two most common patterns, such as "Learning outcomes explicitly express knowledge, skills and other abilities" (the Czech Republic), "knowledge, skills and attitudes" (Estonia and Serbia), "learning outcomes are knowledge and skills and corresponding autonomy and responsibility ..." (Croatia), "skills students are expected to have acquired" (Sweden), "knowledge, skills, or aptitudes" (the United Kingdom (Scotland)), "skills and competences" (the Holy See).

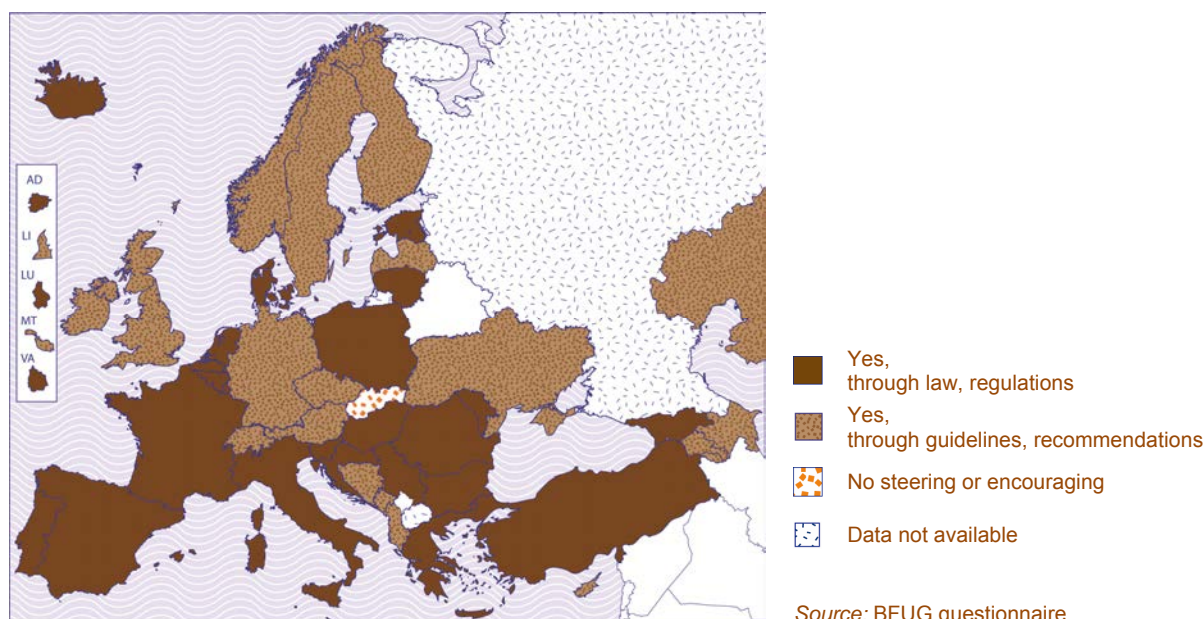
However, in some countries, specific national definitions are used that are not necessarily compatible with the other more widely adopted definitions. Examples are, "general measurable results of learning process that allow higher education institutions to assess whether students have developed the required competences" (Armenia), "ability to demonstrate knowledge and/or skills, oral and written representation of the information from the course" (Bulgaria), "Learning outcome is a qualification acquired through successful completion of academic program" (Georgia), "listed core competencies in accordance with [...] the requirements [...] of professional competence" (Kazakhstan).

National steering towards use of learning outcomes for curriculum development and student assessment. Steering or encouraging the use of learning outcomes through national policies is stipulated in legislation in 25 higher education systems, while 21 encourage learning outcomes through guidelines or recommendations. In just one country (Slovakia), there is no central encouragement of learning outcomes at all. Croatia and the Czech Republic report that they are preparing major projects on this issue. (see Figure 2.18)

Implementation of ECTS, student-centred learning, qualifications frameworks, internal quality assurance within higher education institutions and other important action lines all depend on successful implementation of learning outcomes. At the same time these action lines take more time to implement properly than structural changes. The findings above suggest that those countries that choose not to make a learning outcomes approach compulsory through laws and regulations should step up their activities to encourage implementation of a learning outcomes approach.

⁽⁴⁹⁾ Recommendation of the European Parliament and of the Council of 23 April 2008 on the establishment of the European Qualifications Framework for lifelong learning. 2008/C 111/01. Official Journal of the European Union, 6.5.2008.

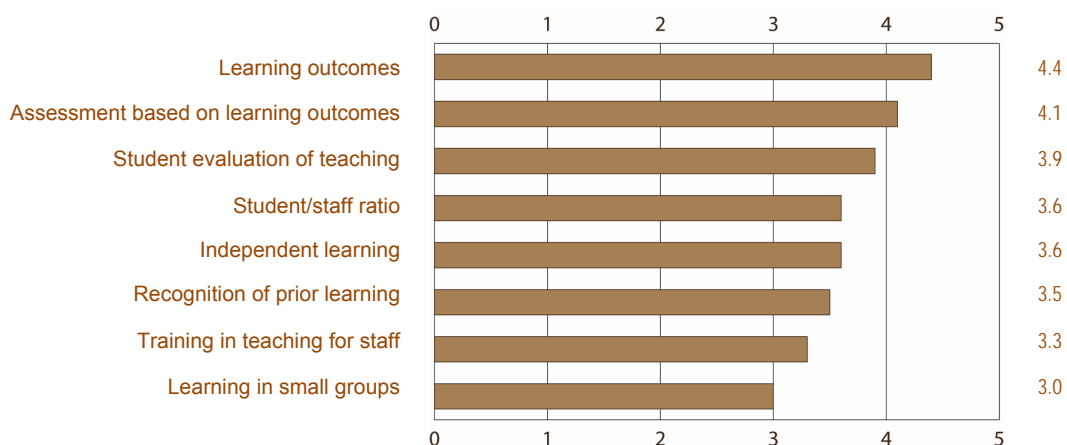
Figure 2.18: Steering and/or encouraging use of learning outcomes in national policy, 2010/11



Monitoring of the use of learning outcomes and assessment of student achievements by quality assurance procedures is in place in most higher education systems, the exceptions being Azerbaijan, Slovakia, Switzerland and Turkey. Most countries which monitor the use of learning outcomes first refer to external quality assurance and particularly procedures for programme accreditation/approval. It seems that the most widely used model is direct assessment of implementation of learning outcomes by external evaluators. Belgium, the Czech Republic and Finland mention the involvement of internal quality assurance procedures, with external monitoring in the form of an audit procedure while Armenia uses stakeholders' feedback.

Training programmes on student-centred learning/learning outcomes are available in most countries. Seminars and conferences and/or staff consultations and training activities take place in 21 countries. A number of countries (Armenia, Azerbaijan, Latvia, Poland, Serbia and Ukraine) issue methodological guidance materials, while others (the Flemish Community of Belgium, Croatia, Estonia, Finland, Lithuania, Romania, Spain and Sweden) have allocated national or EU funding for major projects. The support measures are often organized by national Bologna expert groups, ministries, rectors' conferences or quality assurance or other agencies. Generally, attendance to the training on implementation of student-centred learning is voluntary, although in 12 higher education systems (Albania, Austria, the French Community of Belgium, Bosnia and Herzegovina, the Czech Republic, Iceland, Ireland, Latvia, Moldova, Romania, Turkey and the United Kingdom – England, Wales, Northern Ireland and Scotland) for some groups of staff attendance is mandatory. The staff for which the training is mandatory varies from country to country and ranges from institutional leaders, deans, directors of graduate schools, to Bologna coordinators and quality officers at higher education institutions (Turkey), to new lecturers, teaching fellows, or postdoctoral fellows (the United Kingdom). In Latvia, these topics are included in the compulsory training for all teaching positions below professorial level. Voluntary training in the use of learning outcomes is available for all staff in 16 countries and for some groups of staff in another eight countries. Yet, in one third of countries, there is no training offer on learning outcomes/student-centred learning or such training is available only to some groups of staff. This can be another reason for slow progress in action lines that are dependent on implementation of learning outcomes.

Figure 2.19: Importance of elements of student-centred learning in the eyes of EHEA countries (of total score 5), 2010/11



Source: BFUG questionnaire.

Countries were asked to score several elements of student-centred learning on a scale from one (not important) to five (see Figure 2.19). The two most valued elements clearly are the learning outcomes and assessment based on learning outcomes. Student evaluation of teaching and independent learning come next. The least valued aspect is learning in small groups. Additionally, countries have emphasized the importance of more aspects that are essential for establishing genuine student-centred learning. The development of the student's ability to think critically and engage independently with the curriculum has been stressed, as well as the objective that students should genuinely participate in all aspects of academic life. Participation of students in research and development has also been stressed. Countries also point out that support services: academic and career guidance, tutoring, psychological counselling have an important role in building up student-centred learning and that this process also requires the different actors to be identified and their roles to be (re)defined.

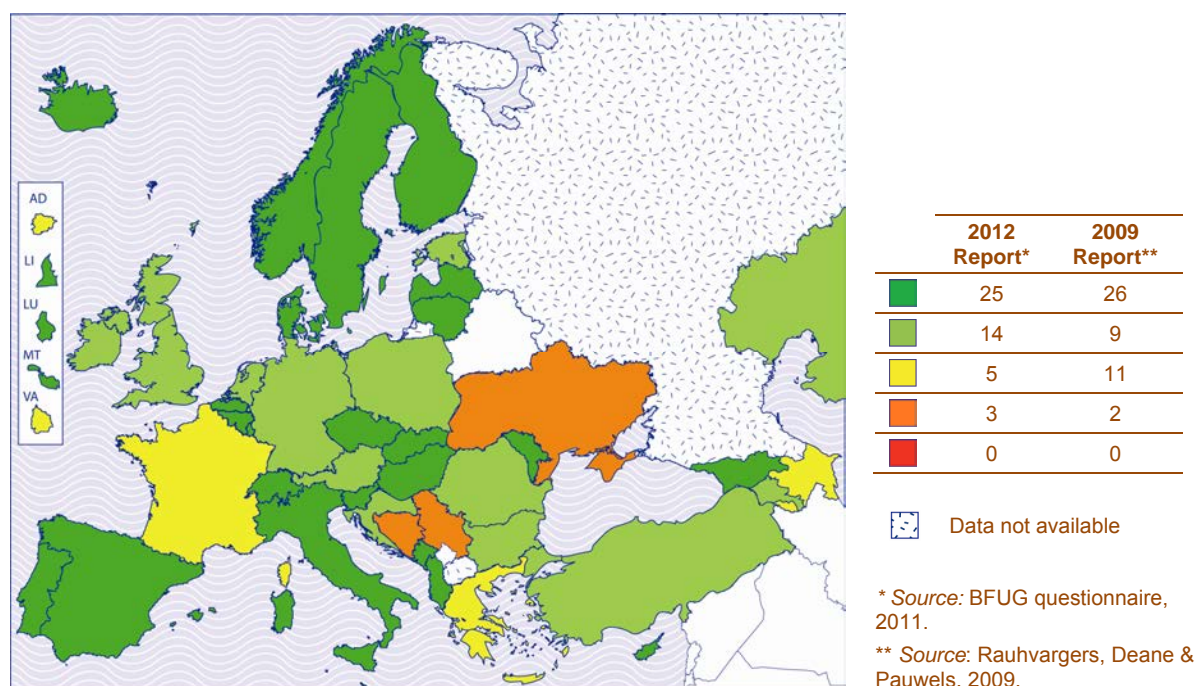
In conclusion, the vast majority of countries at least formally follow the definitions of learning outcomes used in the EHEA overarching qualifications framework or EQF for LLL while compatibility of some national definitions of learning outcomes with those two patterns could be questioned. The question still remains of how far those definitions are known, understood and actually applied in practice when it comes to individual higher education institutions' staff members who have to apply them for the courses they are delivering. In the majority of countries the introduction of a learning outcomes approach, especially regarding student assessment, is only encouraged through voluntary recommendations. While there are some countries where there is long experience of steering higher education institutions by recommendations and guidelines, in others issuing a recommendation does not necessarily lead to immediate follow-up and that could be one reason why implementation of these issues is taking longer than might have been hoped for and expected. In most countries, the use of learning outcomes for curriculum development is monitored directly by programme assessments in external quality assurance, while in fewer countries internal quality assurance has the primary responsibility.

Countries consider that the most important elements on the way to genuine student-centred learning are learning outcomes and outcomes-based assessment of student achievements. Genuine student-centred learning is a complex matter that is difficult to integrate into everyday higher education reality. It should comprise actions that ensure that students learn how to think critically, participate in all kinds of academic life, and are given more independence and responsibility.

2.2.3. Diploma Supplement

The Diploma Supplement was developed in 1998 by a working group sponsored by the Council of Europe, the European Commission and UNESCO-CEPES, and it was taken up as a transparency tool already in the Bologna Declaration in 1999.

Figure 2.20: Scorecard indicator n°7: Stage of implementation of the Diploma Supplement, 2010/11*



Scorecard categories

- Every graduate receives a Diploma Supplement in the EU/CoE/UNESCO Diploma Supplement format and in a widely spoken European language
 - automatically
 - free of charge
- Every graduate who requests it receives a Diploma Supplement in the EU/CoE/UNESCO Diploma Supplement format and in a widely spoken European language
 - free of charge
- A Diploma Supplement in the EU/CoE/UNESCO Diploma Supplement format and in a widely spoken European language is issued to some graduates OR in some programmes free of charge
- A Diploma Supplement in the EU/CoE/UNESCO Diploma Supplement format and in a widely spoken European language is issued to some graduates OR in some programmes for a fee
- Systematic issuing of Diploma Supplement in the EU/CoE/UNESCO Diploma Supplement format and in a widely spoken European language has not yet started

Note: Indicator measures the implementation of the Diploma Supplement against four criteria:

- 1) Diploma Supplement should be issued to every graduate
- 2) Diploma Supplement should be issued automatically,
- 3) Diploma Supplement should be issued in a widely spoken European language;
- 4) Diploma Supplement should be issued free of charge.

Quantitative data on issuing the Diploma Supplement. In addition to country scores in the Diploma Supplement indicators (Figure 2.20), the data submitted by countries show that the Diploma Supplement is issued automatically in only 25 higher education systems. In the other 22 systems either all Diploma Supplements or those in the non-national language are only issued upon request. In Andorra, Azerbaijan, France, Greece and the Holy See, Diploma Supplements are not issued to all

graduates, and in Bosnia and Herzegovina, Serbia, Turkey and Ukraine, the Diploma Supplement is issued for a fee that varies from 10 EUR in Ukraine to 50-100 EUR in Serbia. In nearly all countries, the Diploma Supplement is issued in the national language(s) and English – the dominant “widely spoken European language”.

National monitoring of the effectiveness of the Diploma Supplement. Only seven higher education systems (the French Community of Belgium, Germany, Italy, Moldova, Montenegro, Slovenia and Sweden) report that they have launched studies to monitor how employers use the Diploma Supplement and in the French Community of Belgium and Germany the results of these studies are as yet unknown. Slovenia and Sweden confirm that no more than 10 % of employers are aware of the Diploma Supplement and that they are not much interested in it. Meanwhile, in Moldova, employers wish to see a much more detailed Diploma Supplement although they appreciate the presence of learning outcomes listing generic and specific competences. With regard to monitoring the use of the Diploma Supplement in higher education institutions, less than half of the countries state that such monitoring takes place, and only Croatia, France, Serbia and the Holy See have provided any outcomes of such monitoring.

Lessons from the examples of Diploma Supplements. All countries were invited to submit an example of a Diploma Supplement along with their completed questionnaires. Less than half of the countries actually submitted a Diploma Supplement and two of those countries actually sent in a blank Diploma Supplement with a description of the national education system. Among those examples that were submitted, the format of all of them was the one approved by the Council of Europe, UNESCO and the European Commission. However, the main shortcomings were the following: some did not contain a description of the education system or only included a diagram without comments, or alternatively some description of the educational system but without a diagram; less than half of the Diploma Supplements submitted provided the quality assurance status of the higher education institution which issued the qualification and/or provided the study programme; only one third of Diploma Supplements mentioned what kind of access qualification was required as a prerequisite for access to the programme completed; in two-thirds of the Diploma Supplements submitted, not only were learning outcomes not provided, but they were not even mentioned.

However, in one-third of the samples of Diploma Supplements there were attempts to provide the learning outcomes of the programme completed. Yet in most of these cases the formulations were in reality overall aims rather than real learning outcomes in the form of “what the graduate knows, understands and is able to do”.

The above shortcomings lead to the conclusion that Diploma Supplements are in many cases not prepared properly and hence do not provide the expected information to the users. Higher education institutions do not always follow the guidance for filling out Diploma Supplements adopted by the Intergovernmental Committee of the Lisbon Recognition Convention in 2007 ⁽⁵⁰⁾ and therefore a much wider dissemination of the Diploma Supplement explanatory notes as well as training of the appropriate staff is needed. The results also add strength to the conclusion that slow implementation of a learning outcomes approach is a hindrance for a number Bologna tasks and action lines.

⁽⁵⁰⁾ See Diploma Supplement explanatory notes at e.g. http://ec.europa.eu/education/lifelong-learning-policy/doc/ds/ds_en.pdf

2.3. Recognition of qualifications

Recognition has been at the heart of the Bologna Process since its inception in the late '90s. Recognition can be considered both as a core, operational objective by itself as well as an instrument to enable the full implementation of the EHEA. In the last two decades, various instruments have been developed, adopted and implemented at the European, national, regional and institutional level aiming at facilitating fair recognition of foreign qualifications and/or study periods abroad. As illustrated in the analysis of the 2007 National Action Plans for Recognition (NAPs) (Rauhvargers & Rusakova, 2008), despite the signature and/or ratification of the Lisbon Recognition Convention (LRC) by most of the EHEA countries (by 2012 Greece was the only country that had not signed and ratified the Convention), there are still legal problems in implementing the principles of the Lisbon Recognition Convention and its subsidiary texts in those countries that have not amended their legislation adopting the above principles. Ministers responsible for higher education in their Leuven/Louvain-la-Neuve Communiqué asked the BFUG, "to follow-up on the recommendations of analysis of the national action plans on recognition" ⁽⁵¹⁾ which was done by the EHEA working group on recognition, see final report (EHEA Working group on recognition, 2012).

The BFUG survey shows that higher education institutions take the final decisions on recognition of foreign qualifications for the purpose of further studies in the vast majority (30) of countries. Within this group, recognition decisions are taken at the central level of higher education institutions in 15 countries, while in most other countries they are left to individual faculties and departments. This increases the risk that the staff actually taking these decisions have less knowledge of the overarching legal framework, and less experience in assessing foreign qualifications or credits.

In two countries (the Czech Republic and Denmark), higher education institutions also have the main responsibility for the decision upon recognition. However, in Denmark, the ENIC/NARIC centre may assess and certify compliance of qualifications for meeting general admission requirements. This means that the institutions cannot reject foreign access qualifications if the Danish ENIC/NARIC Centre has assessed that the qualification is comparable to Danish access qualifications. On the other hand institutions are free to consider access and admission for qualifications that the Danish ENIC/NARIC Centre has assessed as not comparable to the Danish access qualification. In the Czech Republic the ministry, rather than the higher education institution, makes the decision on recognition in cases of the qualification coming from countries with which the Czech Republic has bilateral agreements on recognition. In Cyprus and Greece, decisions on academic recognition are made by the national ENIC/NARIC centre.

In 12 countries, decision-taking for academic recognition of foreign qualifications is the responsibility of the ministry or a central government authority (Figure 2.21). In Turkey the recognition decisions are taken by the Higher Education Council (YOK) without participation of higher education institutions. In at least four countries, decisions on recognition are still made by national authorities without involving either the ENIC and NARIC centres or the higher education institutions. Such practice may adversely impact on the autonomy of higher education institutions and restrict their capacity to select and admit students according to their admission criteria.

⁽⁵¹⁾ The Bologna Process 2020 – The European Higher Education Area in the new decade. Communiqué of the Conference of European Ministers Responsible for Higher Education, Leuven and Louvain-la-Neuve, 28-29 April 2009.

Figure 2.21: Institution which makes final decisions on recognising foreign qualifications for academic purposes, 2010/11

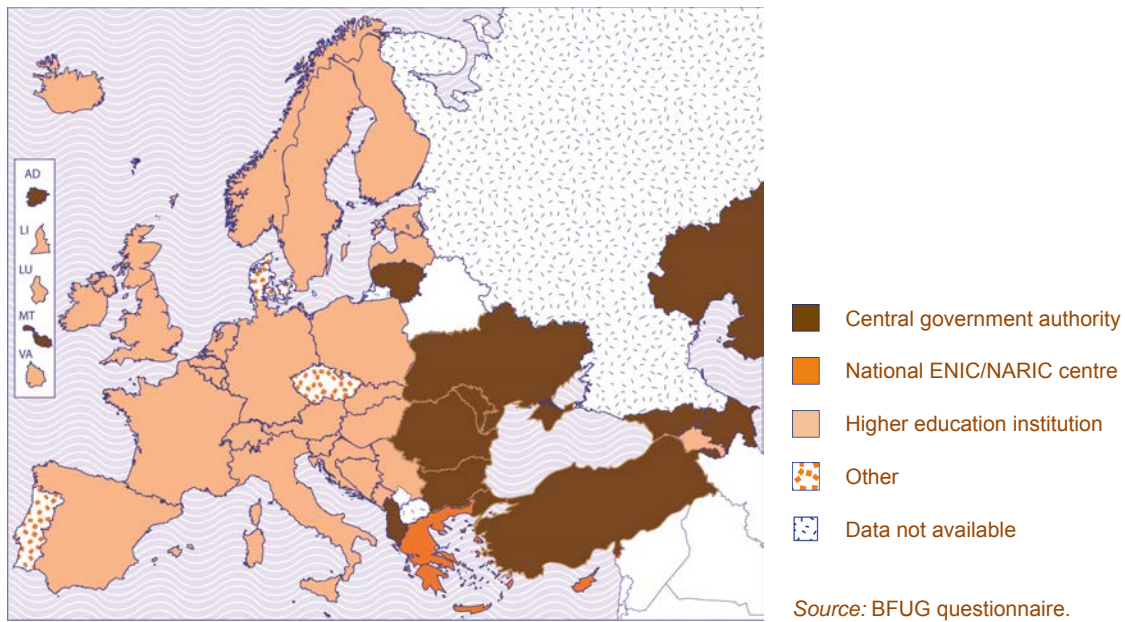
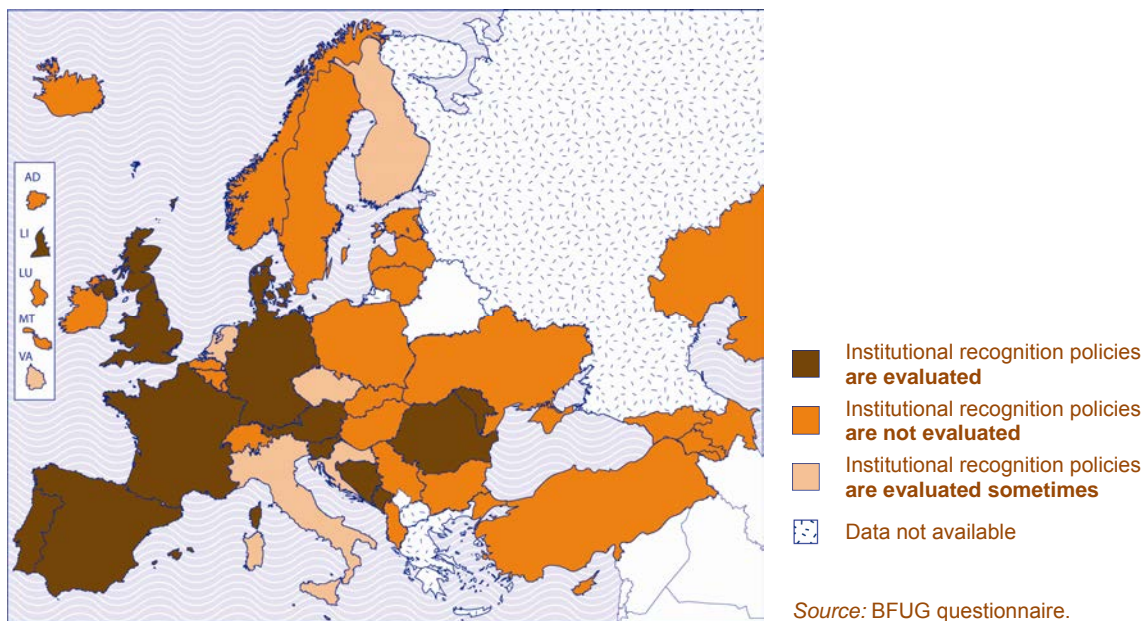


Figure 2.22: Evaluation of higher education institutions' recognition policy in external quality assurance processes, 2010/11



The analysis of the 2007 National Action Plans for Recognition also indicated that some countries report problems in implementing the Lisbon Recognition Convention linked to the autonomy of higher education institutions. These countries report that they are unable to ensure that the principles of the Lisbon Recognition Convention are followed, as they cannot know what practices are undertaken in autonomous institutions. While such statements are legally unsound, it should be noted that 14 years after the adoption of the Lisbon Recognition Convention these countries have not managed to ensure that their institutional recognition procedures comply with the Convention.

One potentially good solution to this issue would be to make the recognition of qualifications in higher education institutions part of quality assurance processes. Quality assurance would then have the task to assess the level of compliance with the Lisbon Recognition Convention. Involvement of quality assurance as a solution to this problem is logical because the quality of the recognition procedures within a higher education institution can be covered by the internal quality assurance system in the same way as any other academic or administrative procedure. Secondly, higher education institutions have accepted external and internal quality assurance, and therefore introducing the Lisbon Recognition Convention principles through the quality assurance system, and especially through internal quality assurance, should be easier than through directive measures. However, few countries have so far taken steps in this direction. Figure 2.22 shows that recognition policies are regularly evaluated by external quality assurance in only 14 countries while in the majority of countries recognition at higher education institutions is not evaluated at all.

The EHEA working group on recognition also stresses the need to strengthen the link between quality assurance and recognition, proposing that higher education institutions and quality assurance agencies include compliance of institutional recognition procedures with the legal framework of the Lisbon Recognition Convention in issues covered by both internal and external quality assurance. The working group also suggests that countries should be encouraged to examine and, where necessary, amend national legislation so that it complies with the principles of the Lisbon Recognition Convention and its subsidiary legal texts by 2015. Ministers should set the 2015 Ministerial Conference as the deadline to complete this task.

Conclusions

This chapter has examined structures and tools of the Bologna Process as well as the level of the implementation of the Lisbon Recognition Convention (LRC).

The analysis has shown that while the introduction of the three-cycle structure in most institutions and programmes has been one of the most significant achievements of the process, there are still programmes outside the Bologna structure in all countries. This most often applies to studies related to regulated professions (e.g. medicine, pharmacy and architecture), but other study fields are also concerned. The chapter also indicates that in many EHEA countries, short-cycle programmes have not yet been fully linked to first-cycle programmes and they are sometimes not even regarded as part of the higher education system.

Contrary to some common perceptions, there is no single model of the three-cycle structure and models vary not only across countries but also within the borders of individual countries. This applies in particular to first-cycle studies, where in many EHEA countries the 180 ECTS first-cycle model co-exists with 240 ECTS programmes, as well as programmes following other structures. The situation in the second cycle is slightly more homogenous, with most programmes following the 120 ECTS structure.

The development of doctoral studies as third-cycle studies is constantly progressing. Doctoral studies are characterised by significant cross-country and cross-institutional diversity, in particular in terms of their length, institutional settings and the use of ECTS. Their character ranges from structured higher education programmes within different models of doctoral or graduate schools to supervision-based independent research.

Although the Bologna communiqués emphasise the importance of the completion of each cycle giving access to the next cycle, the issue of progression between cycles is still very much alive. Obstacles can be observed both between the first and the second cycle, and between the second and the third

cycle. However, in some contexts, and particularly where there is a strong binary divide in the higher education system, an "obstacle" such as a bridging course may be better understood as a system feature facilitating progression. It can also be noted that the size of the actual cohorts of students progressing from one cycle to another varies greatly between countries. In some countries the high levels of progression between the first and second cycle could be an indication that the first cycle has not been developed as a qualification giving access to the labour market.

Even if the chapter acknowledges the lack of reliable data on the level of the implementation of joint degrees and programmes, available information suggests that the situation across the EHEA is very uneven. While in some countries, nearly all institutions offer at least one joint programme, in other instances, none or only a few institutions are involved. Available data also indicate that students of joint programmes are rarely awarded a joint degree.

With regard to the implementation of Bologna tools – i.e. national qualifications frameworks, the European Credit Transfer and Accumulation System (ECTS) and Diploma Supplement – optimal functioning of these instruments depends on the understanding and implementation of the learning outcomes approach. This is far from being achieved and the progress in this field is being slowed down by various factors. For example, the concept of learning outcomes is still subject to various interpretations and higher education staff do not always have access to training in this field.

Finally, the analysis of the implementation of the Lisbon Recognition Convention (LRC) shows that despite its signature and/or ratification by most of the EHEA countries, actual implementation needs to be enhanced. This process could be facilitated by the inclusion of the recognition of foreign qualifications and/or periods of study abroad into higher education quality assurance systems.

3. QUALITY ASSURANCE

The Bologna context

The Bologna Declaration encouraged European cooperation in higher education quality assurance, with a view to developing comparable criteria and methodologies. Thus from the beginning of the process, there has always been a strong focus on quality. All subsequent ministerial communiqués have also paid attention to an evolving agenda in European quality assurance. At the Berlin summit in 2003, ministers acknowledged that the primary responsibility for quality assurance lies with higher education institutions and agreed on the core elements national quality assurance systems should include by 2005, comprising: a definition of the responsibilities of the bodies and institutions involved; evaluation of programmes or institutions, including internal assessment, external review, participation of students and the publication of results; a system of accreditation, certification or comparable procedures, and international participation, cooperation and networking.

Two years later, at the Bergen meeting of May 2005, ministers adopted the "Standards and Guidelines for Quality Assurance in the European Higher Education Area" (ESG). These standards and guidelines are designed to be applicable to all higher education institutions and quality assurance agencies in Europe, and aim to promote mutual trust while respecting diverse national and institutional contexts and subject areas. In 2008 followed the establishment of the European Quality Assurance Register for Higher Education (EQAR). EQAR is a register of those agencies that substantially comply with the ESG. The 2009 Leuven/Louvain-la-Neuve Communiqué also stresses that quality assurance will remain a priority in a landscape where new tools, mechanisms and initiatives are increasingly being designed to provide information about higher education institutions.

Chapter outline

This chapter deals with the progress made to develop quality assurance systems across the European Higher Education Area and covers both external and internal quality assurance. The main focus of the chapter is on the extent to which quality assurance systems are following the Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG). It looks at the main distinctions in European quality assurance systems, as well as the development of trends towards greater internationalisation in quality assurance. The focus then shifts to other developments in external quality assurance, including the involvement of different key stakeholders. The last section is on developments in internal quality assurance systems.

3.1. External quality assurance

3.1.1. Character and orientation of national quality assurance systems

Quality assurance in higher education can be understood as policies, procedures and practices that are designed to achieve, maintain or enhance quality as it is understood in a specific context.

Since the Bologna Process was launched in 1999, there has been a rapid transformation of external quality assurance in Europe. Improving quality of higher education and establishing quality assurance systems has been a high priority for many if not all countries. The development of the European Higher Education Area can certainly be seen as a catalyst to this process with quality assurance clearly linked to establishing stakeholder confidence. When the European Standards and Guidelines (ESG) for quality assurance were adopted in 2005, this gave a boost to European cooperation in the domain. The European Quality Assurance Register for Higher Education (EQAR) was established three years later, and by January 2012, 28 agencies in 13 countries were listed on the Register. The countries where at least one agency is listed in EQAR are Austria, Belgium, Bulgaria, Croatia, Denmark, Finland, France, Germany, Ireland, the Netherlands, Romania and Spain.

Only a handful of countries had established clear external quality assurance systems prior to the Bologna Process. Since the Bologna Process was launched, however, 22 countries have established national agencies for quality assurance, with half of these being set up since 2005 (Eurydice, 2010). In a few countries, such as Denmark, France and Italy, new agencies have replaced or built on existing agencies.

Eleven countries in the EHEA do not have established quality assurance agencies. These include those with a small higher education sector such as Andorra, Liechtenstein, Luxembourg and Malta. However, in these countries, the small size of the sector does not mean that quality assurance is neglected, but rather that a different and more suitable approach may have been developed. In the case of Andorra, although responsibility rests with the government, the actual practice of external evaluation is carried out through using other national quality assurance agencies – most commonly the Spanish national agency (ANECA). Luxembourg has also developed a progressive approach of improvement-oriented evaluation that is both inclusive of stakeholders and extremely international in its orientation, while Liechtenstein requires its higher education institution to be accredited by any quality assurance agency listed on EQAR.

Although practically all EHEA countries have established some form of external quality assurance system, there are significant differences in the philosophy and approach behind systems. Despite the adoption of Common Standards and Guidelines for the EHEA, systems are indeed still quite diverse in their orientation.

One important distinction that can be drawn is whether the main focus of quality assurance is on institutions or programmes, or both. A second is whether or not the QA agency or national body is invested with the power to grant permission for institutions or programmes to operate. Although certain national system features make this reality more complex (for example, whether or not governments retain the power to issue degrees at central level), these orientations give a good general sense of the approach to quality assurance.

It is noteworthy that the vast majority of QA systems now focus on a combination of institutions and programmes (24) rather than on either programmes (7) or institutions (4). This picture suggests that QA systems are becoming more complex as they evolve.

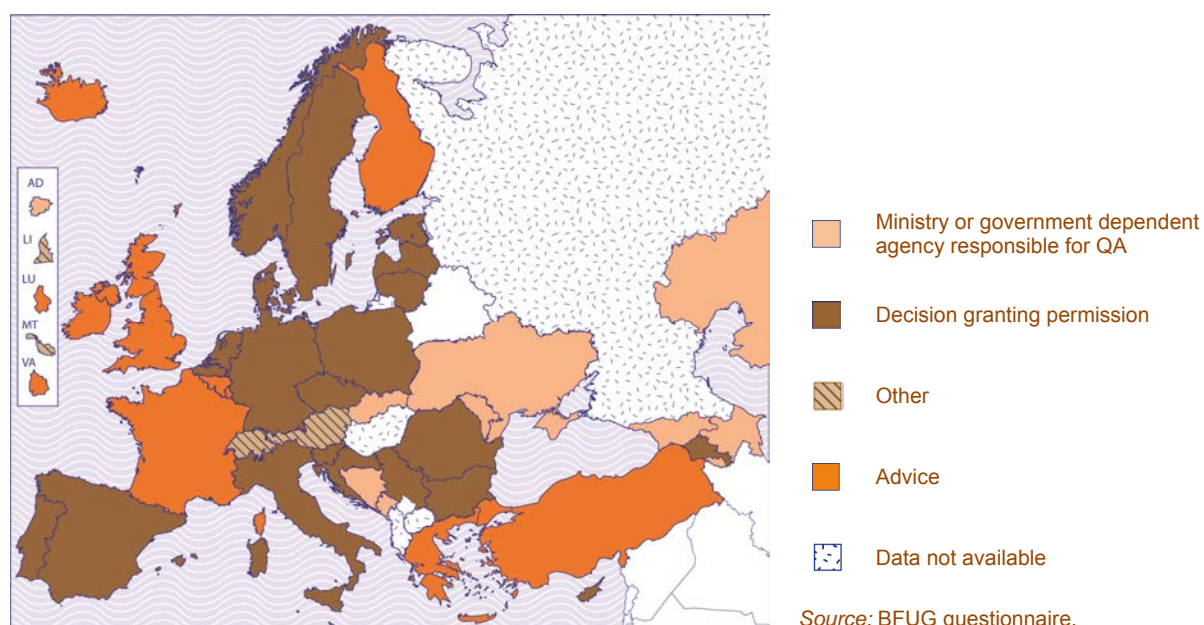
In systems where responsible QA bodies/agencies have the power to permit or refuse programmes and/or institutions to operate, or where they advise governments on such decisions, quality assurance can, in broad terms, be perceived as supervisory in character. In these cases, it generally aims to ensure that minimum quality thresholds are met. Agencies may of course play other roles – including giving advice on the enhancement of quality. This is indeed specifically mentioned in a number of countries, but all these additional roles are likely to be subordinate to the decision of permitting programmes and/or institutions to operate.

In other systems, QA agencies report on institutions' management of quality, and although having "only" an advisory role, aim to support quality enhancement. In such a construction, the primary emphasis is thus on empowering higher education institutions with responsibility for quality improvement. These are systems that will be more likely to use "light touch" external quality assurance processes, aiming to ensure that necessary measures to improve quality have been established within institutions, and interfering less in the decision-making processes at institutional level.

The majority of systems across the EHEA are, using this categorisation, more supervisory in character. Indeed 21 systems have established agencies with decision-making powers – including countries where the agency makes a proposal for decision and the government is responsible for actual decision. Eleven systems have agencies that are advisory and more enhancement-oriented in character. Four countries (Austria, Liechtenstein, Malta and Switzerland) point to a mixed situation, with different agencies having different orientations (see Figure 3.1).

It is also interesting to note that not all the evaluations of "supervisory" agencies have an impact on the funding of institutions or programmes. Indeed, in five systems (Bulgaria, Cyprus, Germany, Liechtenstein and Poland) there is currently no impact of evaluation on funding, although in Poland recent legislative changes are set to alter this reality, with the possibility for additional funding to be granted to programmes considered to be of outstanding quality on the basis of quality assurance. Conversely, some of the enhancement-oriented agency evaluations may have an impact on funding. This is the case in France, Luxembourg, and the United Kingdom.

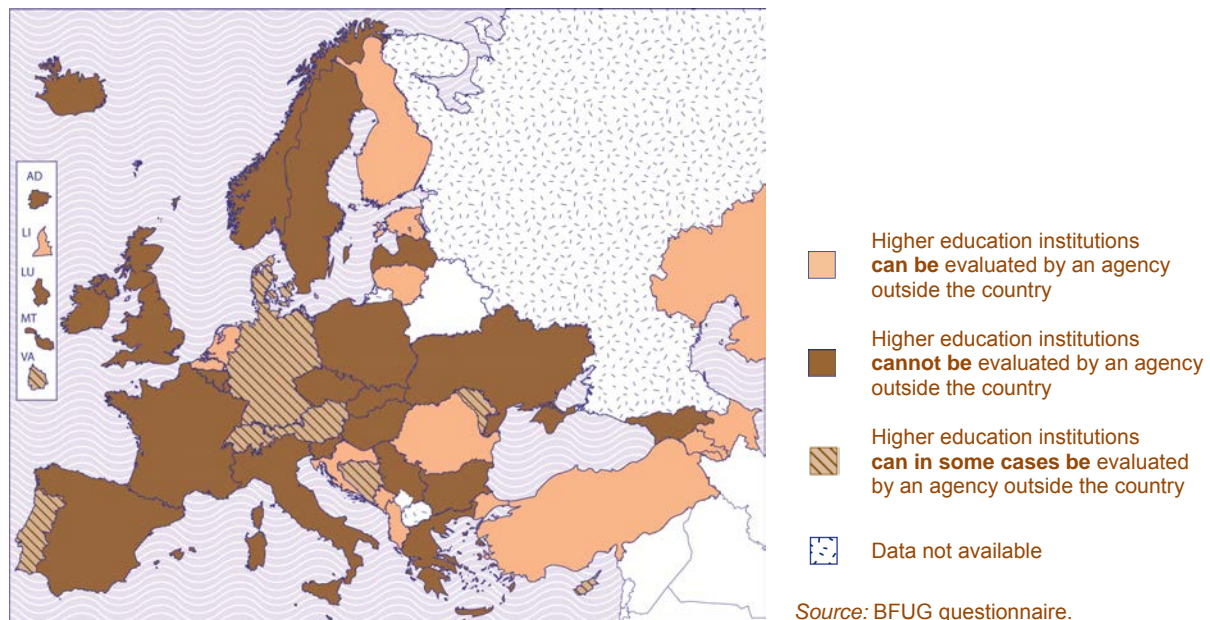
Figure 3.1: Main outcome of external evaluation by QA agency, 2010/11



3.1.2. Ability of higher education institutions to be evaluated by non-national agencies

The European debate on quality assurance has stressed the importance of trust between systems. One significant measure of how far trust is developing, is whether governments enable higher education institutions to be evaluated by a quality assurance agency from another country when aware, for example, that the agency works in full compliance with the European Standards and Guidelines. This indeed is a significant purpose of the ESG, and also the principal reason for the establishment of the European Quality Assurance Register. However, as national responsibility for quality assurance could be seen to be challenged by such practices, it is by no means evident that evaluation from non-national agencies will become commonplace in the EHEA, particularly in systems where the main outcome of quality assurance is a decision granting permission to institutions or programmes to operate. The issue may also perhaps be perceived differently by bigger and smaller higher education systems.

Figure 3.2: Ability for higher education institutions to be evaluated by an agency outside the country, 2010/11



The question of whether higher education institutions are able to be evaluated by an agency outside the country refers primarily to obligatory external evaluation or accreditation requirements. Fourteen national systems claim that all their higher education institutions are free to be evaluated by other national agencies instead of their own. A further eight countries suggest that under certain conditions, some agencies are able to pursue this route. For Austria and Cyprus, public higher education institutions may use non-national agencies, but private institutions cannot. For Denmark and Germany, higher education institutions can use non-national quality assurance agencies only in the cases of accreditation of joint programmes, while other programmes can be evaluated but not accredited by non-national quality assurance agencies. Moldova and Spain point out that institutions are able to go through evaluation processes with other agencies, and may do so to gain prestige. However, this is only possible if they are first accredited by the national system. As this could be perceived more as a duplication of efforts rather than evidence of trust and cooperation across borders, these countries are shown in the map alongside those that are unable to be evaluated abroad.

Some higher education systems also point out that, even if their higher education institutions are unable to choose to be evaluated from an agency outside the country, they are free to seek accreditation for particular study fields by international accrediting organisations. There are also examples of cooperation between national quality assurance agencies in evaluating higher education institutions and/or particular programmes.

It should also be noted, however, that this reality is changing very rapidly. Poland is an example where new legislation, in force since October 2011, now provides a basis for higher education institutions to be evaluated by international agencies, and for the outcomes to be taken into consideration by the national quality assurance system.

3.1.3. Evaluating national systems against ESG

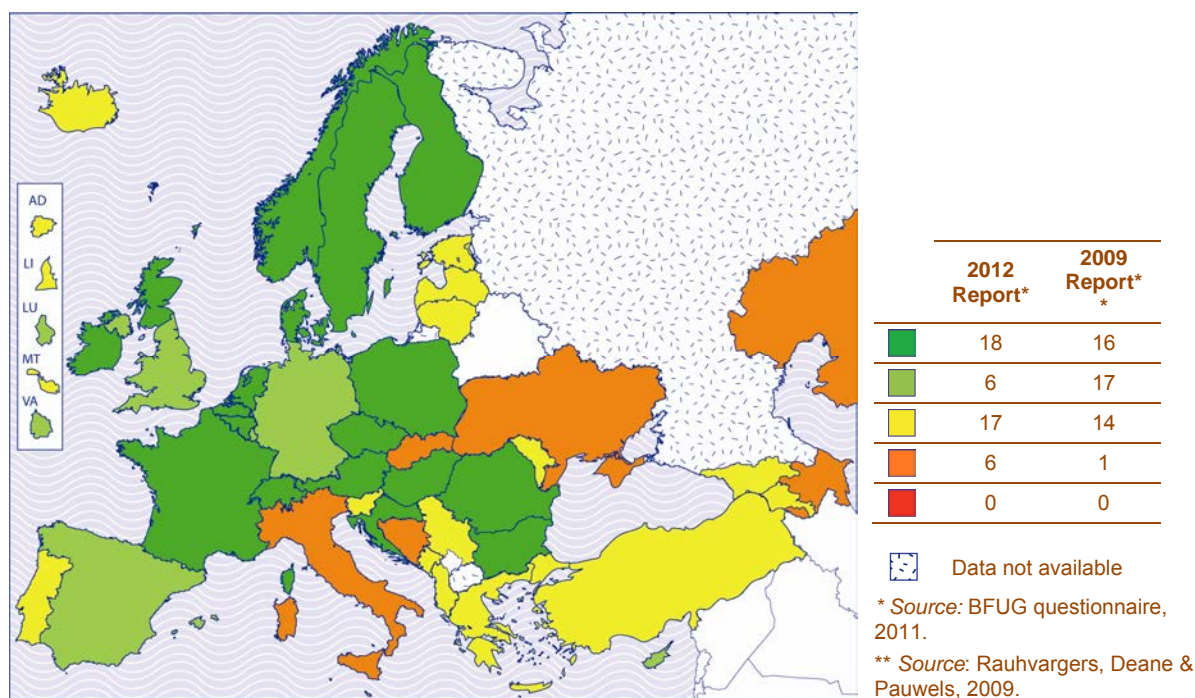
The European Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG) were developed by the so-called E4 Group (ENQA, ESU, EUA and EURASHE), and were adopted in 2005 by the ministers in Bergen (Norway). The standards and guidelines are designed to be applicable to all higher education institutions and quality assurance agencies in Europe, irrespective of their structure, function and size, and the national system in which they are located. The ESG do not include detailed "procedures" since institutional and agency procedures are an important part of their autonomy. Rather the ESG "recognise the primacy of national systems of higher education, the importance of institutional and agency autonomy within those national systems, and the particular requirements of different academic subjects" (ENQA 2005, p. 13).

They also reflect the statement of ministers in the Berlin Communiqué (2003) that "consistent with the principle of institutional autonomy, the primary responsibility for quality assurance in higher education lies with each institution itself and this provides the basis for real accountability of the academic system within the national quality framework". In the standards and guidelines, therefore, an appropriate balance has been sought between the creation and development of internal quality cultures, and the role which external quality assurance procedures may play (ENQA 2005, p. 11). Indeed, the following principles outlined in the Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG) stress that quality assurance should focus on:

- the interests of students as well as employers and the society more generally in good quality higher education;
- the central importance of institutional autonomy, tempered by a recognition that this brings with it heavy responsibilities;
- the need for external quality assurance to be fit for its purpose and to place only an appropriate and necessary burden on institutions for the achievement of its objectives.

Three indicators on quality assurance are included in the EHEA Scorecard. Because a great deal of progress has been achieved in the development of quality assurance systems in the past decade, these indicators have been newly devised to reflect ministerial agreement on the main issues for further development in quality assurance in the years to come. They focus on the stage of development of external quality assurance systems, the level of student participation in external quality assurance and the level of international participation in external quality assurance.

Figure 3.3: Scorecard indicator n°4: Stage of development of external quality assurance system 2010/11*



Scorecard categories

- A fully functioning quality assurance system is in operation nationwide. The QA agency/ies has/have been successfully evaluated against the European Standards and Guidelines in the EHEA. The QA system applies to all institutions and/or programmes and covers the following main issues:
 - teaching
 - student support services
 - internal quality assurance/management system
- A fully functioning quality assurance system is in operation nationwide. The QA agency/ies has/have been successfully evaluated against the European Standards and Guidelines in the EHEA. The QA system applies to all institutions and/or programmes and covers a subset of the main issues.
- A quality assurance system is in operation nationwide. The QA system has not been evaluated against the European Standards and Guidelines in the EHEA. The QA system applies to all institutions and/or programmes and covers teaching, student support services and internal quality assurance/management.
 OR
 A quality assurance system is in operation at the national level. The QA system has been successfully evaluated against the European Standards and Guidelines in the EHEA. The QA system applies to some institutions and/or programmes and covers subset of the main issues.
- A quality assurance system is in operation nationwide. The QA system has not been evaluated against the European Standards and Guidelines in the EHEA. The QA system applies to all institutions and/or programmes and covers a subset of the main issues.
- A quality assurance system is in operation nationwide. The QA system has not been evaluated against the European Standards and Guidelines in the EHEA. The QA system applies to some institutions and/or programmes and covers a subset of the main issues.

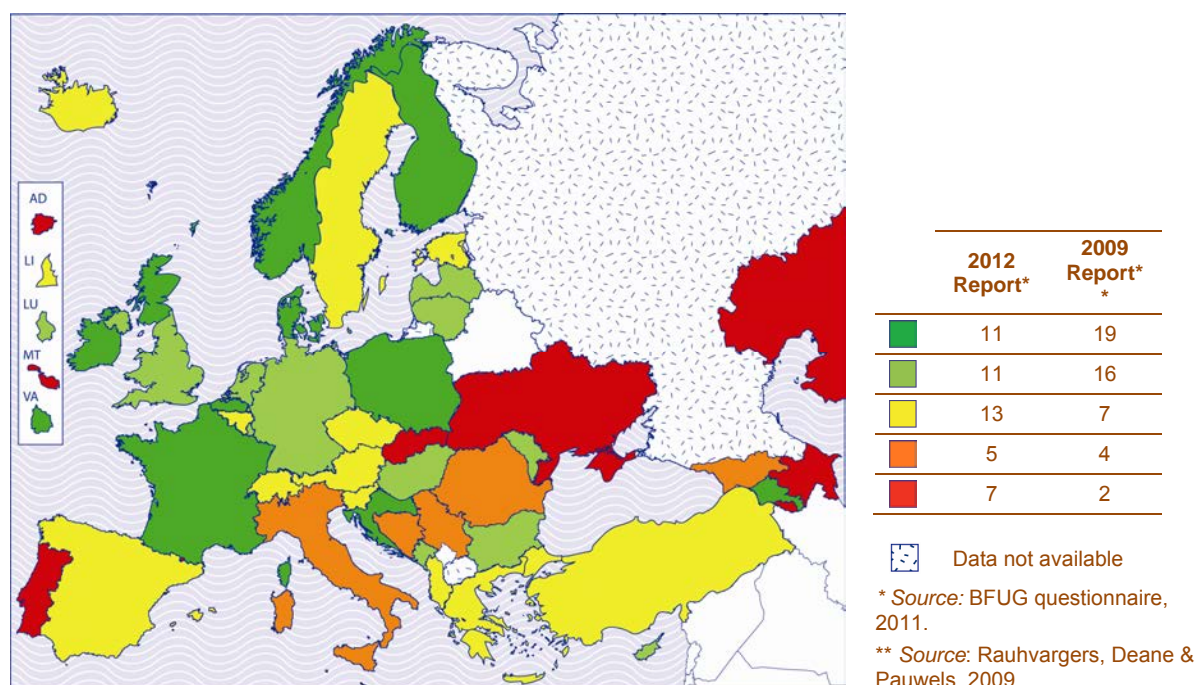
Indicator 4 focuses on the stage of development of external quality assurance systems. It combines elements assessing how comprehensive the system is, the range of key issues covered by the quality assurance system (teaching, student support and internal quality assurance), as well as whether or not the agencies or other responsible bodies in the system have been successfully evaluated against the European Standards and Guidelines. This process of evaluation is a requirement both for full membership of ENQA and for agencies that are listed in EQAR. The indicator is very demanding, and this itself is a reflection of how much progress has been made to the quality assurance landscape during the first decade of the Bologna Process.

Countries are spread among the top four categories. No countries are in the red zone, which would indicate the absence of an adequate quality assurance system. Six countries find themselves in the orange zone. The countries in this category have established national quality assurance agencies or other bodies with responsibility for quality assurance, but these have not yet been evaluated against the European Standards and Guidelines. Moreover, the system does not cover all of the key quality assurance issues.

Seventeen countries are in the yellow zone. These are all countries that have a comprehensive quality assurance system in place, covering all priority aspects of quality assurance. However, their agencies have not yet been successfully evaluated against the European Standards and Guidelines.

Six systems are currently in the light green, and 18 in the green zone. In both cases, a comprehensive quality assurance system is in place, and it has been evaluated against the European Standards and Guidelines. The difference between these situations concerns the coverage of the quality assurance systems, as one of the main elements of quality assurance (teaching, student support and internal quality assurance) is missing in the countries in the light green zone.

Figure 3.4: Scorecard indicator n°5: Level of student participation in quality assurance, 2010/11*



Scorecard categories

- In all quality assurance reviews, students participate at five levels:
 - in governance structures of national quality assurance agencies
 - as full members or observers in external review teams
 - in the preparation of self evaluation reports
 - in the decision making process for external reviews
 - in follow-up procedures
- Students participate at four of the five levels mentioned above
- Students participate at three of the five levels mentioned above
- Students participate at two of the five levels mentioned above
- Students cannot participate or participate at only one level mentioned above

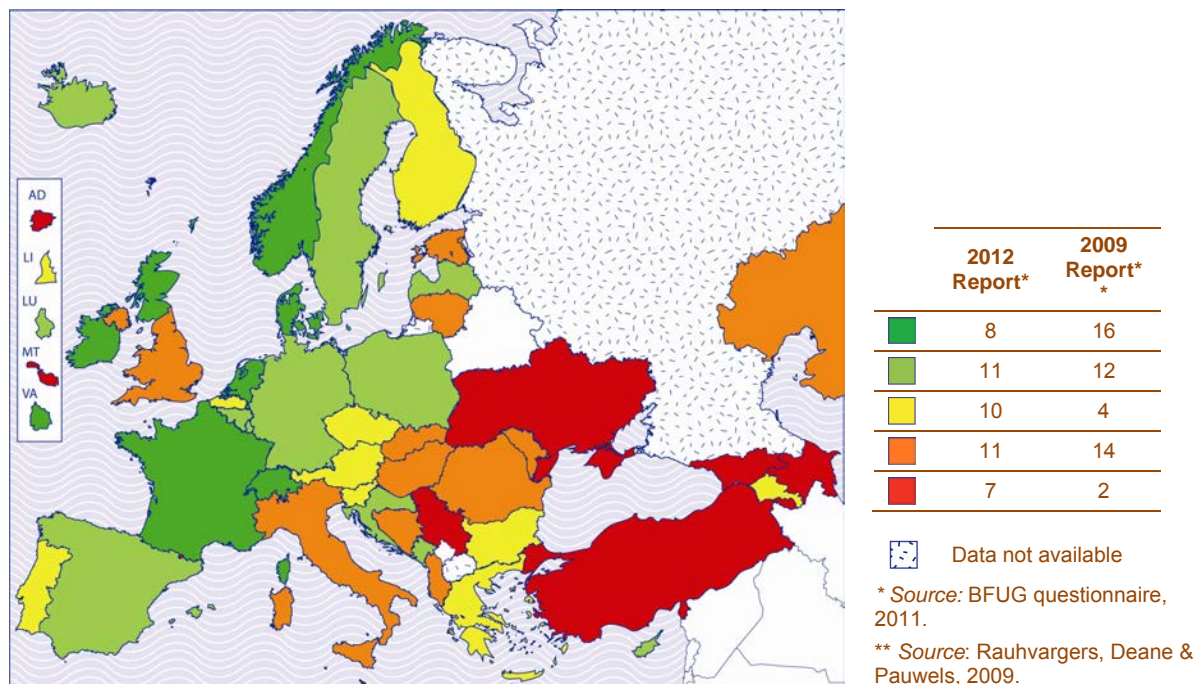
One of the striking characteristics of the development of quality assurance systems in Europe during the last decade has been the recognition of the importance of stakeholder participation, and in particular the importance of students as the key stakeholder group in higher education. The Bologna documentation recognises that students should be fully engaged in the improvement and enhancement of higher education and of their own learning experiences. The form of this engagement should be wide-ranging, involving students in all aspects of quality assurance systems. This indicator therefore focuses on student participation in governance structures, in review teams, in the preparation of self-evaluation reports, in decision-making processes and in follow-up procedures. These elements are given equal weight, as all are considered essential ways in which student voices and views should be heard and acted upon.

The overall results show that there is still considerable room for progress. Only 11 higher education systems currently demonstrate that students systematically participate in all these aspects of quality assurance systems, although a sizeable number (11) indicate that students are involved in all but one of these areas. Among these countries, students are most commonly not involved in follow-up procedures.

A group of 13 systems are in the yellow zone, indicating that students are involved systematically in three out of the five areas. Here, in addition to the follow-up procedures, it is most common to find students not being involved in decision-making processes that result from evaluation.

Five countries are currently in the orange zone, with students being involved in two of the five identified areas. A further seven countries are in the red zone, indicating that students are absent from all or all but one of the identified areas.

Figure 3.5: Scorecard indicator n°6: Level of international participation in external quality assurance, 2011/12*



Scorecard categories

- In all cases the following four aspects are met:
 - agencies are full members of ENQA and/or listed on EQAR
 - international peers/expert participate in governance of national QA bodies
 - international peers/experts participate as members/observers in evaluation teams
 - international peers/experts participate in follow-up procedures
- Three of the four aspects are met
- Two of the four aspects are met
- One of the four aspects is met
- No international participation

As has been outlined in this chapter, the development of quality assurance since the Bologna Process began has been rapid, and there have been a number of major milestones in European cooperation. It might have been expected, therefore, that an indicator on the level of international participation in quality assurance would not prove to be particularly challenging to countries.

The results show otherwise. The distribution of countries is remarkably even, with eight systems in the dark green and seven at the other extreme in the red zone. Meanwhile, the other thirty two systems are very evenly distributed among the three other categories. Countries outside the European Union fare slightly worse than those within the European Union on this indicator. This is largely a result of the first criterion – membership of ENQA/being listed on EQAR. Currently, the membership of ENQA is largely drawn from within the European Union, and there is as yet only one agency from a country outside the European Union listed in EQAR.

3.1.4. Involvement of employers in QA

The Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG) highlight not only the importance of students and international peers in quality assurance, but also the role of other stakeholders – and in particular employers. Indeed the ESG specify that quality assurance of programmes and awards are expected to include "regular feedback from employers, labour market representatives and other relevant organisations".

The findings for this report indicate that employer involvement has become a feature of quality assurance in many systems. Indeed 28 countries state that there is a formal requirement for involvement of employers – whether in governance bodies or in external review teams. Among the 14 countries that state that there is no such formal requirement, it should not be assumed that there is no employer involvement. For example, the United Kingdom points out that the involvement of employers depends upon the orientation provided by higher education institution being evaluated. Thus in this case, the principle of institutional autonomy is respected above formal requirements for employer involvement.

3.2. Internal quality assurance

This report, not having any direct input from higher education institutions themselves, can only give a limited picture regarding the state of development of internal quality assurance systems.

3.2.1. Formal requirements for higher education institutions to establish internal quality assurance systems

Countries were asked to specify whether or not there are formal requirements on higher education institutions to establish internal quality assurance systems. It is interesting to see that this is the case in all but four national systems, and such requirements are most commonly embedded in higher education legislation.

The exceptions are Estonia, Slovakia, Ukraine and the United Kingdom. For Estonia and the United Kingdom, however, the answer is a reflection of the legal environment within which higher education institutions operate. Indeed, while there is no formal legal requirement for institutions to establish internal QA systems, there are clear expectations laid out by the national quality assurance agency.

3.2.2. Responsibility for the focus of internal quality assurance systems

The primary focus of internal quality assurance systems is, according to the information provided by countries, most commonly determined by higher education institutions themselves. However, a number of countries put the emphasis on other actors. Several countries, including Greece, Ireland, Italy, Spain, Switzerland and the United Kingdom point to the role of the quality assurance agency in setting the priorities for external evaluation. These priorities then clearly have a major impact on how internal quality processes are organised.

Azerbaijan and Montenegro are the only countries to state that the Ministry is primarily responsible for determining the focus of internal quality assurance, although Montenegro points out that the Ministry acts upon the proposal of its higher education Council. Several other countries also point to the role of the Ministry in combination with other actors. This is the case for Georgia, Liechtenstein and Spain.

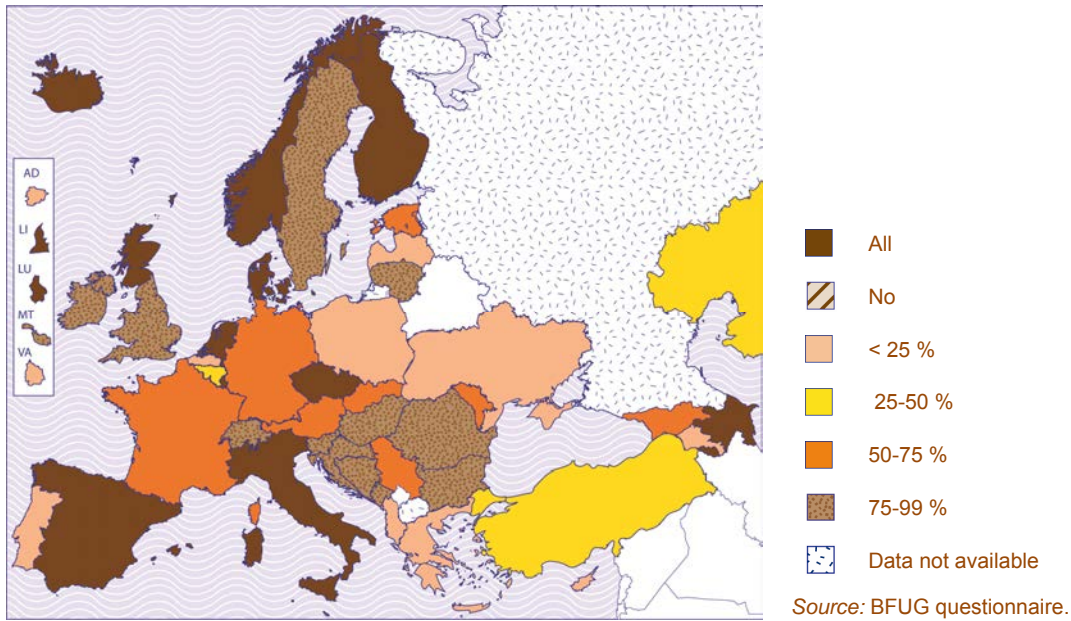
3.2.3. Institutional strategies for continuous quality improvement

Many countries report very positive findings regarding the number of institutions that have published a strategy for continuous quality improvement in the past 5 years. Indeed, 25 national systems consider this number to be in excess of 75 % of their higher education institutions, with 12 systems claiming that all higher education institutions have published such a strategy.

There are, however, some systems at the other end of the spectrum. Eleven national systems estimate that between 0-25 % of institutions have published such a strategy. Three systems estimate 25-50 %, and eight place the estimation between 50 and 75 %.

Overall, if these data reflect national reality relatively closely, they suggest that higher education institutions have been making great efforts to develop strategies to improve quality in recent years.

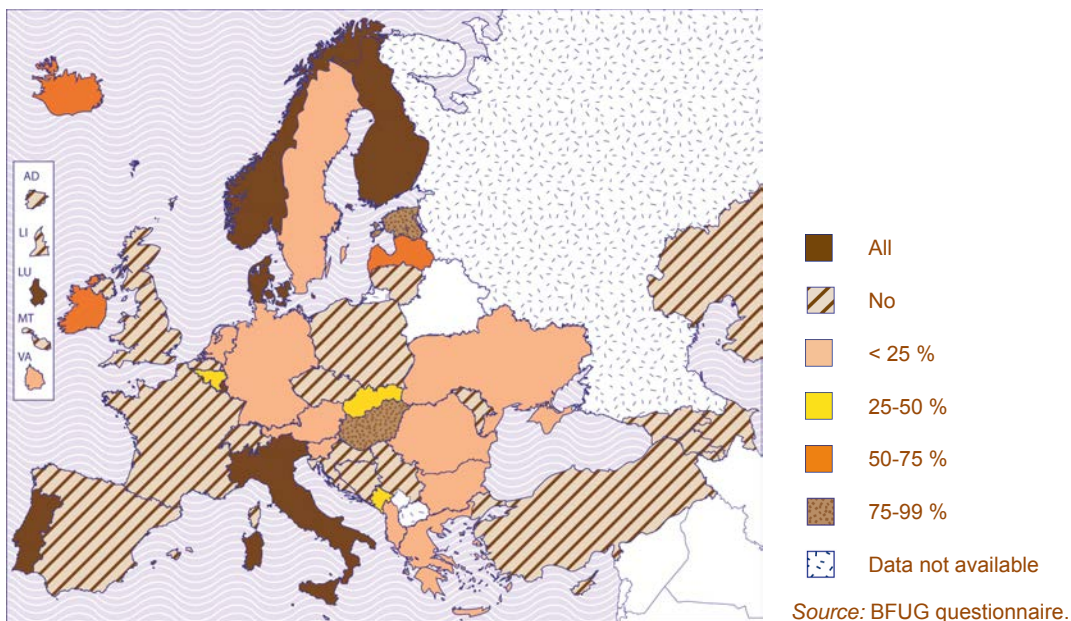
Figure 3.6: Publication of institutional strategies for continuous quality enhancement in the past 5 years, 2010/11



3.2.4. Publication of critical and negative evaluation reports

The picture regarding the number of institutions that publish critical and negative outcomes of quality assurance is significantly different. Here by far the greatest number of systems (22) state that none of their institutions publish such reports, and a further 11 put the lowest percentage (1 %-25 %). At the other extreme are a group of six countries that state that all of their institutions publish these reports. However, among this group is Italy that also reports that no external evaluations have yet taken place by the quality assurance agency. So this finding remains hypothetical. Only eight systems are in the categories ranging between 25 and 99 %.

Figure 3.7: Publication of critical and negative outcomes by higher education institutions, 2010/11



The reason for the diversity of these findings is not clear, as countries have generally provided little supplementary explanation. However, it is likely that countries where all institutions publish critical reports are either very open, transparent societies, or there is a requirement for institutions to publish evaluation reports – whether they are positive or critical.

Conclusions

This report provides strong evidence that the wave of quality assurance activity that gathered momentum after the launch of the Bologna Process in 1999 continues today. Despite the common Standards and Guidelines for the EHEA, systems nevertheless remain quite diverse in their orientation. The vast majority of QA systems now focus both on institutions and programmes. This suggests that while in the early stages of developing external QA systems the focus tends to be on programme evaluation, over time this often evolves to an institutional focus. However, the attention to programmes rarely disappears completely, and hence systems may become quite complex in attempting to respond to a variety of societal demands. As complexity increases, it will also be important to remain vigilant with regard to the impact of quality assurance on higher education institutions themselves. In particular, it is vital to ensure that the position expressed in the Berlin Ministerial Communiqué 2003 – that the primary responsibility for quality assurance rests with higher education institutions themselves – is viable in practice.

The scorecard indicators that have been used for this report reflect the main issues of the Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG), and look forward towards 2020. While the outcomes confirm the impressive changes that have taken place in the landscape of higher education quality assurance since the Bologna Process began, there is still considerable room for improvement. In particular stakeholder involvement in all relevant aspects of quality assurance is an accepted principle, but it is still far from being a commonplace reality. The report also shows that, despite the establishment of the European Quality Assurance Register (EQAR), many countries remain reluctant to devolve responsibility for external quality assurance beyond national boundaries.

4. SOCIAL DIMENSION IN HIGHER EDUCATION

The Bologna context

In the Bologna Process, the social dimension entered the communiqués later than most other issues, in 2001. However, in the following years, it gained significant attention. In 2001, the Prague Communiqué concentrated on the inclusion of students and the need to make mobility opportunities available for all. In 2003 in Berlin, ministers focused more broadly on social cohesion of the student population and social and gender inequalities. In particular, they mentioned the need to remove obstacles related to students' social and economic background based on comparable data. These general and specific commitments to make higher education accessible to all were renewed in Bergen in 2005, emphasising the obligation of governments to help students from "socially disadvantaged groups" to get access.

Despite this repeated reference to the social dimension aspect of building the European Higher Education Area (EHEA), there was no precise and commonly accepted definition of the social dimension in higher education until 2007. In that year in London, the ministers agreed on a comprehensive definition and the goal to achieve. Accordingly, "the student body entering, participating in and completing higher education at all levels should reflect the diversity of our populations". Ministers also emphasised that "students [should be] able to complete their studies without obstacles related to their social and economic background" ⁽⁵²⁾. The 2007 report of the BFUG Working Group on the Social Dimension and Data on Mobility further clarified that the social dimension is understood as the process towards achieving this overarching goal (Bologna Process Working Group on Social Dimension and Data on Mobility of Staff and Students in Participating Countries, 2007). In other words, the social dimension is defined as a large sphere of activities where governments can enact policies.

In 2007, the ministers also agreed to report on the progress made on this trajectory and in 2009 decided to set measurable targets "for widening overall participation and increasing participation of under-represented groups" with a goal to achieve them by 2020 ⁽⁵³⁾. Eurostudent and Eurostat (2009) also highlighted the need to have more comparative research on the social dimension of higher education based on recent data to be used by policy makers.

Based on this call for more precise and comparable data, which was also taken up by ministers in the Leuven/Louvain-la-Neuve Communiqué, Eurydice examined the social dimension in the European Higher Education Area (EACEA/Eurydice 2010, 2011b) and concluded that significant changes in higher education systems have taken place, but challenges remain. In particular, very few countries have set specific targets related to the social dimension and a monitoring of the participation of underrepresented groups has not yet been developed to any significant degree. Eurydice reports also indicate that while special measures to assist specific groups based on socio-economic status, gender, disability, ethnicity, etc. exist in many countries, these are rarely a central element of higher education policy.

⁽⁵²⁾ London Communiqué: Towards the European Higher Education Area: responding to challenges in a globalised world, 18 May 2007.

⁽⁵³⁾ The Bologna Process 2020 – The European Higher Education Area in the new decade. Communiqué of the Conference of European Ministers Responsible for Higher Education, Leuven and Louvain-la-Neuve, 28-29 April 2009.

BFUG Working Group on the Social Dimension

Further support to the cooperation on the social dimension in higher education has been provided through the activities of the Working Group on the Social Dimension (2010-2012), which has been entrusted the responsibility to oversee the progress made by countries, define comparable indicators on the social dimension in higher education and collect examples of good practice in this area. The working group has also been exploring the possibility of creating a European Observatory on Social Dimension of Higher Education. This chapter has benefitted greatly from close cooperation with the working group, whose members have provided advice both on the issues to be addressed as well as detailed comments on provisional drafts.

Chapter outline

Building on the previous reports and the outcomes of the Working Group on the Social Dimension, this chapter brings together available statistical information on student background and educational attainment with administrative data on the social dimension and funding of higher education in EHEA signatory countries. The chapter starts with an overview on higher education participation and attainment based on available background characteristics of students. On the one hand, these indicators set the context for further analyses of social dimension policies in higher education. On the other hand, they help to assess the achievement of goals set by the ministers. This mostly statistical section is followed by an analysis of different national approaches to widening participation in higher education. In particular, the focus lies on whether under-represented groups are expressly defined or whether there are other policy approaches to address the under-representation. Following this, the chapter looks at specific aspects of the social dimension in higher education as highlighted in the Bologna communiqués, namely alternative access routes targeting non-traditional learners and guidance and counselling services available to students during their studies. The chapter concludes with a look at the financial side of higher education by contrasting major costs charged to students (e.g. tuition fees) and data on student income via direct and indirect public student support, family support and self-financing through paid jobs. The aim is to examine whether funding systems are being oriented to support and stimulate the social dimension policy objective of widening participation.

4.1. Statistical information on the impact of students' background on their participation in and attainment of higher education

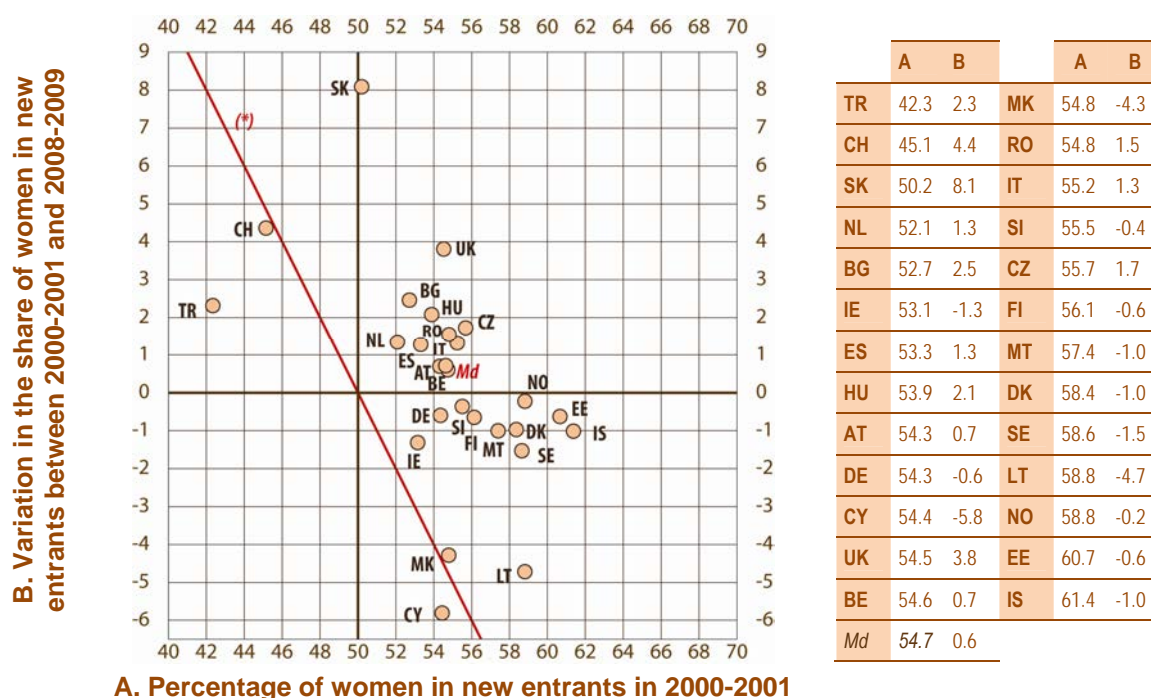
The need to expand higher education in a time where labour markets and the knowledge-based economy increasingly require higher education degrees has been reaffirmed by all signatory states repeatedly in the Bologna communiqués and other international declarations. Chapter 1 of the present report has provided an overall picture of trends in participation in higher education showing the continuing move towards the "massification" of the higher education systems (see Figure 1.3). This section provides data on the participation and attainment of specific groups of the student population. The aim of these indicators is to set the context for further analyses of the social dimension in higher education.

4.1.1. Gender balance in higher education

Ministers agreed that those participating in higher education should reflect the composition of the overall population as closely as possible. One important indicator in this regard looks at the gender of students. Here, the historical trend is a reversal of the tendency for men to outnumber women in higher education.

Figure 4.1 shows that in the beginning of the first decade of the Bologna Process more women than men entered higher education. This is reflected by the fact that, with the exception of Switzerland and Turkey, all countries in the EHEA for which data is available were positioned to the right of the 50 % vertical line. This development has continued throughout the decade in half of the countries. For those countries above the 0 % horizontal line, the percentage of women in higher education has increased between 2000-2001 and 2008-2009.

Figure 4.1: Percentage of women in new entrants in tertiary education in 2000/01 and variation from 2000/01 to 2008/09



(*) = Line where the difference in the percentage of women would exactly cover the gender gap

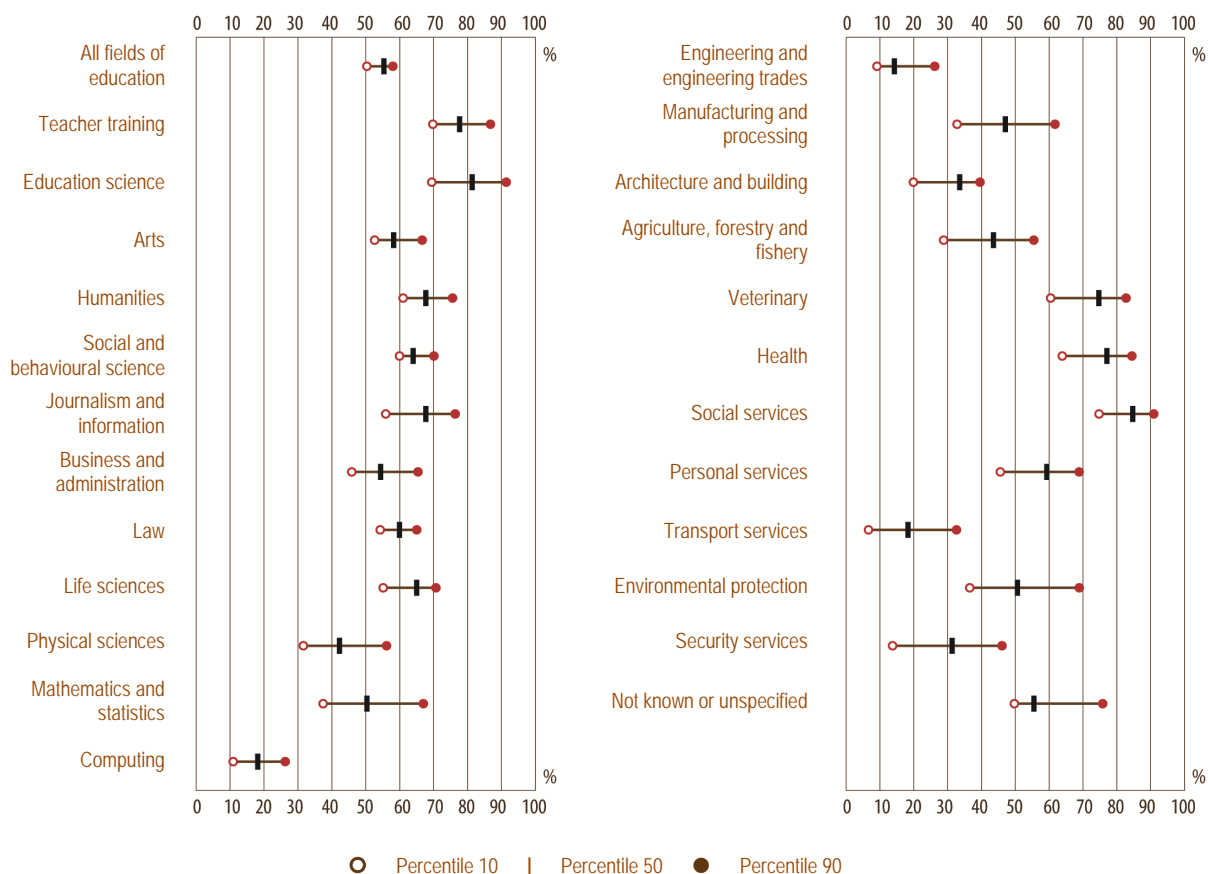
Note: The value for 2000-2001 corresponds to the average level of the academic years 1999/2000 and 2000/01, and the one for 2008-2009 to the average of the academic years 2007/08 and 2008/09.

Source: Eurostat, UOE.

Overall, the figure indicates that the gender parity imbalance has increased slightly during the first Bologna decade. However, divergent developments stand out. For example, out of the 26 countries for which data is available, in 12 countries, a higher percentage of women entered higher education in the beginning of the decade, but by 2009 the relationship had moved more towards gender balance. One country, Cyprus, has seen the picture completely turned upside down, and now has more men entering higher education than women. In Switzerland, fewer women than men entered higher education in the beginning of the decade (45.1 % in 2000/01), but by 2009 parity was almost achieved. In contrast, in the Slovak Republic, the student population was balanced in the beginning of the decade (50.2 % female entrants), but by the end of the decade the country had the 4th highest percentage of women entering higher education.

The overrepresentation of women in higher education, however, needs to be further analysed. When looking at gender balances by study field, another picture emerges (Figure 4.2; for country coverage see Glossary and Methodological Notes). Women dominate in the education field, in veterinary sciences and in health and welfare. Men, on the other hand, are predominant in computing, in engineering and engineering trades and in transport services. And while in mathematics and science, as well as in manufacturing and processing and environmental protection, the median is around 50 %, the spread across countries is very wide.

Figure 4.2: Percentage of women in new entrants in tertiary education by field (median and 10/90 percentile), 2008/09



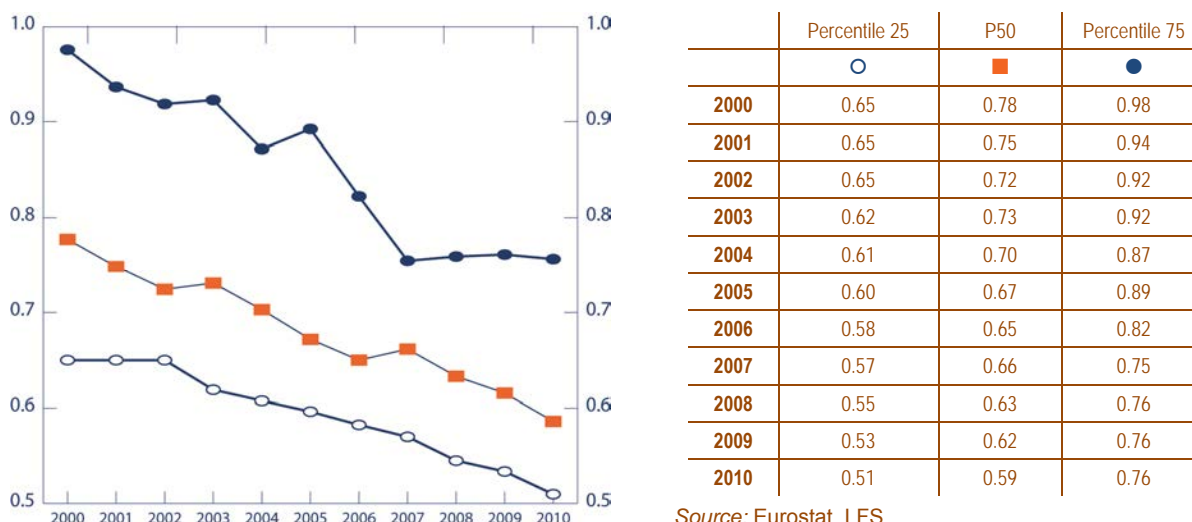
Source: Eurostat, UOE.

This indicator highlights that when looking at the importance of gender in higher education participation, taking a broad look across study fields does not yield sufficient information. While overall participation by women is higher, this picture needs to be adjusted by looking at particular study fields. Additionally, a recent Eurydice study (EACEA/Eurydice, 2009) also underlines the question of vertical segregation in higher education, showing that women are still slightly under-represented among doctoral graduates.

Building on the indicators on participation by gender, attainment by gender (Figure 4.3; for more details on country coverage see Glossary and Methodological Notes) supports the already reported findings: over the last decade, the chances for men to achieve tertiary education attainment have been decreasing compared to their female counterparts. The figure shows that already in 2000, the 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 a median odds ratio of less than 0.6 by 2010. This is not to say that fewer men enrol in higher education, but that the overall balance is increasingly tilted towards women.

The figure also shows that the spread between the countries where the odds ratio of men over women was the lowest (P25) and those where the odds for men and women were most similar (P75) have decreased. Yet, the development was – from a balance point of view – negative, as the countries in which the situation was the most balanced showed a much stronger decreasing odds ratio than the countries that already had a low odds ratio in 2000.

Figure 4.3: Attainment by gender: odds ratios of men over women to attain higher education, 2000-2010



Source: Eurostat, LFS.

Note: 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 2010, for the median country (P50); for every 100 women attaining higher education there would only be 59 men. In 2000, there were 78 men for every 100 women.

4.1.2. Migrants in higher education

The integration of Europe and globalisation in general have led to increasing cross-border migration. In many countries, a significant share of the resident population does not have the citizenship of the country or was born abroad. This brings a further dimension of higher education to attention: migrant participation. In a European Higher Education Area that provides accessible higher education for all⁽⁵⁴⁾, migrants should constitute a share among the student population that is equal to their share in the population.

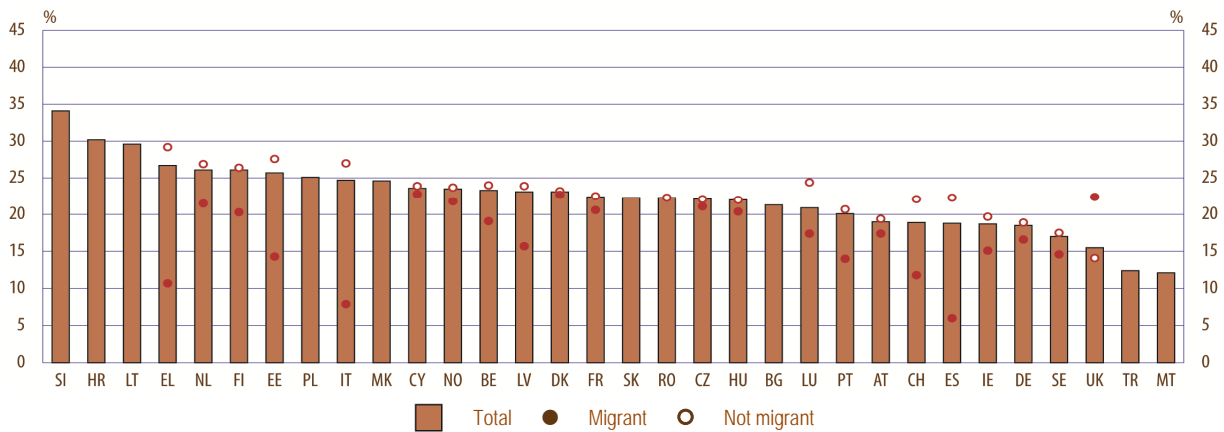
Figure 4.4 depicts the participation rates of migrants compared to non-migrants. Migrants here are defined as individuals for whom the country of birth is not the reference country. However, it is not possible to know whether an individual has been living in a country for a long time or whether s/he has come to a country only recently (e.g. for the purpose of study). As a result, participation rates for migrants include the international student population but, at the same time, do not include second-generation migrants born in the country of their studies. This highlights the difficulties of accurately evaluating migrant participation in higher education.

Data differentiating between migrants and non-migrants in higher education covering 22 countries show that in almost all countries, participation rates for migrants are lower than for non-migrants. In ten of them this gap is larger than five percentage points, with Estonia, Greece, Italy, Spain and Switzerland having the largest gaps. A second group of four countries (the Cyprus, Czech Republic, Denmark and Hungary) has the same (or very similar) participation rates for the two groups. In these countries, migrants are as likely to participate in higher education as non-migrants, thus reaching the

⁽⁵⁴⁾ The European Higher Education Area - Achieving the Goals. Communiqué of the Conference of European Ministers Responsible for Higher Education, Bergen, 19-20 May 2005.

goal ministers set themselves. The United Kingdom stands out among the countries as migrants show a much higher rate of participation than non-migrants (22.4 % v 14.1 %). This exceptional situation can be partially explained by the attractiveness of the United Kingdom higher education system for international students as the figure on student incoming mobility illustrates (see Figure 7.1 in Chapter 7).

Figure 4.4: Participation rates in tertiary education among the migrant, non-migrant and total population, 2009



	SI	HR	LT	EL	NL	FI	EE	PL	IT	MK	CY	NO	BE	LV	DK	FR
Total	34.1	30.2	29.6	26.7	26.1	26.1	25.7	25.1	24.7	24.6	23.6	23.5	23.3	23.1	23.1	22.4
Migrant	:	:	:	10.7	21.5	20.3	14.3	:	7.9	:	22.8	21.8	19.1	15.7	22.7	20.6
Not migrant	:	:	:	29.2	26.9	26.4	27.6	:	27	:	23.9	23.7	24	23.9	23.2	22.5

	SK	RO	CZ	HU	BG	LU	PT	AT	CH	ES	IE	DE	SE	UK	TR	MT
Total	22.3	22.3	22.1	22	21.3	20.9	20.1	19	18.9	18.8	18.7	18.5	17	15.5	12.4	12.1
Migrant	:	:	21.1	20.4	:	17.4	14	17.4	11.8	6	15.1	16.6	14.6	22.4	:	:
Not migrant	:	22.3	22.1	22	:	24.4	20.7	19.4	22.1	22.3	19.7	18.9	17.5	14.1	:	:

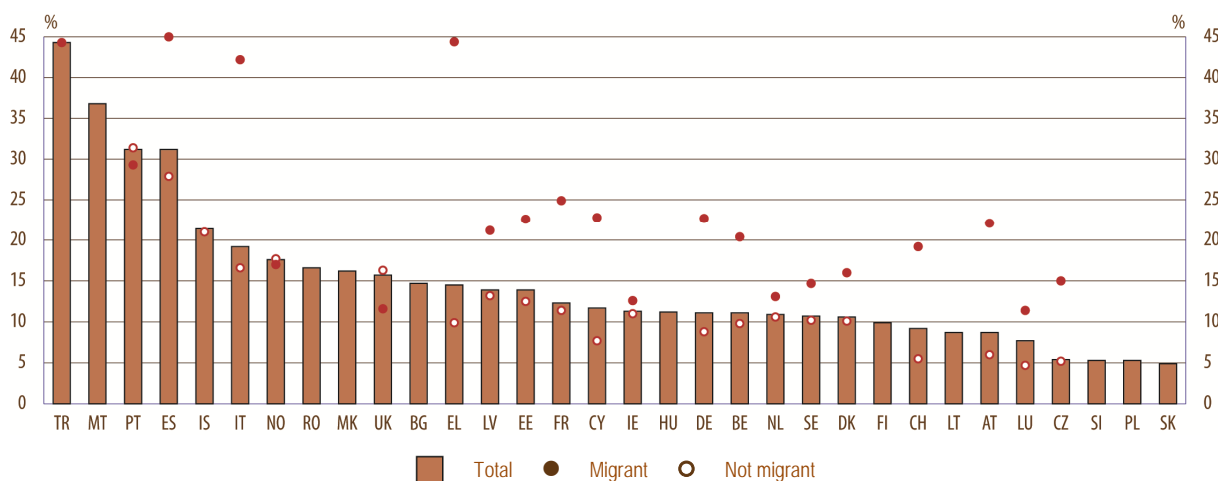
Note: Migrant is in this context a person for whom the country of birth is not the reference country (for more details see Glossary and Methodological Notes).

Source: Eurostat, LFS.

Figure 4.5 provides data on early school leaving and it allows the comparison between students with a migrant background and the non-migrant population.

The figure shows that students belonging to the first category are much more likely to leave school early than those belonging to the second one. This means that the reasons for a relatively low participation rate of migrants in higher education are not (only) linked to access problems and admission to higher education, but can be found clearly at earlier education levels. For example, in countries having large gaps in higher education participation rates between migrants and non-migrants (Figure 4.4), data on early school leaving (Figure 4.5) also show that students with a migrant background are much more likely to leave school early than the non-migrant population. The picture is particularly striking for Greece (difference of 34.5 percentage points), Italy (difference of 25.6 percentage points) and Spain (difference of 17.1 percentage points). This indicates that measures to foster the participation of people with a migrant background must start much earlier than at the level of higher education.

Figure 4.5: Early school leavers as percentage of the migrant, non-migrant and total population, 2009



	TR	MT	PT	ES	IS	IT	NO	RO	MK	UK	BG	EL	LV	EE	FR	CY
Total	44.3	36.8	31.2	31.2	21.4	19.2	17.6	16.6	16.2	15.7	14.7	14.5	13.9	13.9	12.3	11.7
Migrant	44.3	:	29.3	45.0	:	42.2	17.0	:	:	11.6	:	44.4	21.2	22.6	24.9	22.8
Not migrant	:	:	31.4	27.9	21.0	16.6	17.7	:	:	16.3	:	9.9	13.2	12.5	11.4	7.7
	IE	HU	DE	BE	NL	SE	DK	FI	CH	LT	AT	LU	CZ	SI	PL	SK
Total	11.3	11.2	11.1	11.1	10.9	10.7	10.6	9.9	9.2	8.7	8.7	7.7	5.4	5.3	5.3	4.9
Migrant	12.6	:	22.7	20.4	13.1	14.7	16.0	:	19.2	:	22.1	11.4	15.0	:	:	:
Not migrant	11.0	:	8.8	9.8	10.6	10.2	10.1	:	5.5	:	6.0	4.7	5.2	:	:	:

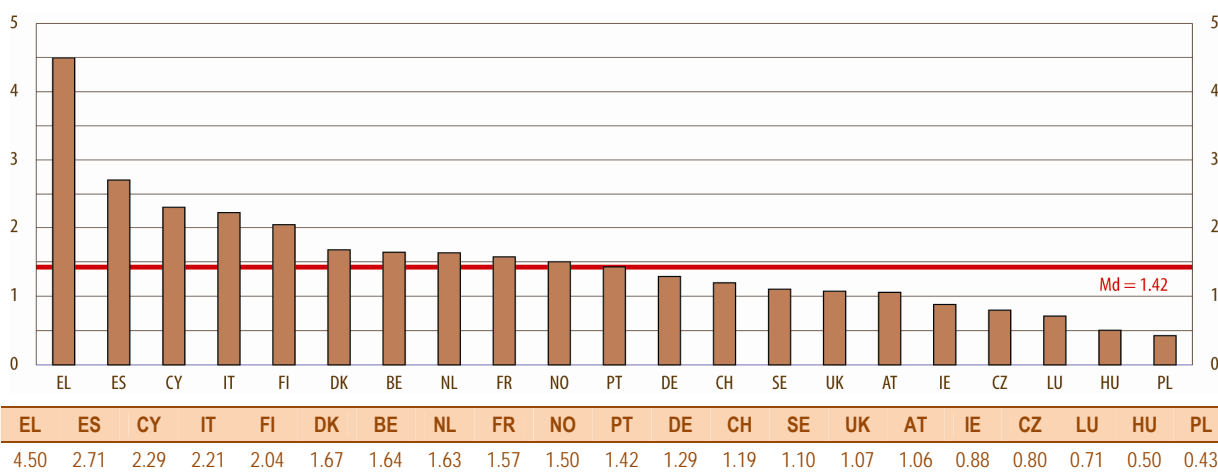
Notes: Early school leaver is in this context a person aged 18-24 with at most lower secondary education and not in further education or training (for more details see Glossary and Methodological Notes).

Migrant is in this context a person for whom the country of birth is not the reference country (for more details see Glossary and Methodological Notes).

Source: Eurostat, LFS.

Figure 4.6 presents the relative chances of non-migrants to attain higher education compared with the migrant population. It shows that in five countries – Greece, Spain, Cyprus, Italy and Finland – non-migrants have significantly higher chance to achieve a degree than migrants (the odds ratio is higher than 2). On the other hand, in Ireland, the Czech Republic, Luxembourg, Hungary and Poland, the odds ratio for non-migrants is less than 1, meaning that in these countries, migrants have higher relative chances to attain higher education than non-migrants.

Figure 4.6: Attainment by migrant status: odds ratio of non-migrants over migrants to attain higher education, 2009



EL	ES	CY	IT	FI	DK	BE	NL	FR	NO	PT	DE	CH	SE	UK	AT	IE	CZ	LU	HU	PL
4.50	2.71	2.29	2.21	2.04	1.67	1.64	1.63	1.57	1.50	1.42	1.29	1.19	1.10	1.07	1.06	0.88	0.80	0.71	0.50	0.43

Note: Migrant is in this context a person for whom the country of birth is not the reference country (for more details see Glossary and Methodological Notes).

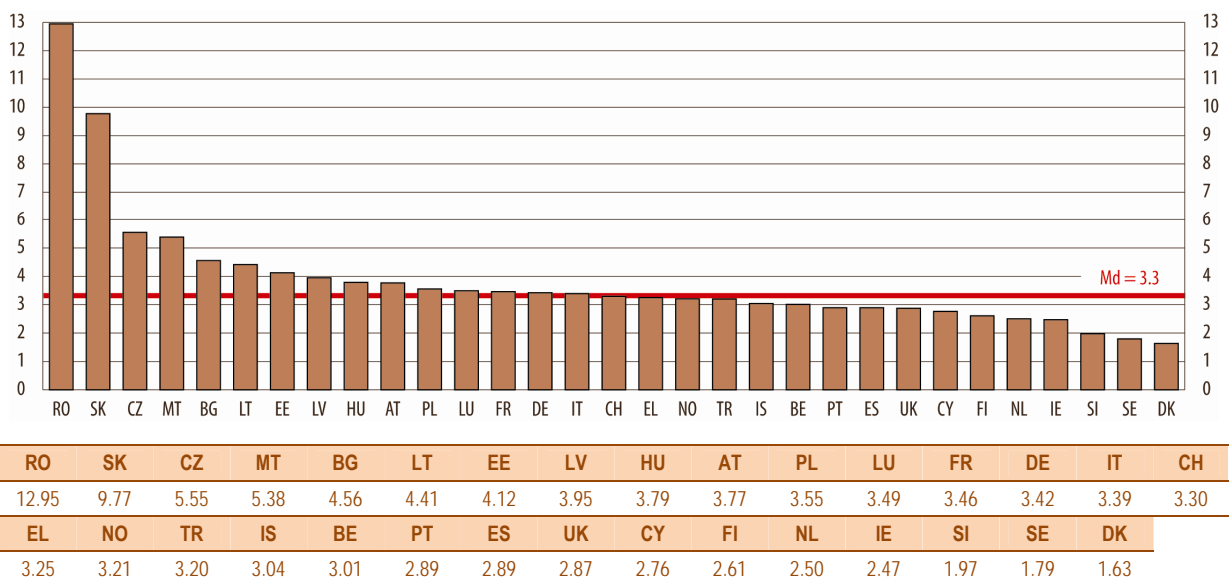
Source: Eurostat, LFS.

4.1.3. Influence of parental education on higher education attainment

One strong indicator for the fairness of a higher education system is to what extent educational attainment is passed down through generations. If the EHEA countries want to achieve their commitment made in the London Communiqué that students should be able to complete their study regardless of their social and economic background, looking at the effect of parental educational attainment is crucial. It has been shown that the educational level of parents strongly influences educational attainment (e.g. Koucký, Bartušek & Kovařovic, 2010), though data also show that this relationship has been diminishing (Eurostat/Eurostudent, 2009).

Figure 4.7 presents the odds ratios for attaining a higher education qualification, comparing students with highly educated parents (tertiary education) to students with medium educated parents (upper secondary or post-secondary non-tertiary education). It shows that in almost all countries the chances of persons to attain tertiary education are strongly determined by their parents' educational background. In Denmark, Slovenia or Sweden, the impact of parents' educational background is evident, but relatively weak. In most other EHEA countries, however, the relative chances for students with highly educated parents to attain higher education are between two and five times higher than for students whose parents have a medium educational level. In Slovakia and Romania, the relative chances are even higher, with the chances for children of highly educated persons being 10 and 13 times higher, respectively.

Figure 4.7: Attainment by educational background: odds ratio of students with highly educated parents (i.e. tertiary education) over students with medium educated parents (i.e. upper secondary and post-secondary non-tertiary education) to attain higher education, 2009



Source: Eurostat, LFS ad-hoc module 2009.

These findings are confirmed by Eurostudent data on educational background of students enrolled in higher education (Eurostudent, 2011). In particular, Eurostudent research identifies the higher education systems of Romania and Slovakia among socially exclusive systems, i.e. systems characterised by a significant under-representation of students with low educational background.

As Figures 4.6 and 4.7 use the same statistical approach, it is possible to compare the influence of migrant status on students' chances to achieve a higher education degree with the influence of parents' educational attainment. The comparison between the two indicators shows that while being a

migrant in some countries does not limit the odds of obtaining a higher education degree, in no country is the parents' educational background irrelevant for higher education attainment. In other words, migration background does not influence students' chances to attain higher education as much as their parents' educational background.

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Overall, the analysis of data on higher education participation and attainment indicates that the goal of providing equal chances for all in the EHEA has not yet been achieved. The following section will take a more detailed look at policy approaches countries use to expand access to and participation in higher education.

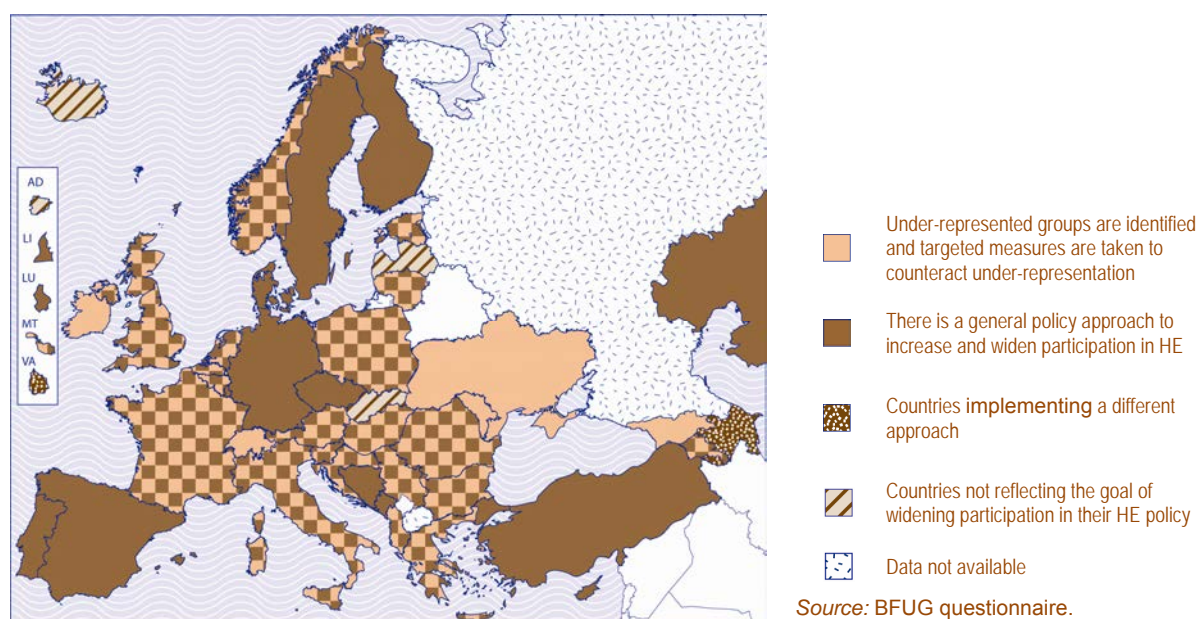
4.2. Policy approaches to widening access to and participation in higher education

Building on statistical data on background characteristics of students, this section provides an overview of national approaches to widening participation in higher education so that the diversity of the population is reflected. It presents an overview of policy measures countries adopt to reach this goal as well as monitoring mechanisms put in place. The objective is to gain an understanding of the different mechanisms through which the goal of widening participation is addressed.

4.2.1. Overview of the main approaches

According to the reporting exercise, almost all EHEA countries work towards the goal of widening participation in higher education as laid down in the Bologna documents. Only four countries (Andorra, Iceland, Latvia and Slovakia) do not reflect this goal in their higher education policy.

Figure 4.8: National policy approaches to widening participation in higher education, 2010/11



Approaches to widening access to higher education can take different forms: a general policy approach targeting all categories of students, measures focusing on different under-represented groups, or – in most cases – a combination of both. Two higher education systems – Azerbaijan and the Holy See – claim to work towards the goal of widening participation in higher education, but they report that their policy approach can neither be described as general nor as targeted. Figure 4.8 provides an overview of the situation across the EHEA.

General policy approach

Higher education systems addressing the under-representation through a general policy approach commonly strive for creating an environment that provides equal opportunities for all to participate in higher education. It is expected that this will have a positive impact not only on the overall participation in higher education, but also on the number of students from disadvantaged groups. While the majority of EHEA countries combine general policy actions with targeted measures, 13 countries concentrate on the first approach. From the geographical perspective, the general policy approach is quite common in the Nordic countries, as in three of them – Denmark, Finland and Sweden – it is the main mechanism to address under-representation.

Several countries indicating a general policy approach to widening participation refer to financial arrangements they have put in place (Belgium, Bulgaria, the Czech Republic, Croatia, Denmark, Finland, Italy, Luxembourg, Norway, Romania and Slovenia). These countries are commonly pointing out that the system of fees and financial support available for students are intended to allow all those interested in higher education to embark on studies at this level regardless of their socio-economic status or situation. More details on these aspects are provided in section 4.4, which deals with higher education funding systems, relating the most important elements of national fee systems with student support.

Alongside financial measures, countries reporting a general policy approach often make a reference to structural changes in their higher education systems. The aim of these measures is to adapt existing higher education provision so that the system would attract a wider range of societal groups, including groups that have been under-represented in the past. Such structural adaptation can be related to the introduction of new higher education programmes (e.g. in Cyprus), including short-cycle programmes (e.g. in Luxembourg) or professionally-oriented programmes (e.g. in France). It can also be linked to the development of public vocational higher education institutions (e.g. in Poland) or institutions focusing on flexible higher education provision (e.g. in Italy). Besides, some countries report that their higher education systems have become more open towards the recognition of learning outcomes acquired outside formal learning contexts (e.g. France, Germany, Italy and Sweden), which can also be seen as an adjustment likely to enhance the participation in higher education.

Finally, efforts to achieve equity in higher education are sometimes complemented by actions in other parts of education systems. These actions mainly take place at upper secondary level and can, for instance, include guidance and counselling services targeting upper secondary graduates (the Czech Republic, France and the Netherlands). Their aim is to ensure that pupils make informed choices about their further career and consider higher education as one of possible options. Preparatory programmes for higher education candidates (which are referred to by the Czech Republic) also fall under this category of measures.

Policy approaches targeting specific under-represented groups

Along with a general policy approach, many EHEA countries have taken measures targeting specific under-represented groups. Five higher education systems (Georgia, Ireland, Moldova, Switzerland and Ukraine) concentrate on targeted measures, rather than general policy actions or the combination of both approaches.

Targeted actions can cover different categories of students. The BFUG reporting shows that students with disabilities are the most common group targeted by specific measures (around half of the EHEA countries are referring to this category of students). The aim is to adapt their study environment so that they could integrate into the higher education system on the same footing as other students. The second most common category of students targeted by specific measures is the category of those, whose socio-economical situation is likely to be a barrier to higher education studies (20 EHEA countries are referring to this category of students). Although the low socio-economical status is defined differently across countries, the measures most commonly focus on those from low-income families, families with low educational background or orphans. These students are often eligible for various forms of financial support, in particular grants and subsidies, aiming to compensate their economic handicap. In some systems (e.g. Scotland), students with low socio-economical status are also targeted by special guidance and counselling services as well as preparatory programmes aiming to improve their chances to enter higher education and succeed in it.

Several higher education systems formally identify other under-represented groups and target them by a range of policy actions (e.g. financial support schemes, special admission regimes and guidance and counselling services). These groups are defined on the basis of various criteria, including ethnicity and/or migrant status, gender, geography (rural versus urban areas and/or deprived versus wealthy areas) or age (mature versus typical higher education students). Within these general categories, countries often express their specific national concerns. For instance, with regard to ethnicity/migrant status, Georgia pays particular attention to Azeri and Armenian students, whereas Croatia focuses on Roma students. It can also be noted that some countries define under-represented groups on the basis of criteria, which are closely related to their recent history. This applies to certain Balkans and East European countries (e.g. Armenia, Georgia and Moldova), where students or students whose parents participated in military conflicts are recognised as groups under-represented in higher education and targeted by special measures.

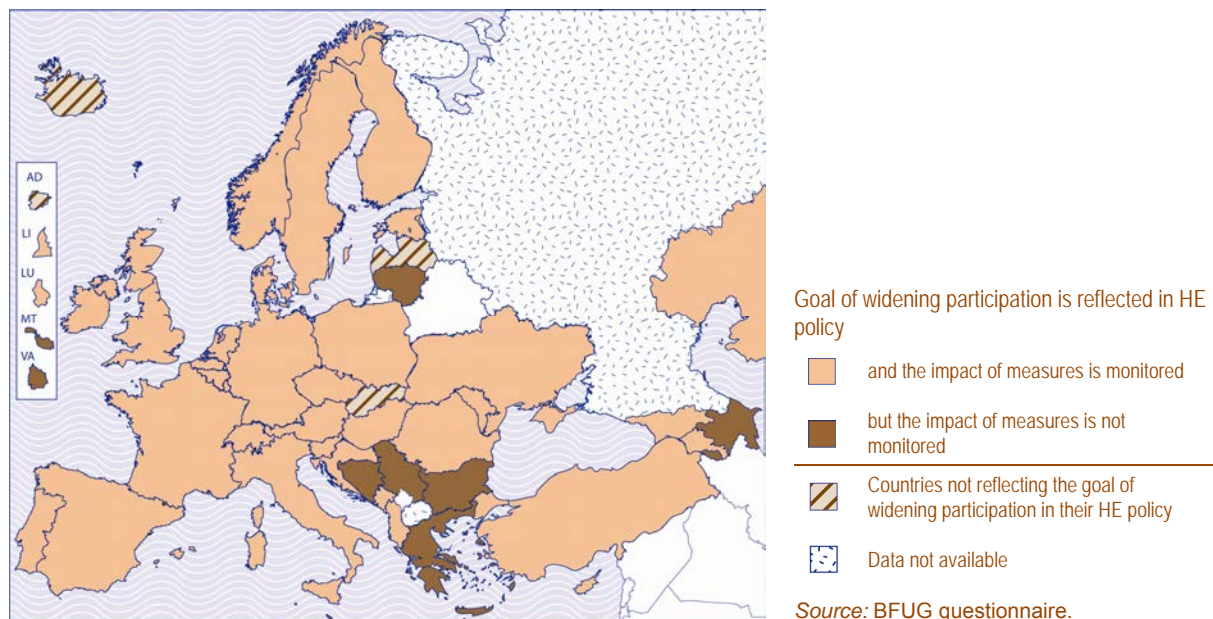
Quantitative targets

Regardless of the policy approach used to address the under-representation, only a few countries (e.g. Armenia, Austria, Ireland, Finland and Norway) refer to quantitative targets to be reached. In Ireland for instance, the National Action Plan for Equity of Access to Higher Education 2008-2013 sets very concrete objectives, stating that all socio-economic groups should have entry rates of at least 54 % by 2020, and mature students should comprise at least 20 % of total full-time entrants by 2013. In Finland, according to the Development Plan Education and Research 2007-2012, the share of immigrant students in higher education should correspond to their share in the entire population.

4.2.2. Monitoring

Most EHEA countries indicate that they have put in place systematic activities allowing them to monitor the composition of the student body according to different characteristics (e.g. gender, disability, age, social background, migrant status, etc.), and therefore evaluate the effect of measures aiming to widen participation in higher education. These monitoring activities are often a part of regular national statistical monitoring and the outcomes are commonly published in statistical or research reports. A few countries state that they address the issue of widening participation through various policy initiatives, but they do not report any systematic monitoring activities that would allow them to evaluate the effect of these measures on the composition of the student body. Figure 4.9 summarises the situation across the EHEA.

Figure 4.9: Existence of monitoring activities allowing the evaluation of the effect of measures to increase participation in higher education, 2010/11



Although the majority of countries have already put in place monitoring activities allowing them to capture the composition of the student body, the monitoring systems do not always cover all groups defined as under-represented and/or they do not allow capturing all relevant student characteristics. This is sometimes related to various legal constraints, in particular the fact that in some contexts it is legally forbidden to monitor certain aspects of the composition of the student body. For example in Estonia and Finland, it is impossible to collect data on ethnic and socio-economic background of students.

It should also be noted that the BFUG reporting does not always show a systematic relationship between monitoring activities and the actual impact of these activities on policy developments across the EHEA. In fact, only a few countries clearly indicate that data obtained through monitoring is systematically used as a reference for strategic planning of future policy initiatives. It therefore seems that the link between data gathering and policy development is yet to be straightened in the majority of EHEA countries.

4.3. Opening access routes to higher education and providing adequate student services

The objective to increase the number and diversity of the student population goes hand in hand with the need to create an institutional environment that values the recruitment of non-traditional learners and pays particular attention to student retention in the higher education system. This has been recognised by the ministers responsible for higher education who highlighted, within the London Communiqué, that the social dimension in higher education should include efforts to create more flexible learning pathways into and within higher education as well as the provision of adequate student services ⁽⁵⁵⁾. Similar references have been included in the Bergen and the Louvain/Louvain-la-Neuve Communiqués ⁽⁵⁶⁾.

This section looks at specific aspects of the social dimension in higher education as highlighted within the Bologna communiqués. It will first provide an overview of alternative access routes to higher education that can be used by prospective students who do not comply with traditional access requirements. The section then looks at services that are commonly available to students, in particular academic and career guidance and services of psychological counselling. Other measures referred to by the ministers, namely flexible learning pathways within higher education, will be examined in Chapter 6 on lifelong learning. Chapter 5 on outcomes and employability will look at policies targeting the completion of higher education studies and it will examine how different higher education systems address the problem of student under-performance and dropout.

4.3.1. Non-traditional access routes to higher education

Non-traditional (or alternative) access routes to higher education are commonly understood as access routes targeting higher education candidates who do not comply with traditional entry requirements. This is either because they followed a short upper secondary vocational path (i.e. a programme, which does not allow access to higher education) or because they abandoned initial education prior to the completion of upper secondary level. In the current policy context, promoting the idea that no talent should be left behind, the theme of non-traditional pathways into higher education gains particular attention. The objective is to extend admissions criteria so that all those who have a capacity to follow higher education studies would be provided with the opportunity to do so, regardless of their prior formal learning achievements.

Overview of the current situation

The analysis of alternative access routes to higher education must be carried out in close relation to the current structures of upper secondary education systems. In fact, one of the most important characteristics of many upper secondary systems is the absence of a clear boundary between academic and vocational paths. This means that vocational upper secondary programmes often lead to a standard qualification allowing access to higher education studies. Overall, this can be seen as a positive trend that contributes to parity of esteem and equality of different educational choices and pathways. However, such permeability between general and vocational education does not yet exist in

⁽⁵⁵⁾ London Communiqué: Towards the European Higher Education Area: responding to challenges in a globalised world, 18 May 2007.

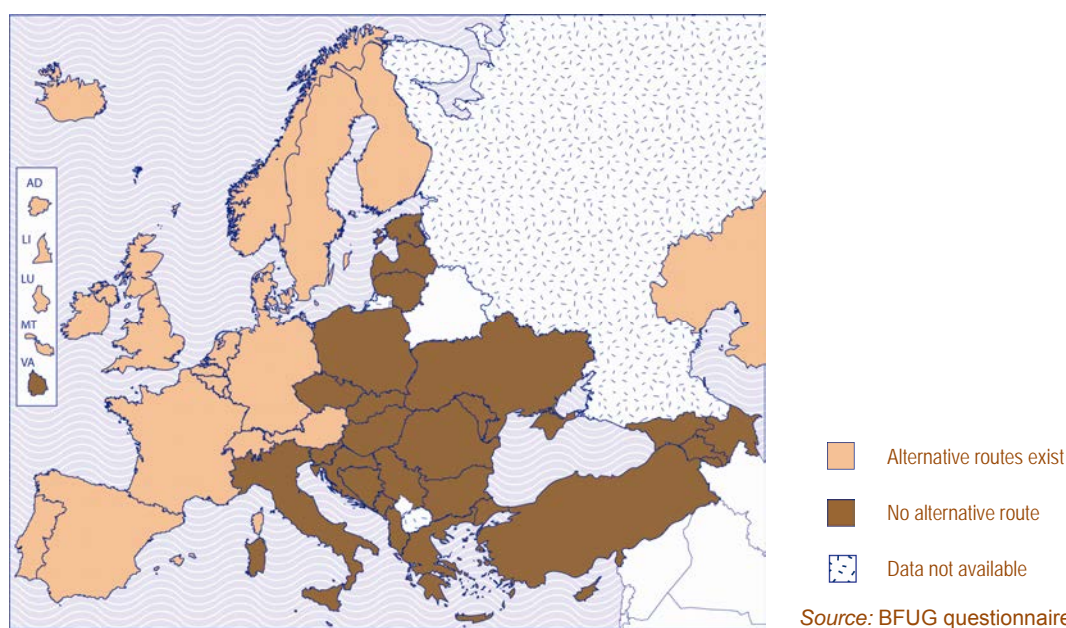
⁽⁵⁶⁾ The European Higher Education Area - Achieving the Goals. Communiqué of the Conference of European Ministers Responsible for Higher Education, Bergen, 19-20 May 2005.

The Bologna Process 2020 – The European Higher Education Area in the new decade. Communiqué of the Conference of European Ministers Responsible for Higher Education, Leuven and Louvain-la-Neuve, 28-29 April 2009.

all countries. Alongside, several countries are characterised by relatively high proportion of early school leavers, i.e. pupils who abandoned upper secondary education prior to completing it (for country-specific information on early school leavers, see Figure 4.5).

Figure 4.10 provides an overview of the current situation in the European Higher Education Area with regard to alternative access routes to higher education. It classifies the EHEA countries into two groups. The first one includes countries where the traditional upper secondary school leaving certificate (general or vocational) is not the only way to enter higher education, and where at least one alternative path into higher education exists. The second group comprises countries where the standard upper secondary school leaving qualification remains the only way to embark on higher education studies⁽⁵⁷⁾.

Figure 4.10: Alternative routes to higher education for non-traditional candidates, 2010/11



The figure shows that out of 47 higher education systems for which data is available, 22 higher education systems have already established at least one alternative route to higher education, whereas in 25 systems the access to higher education is conditioned by the possession of an upper secondary school leaving certificate. Overall, the figure shows that the higher education systems in the countries of Western Europe are characterised by higher flexibility in terms of their entry qualification requirements than other EHEA countries.

Alternative entry to higher education can take different forms and can be based on a range of methods and approaches. Most commonly, alternative entry involves the recognition of the knowledge and skills that prospective non-traditional students acquired outside formal learning contexts (i.e. through various non-formal learning activities, professional experience, volunteering, etc.). It can also involve the enlargement of the scope of higher education entry qualifications, which means that short vocational programmes (or other "non-traditional" programmes/qualifications) can also qualify for higher education entry. Besides, in some countries, candidates who lack the knowledge and skills

⁽⁵⁷⁾ The second group includes a few countries (e.g. the Czech Republic, Slovenia and Turkey), where under exceptional circumstances, particularly talented higher education candidates who do not hold an upper secondary school leaving certificate can be granted access to higher education. However, as this concerns only exceptional cases and often only certain fields of study (e.g. arts programmes in the Czech Republic and Slovenia), these countries cannot be regarded as having a systematic provision of alternative entry routes into higher education. Alongside, the second group also includes countries where candidates without necessary qualifications can be admitted into higher education, but cannot be awarded a higher education degree if they do not complete their upper secondary studies (e.g. the Czech Republic and Ukraine).

necessary for higher education study are provided with the possibility to follow specific preparatory programmes allowing access to higher education. The following sub-sections provide more detailed information on different approaches that can be observed within the EHEA.

Recognition of the knowledge and skills acquired outside formal learning contexts

In countries, where alongside standard formal qualifications the admission to higher education can also be granted on the basis of the recognition of non-formal and informal learning, legislation most often refers explicitly to such possibility. Yet, legal frameworks regulate this option in different ways and to a different extent. In some countries, legislation refers to alternative access to higher education in a relatively open way, i.e. it does not refer to any specific categories of non-traditional learners or to any approaches to be used in alternative admission procedures (e.g. Finland and Sweden). Regulatory frameworks can also be more prescriptive and provide further details relating to various aspects, including the categories of learners who are eligible or methods and approaches that should be used when evaluating the knowledge and skills of non-traditional applicants (e.g. Germany and Spain). The United Kingdom represents a specific case, as there is no legislation referring to alternative entry into higher education, but higher education institutions commonly accept non-traditional candidates who do not comply with standard entry requirements. This is related to the fact that universities are autonomous institutions responsible for the quality of their qualifications and the recruitment of their student population. They can therefore set their own admission criteria and conditions. Nevertheless, at the national level, a support has been provided to boost the implementation of alternative entry routes into higher education: the Quality Assurance Agency for Higher Education (QAA) has published a code of practice, which specified a range of evidence that may be considered in judging the potential of a prospective non-traditional student. According to the document, the evidence might include all prior learning of candidates, including that achieved in the workplace.

Preparatory programmes for non-traditional higher education candidates

Alongside the recognition of prior non-formal and informal learning, some countries have put in place special preparatory programmes targeting non-traditional higher education candidates who need additional support in gaining the skills required for higher education study before they enter higher education. These programmes are primarily directed at learners who followed a short upper secondary programme not opening access to higher education or who left upper secondary education before completing it. They most often lead to a qualification that is recognised as an alternative to an upper secondary school leaving certificate. Provision of preparatory courses for non-traditional higher education candidates is relatively common in Ireland and all areas of the United Kingdom.

It should also be noted that in virtually all countries, there are possibilities for mature students who do not hold a necessary higher education entry qualification to follow programmes leading to a standard upper secondary school leaving certificate. These "second chance" programmes are often delivered under various flexible arrangements such as evening, part-time or distance courses. Despite the fact that this type of provision is not considered under Figure 4.10, it plays an important role in providing non-traditional learners with an opportunity to achieve a standard qualification allowing access to higher education studies.

Statistics and monitoring

In addition to different approaches to alternative access to higher education, it is also important to examine the extent to which these alternative options are used in practice. However, countries reporting the existence of at least one alternative entry route to higher education are often unable to

provide information on the proportion of students entering into the system on the basis of alternative admission procedures. It indicates that in the majority of countries this area is not subject to a regular system-wide monitoring.

Where quantitative data is available (i.e. where countries provided it within the BFUG reporting) alternative pathways into higher education do generally count only for up to 5 % of all entries. Only the United Kingdom (England) reports significantly higher proportion of those who enter higher education through a non-traditional entry route (around 28 % of all entries).

The information provided by central authorities can be compared with recent Eurostudent research (Eurostudent, 2011), which allows to quantify the role of traditional and non-traditional entry routes ⁽⁵⁸⁾ in different higher education systems (Figure 4.11). The data covers 22 countries and is based on students' responses to a question on the access route they have taken to enter higher education.

Figure 4.11: Students entering higher education through a regular route (upper secondary qualification) in %, 2009/10



Source: Eurostudent.

The figure shows that in Turkey, Slovakia, Romania, Poland, the Netherlands, Latvia, Italy, and Croatia, all students entering higher education are in the possession of a traditional upper secondary school leaving certificate. This confirms the information provided in Figure 4.10, which indicates that most of these countries do not provide any systematic possibilities to enter higher education without a standard upper secondary school leaving qualification. Only the Netherlands reports that non-traditional higher education candidates aged over 21 can be admitted to higher education on the basis of the recognition of prior learning. However, according to Eurostudent data, this possibility is rarely used in practice.

At the other end of the spectrum are Finland, Ireland, the United Kingdom (England and Wales) and Sweden, where between 70 % and 80 % of higher education students enter the system through traditional access routes, whereas the rest of the student population takes an alternative entry pathway. The contextual information provided in the text above confirms that all these countries have already established at least one alternative access route to higher education, namely the access

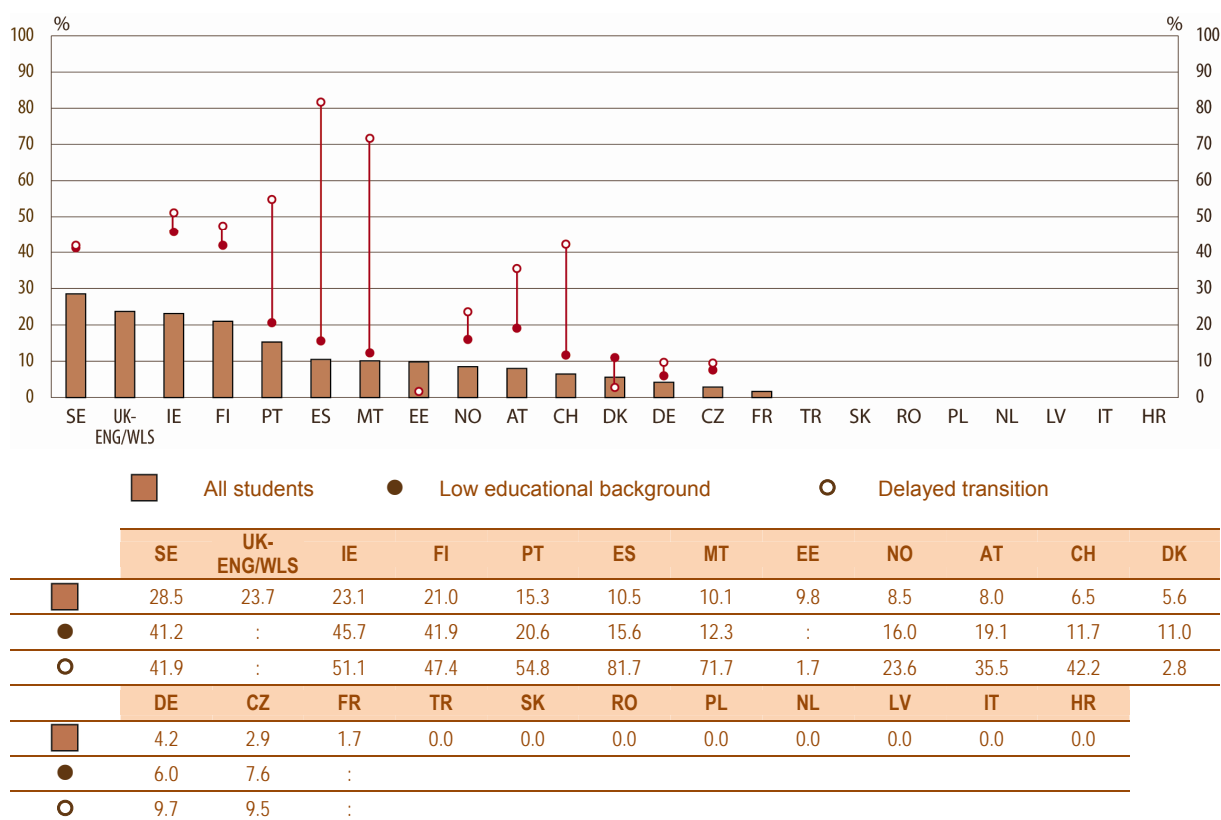
⁽⁵⁸⁾ Within Eurostudent research, the following entry routes fall under the category of non-traditional/alternative entry routes: 1. Vocational training/work experience/Accreditation of prior learning (APR); 2. Special aptitude/entrance examinations; 3. Post-secondary non-tertiary education (for more details, see Eurostudent, 2011). The last category (i.e. post-secondary non-tertiary education) can explain some discrepancies between Figures 4.10, 4.11 and 4.12. These concern the cases of the Czech Republic and Estonia, where the upper secondary school leaving certificate is a necessary condition to enter higher education (i.e. no alternative route is indicated under Figure 4.10), but it is possible to achieve it through second chance programmes classified as post-secondary non-tertiary education (i.e. alternative routes indicated under Figures 4.11 and 4.12).

based on the recognition of the knowledge and skills acquired outside formal learning contexts (Finland, Ireland, Sweden and the United Kingdom) or preparatory courses for non-traditional higher education candidates (Ireland and the United Kingdom).

The majority of the 11 countries situated in the middle of the spectrum, namely France, Germany, Denmark, Switzerland, Austria, Norway, Malta, Spain and Portugal, report that they have a systematic policy approach to alternative entry routes for non-traditional learners (Figure 4.10). In these countries, alternative access routes represent between 2 % and 15 % of all admissions, which indicates that this option is being used in practice to different degrees.

Eurostudent research also provides information on characteristics of those entering higher education through non-traditional access routes (Figure 4.12).

Figure 4.12: Students entering higher education through alternative routes by education background and transition route in %, 2009/10



Source: Eurostudent.

Data reveals that students belonging to the category of delayed transition students (see Glossary and Methodological Notes; for further analysis of this category of students see also Chapter 6, Figure 6.14) and students characterised by a low education/social background (see Glossary and Methodological Notes) frequently use non-traditional access routes. In Finland, Ireland and Sweden more than one in three students characterised by a low education/social background or delayed transition have taken an alternative access route to enter higher education. This confirms that the theme of alternative access to higher education ought to be seen as a key component of debates relating to the social dimension in higher education.

Prospective developments

With regard to future developments in the field of alternative entry into higher education, some countries see the establishment of their national qualifications frameworks based on learning outcomes as a mean to enhance the development of alternative access routes to higher education. It is expected that the shift to clearly identified learning outcomes will support alternative entry pathways in two different ways: First, clearly identified knowledge, skills and competences needed for study at higher education level could allow the implementation of measures to recognise non-formal and informal learning as a part of standard admission procedures. Second, national qualification frameworks are also expected to clarify the content of different national qualifications, which could allow certain "non-traditional" certificates and qualifications to be better understood and potentially accepted by higher education institutions as an alternative to standard upper secondary school leaving qualifications. The impact of the implementation of national qualifications frameworks on alternative entry routes to higher education is therefore a theme to be followed within further analyses.

4.3.2. Student services

Student services provided within the higher education sector are commonly regarded as an integral part of the social dimension, as elements contributing to the quality of the student experience and to widening access to higher education. They can support prospective students before entry to higher education, contribute to students' performance and success during their studies, and accompany higher education graduates in their transition to the labour market. They are also crucial to achieve the goal to make higher education more inclusive, as the ministers acknowledged in their 2007 London Communiqué ⁽⁵⁹⁾.

Overview of the provision

While higher education institutions can offer multiple student services, the BFUG reporting exercise paid particular attention to three types of services, namely academic guidance services, career guidance services and services of psychological counselling. It intended to provide an overview of the extent to which these services are ensured by higher education institutions.

Available data indicates that both academic and career guidance are commonly available to students in the majority of countries. Only Andorra, Croatia, Montenegro and Ukraine indicate that these services are not included in the standard provision of higher education institutions, and in Bulgaria and Georgia, only career guidance is included. The provision of psychological counselling services seems to be slightly less common: only around two thirds of countries report that higher education institutions commonly provide these services to students. Yet, this could be related to the fact that psychological counselling is often ensured by external providers, rather than by higher education institutions themselves (for more details, see the information on the organisational aspects provided further in the text).

Apart from the above-mentioned services, around half of the countries provide information on other services that are commonly available to higher education students. They mainly include healthcare and accommodation services, as well as services related to sport, social and cultural activities of students.

Several higher education systems (the Flemish Community of Belgium, Bosnia and Herzegovina, the Czech Republic, Croatia, Denmark, Iceland, Ireland and Slovenia) provide specific student services for those with special needs, in particular students with disabilities. The aim of these services is to ensure that these students are provided with academic and career guidance adapted to their needs, and that they can follow their studies on the same footing as other students.

A few countries (e.g. Montenegro and the United Kingdom (Scotland)) refer to the provision of academic and career guidance services targeting prospective higher education students, in particular upper secondary pupils. These services mainly take the form of various outreach activities/programmes aiming to enhance the motivation of learners to enter higher education and allow prospective students to make appropriate choices for their study career.

Organisational patterns

From the organisational perspective, student services provided by higher education institutions appear as a complex field. While a certain number of services are often ensured at the central level of higher education institutions, others may be provided by individual faculties or departments. For example in Slovenia, there are several central-level providers of student services, which are in charge of different aspects and areas of student life, including academic and career guidance, services related to accommodation, student mobility, leisure activities, etc. Alongside, individual faculties provide additional and more targeted academic and career guidance support to students. Similarly in the Czech Republic, student services are provided by special advisory units as well as by distinct departments, dean's offices, study offices, etc.

Individual higher education institutions do not necessarily ensure the provision of all services available to their students. This applies in particular to health services or services of psychological counselling, which are often provided by external institutions. In Serbia, for instance, academic and career guidance are most often provided inside higher education institutions (e.g. in career guidance centres), whereas services of psychological counselling are for the most part ensured by external providers, in particular medical centres and polyclinics.

Some countries have established independent legal entities responsible for the provision of various student services. This is the case in Norway, where student services fall under the responsibility of the Student Welfare Organisation and its 24 local branches. This organisation ensures services in areas such as student accommodation, catering and health, as well as services related to sports, social and cultural activities of students. A similar situation can be observed in Germany, where the public institution "Studentenwerk" with branches all over the country, offers comparable services. Denmark has established a self-governing institution Student Counselling, which ensures the provision of psychological counselling.

Student services and legislative frameworks

Legislative frameworks address the provision of student services in different ways. While in some countries it is legally binding for higher education institutions to offer certain types of student services, in other instances such obligations do not exist. For example in the Czech Republic and Sweden, according to the Higher Education Acts, public higher education institutions are obliged to provide applicants, students and other persons with information and advisory services relating to higher education studies as well as to labour market opportunities for graduates. In Denmark, universities are legally obliged to offer special guidance for students who are at risk of dropping out. In Norway, according to the Act on Student Welfare Organisations, all higher education institutions are obliged to collaborate with the Student Welfare Organisation. The United Kingdom represents a different model: higher education institutions are not obliged to offer the provision of student services, given their institutional autonomy. However, the lack of explicit directives does not necessarily mean the absence of student services. Scotland for example reports that all Scottish higher education institutions offer academic and career guidance services as well as psychological counselling services, and many also provide comprehensive health services to students.

⁽⁵⁹⁾ London Communiqué: Towards the European Higher Education Area: responding to challenges in a globalised world, 18 May 2007.

Funding of student services

Budgets of higher education institutions largely appear as the main source of funding of various student services. Yet, several countries also refer to other financial sources.

In countries such as the Czech Republic, Estonia, Finland and Slovenia, the European Social Fund seems to play an important role in the development of services available to higher education students. This is done either through projects focusing specifically on the provision of student services, or through initiatives having a wider scope, where student services represent only one area of action. The second case can be illustrated by the Estonian project "Primus", which aims to support the quality development of higher education and increase the competitiveness of graduates. The project consists of six major action lines, one of them supporting 19 higher education institutions with the provision of student services.

Complementary funding can also come from various national-level funds. This is the case in Denmark, where student services have been partly financed through a central political agreement, which includes initiatives in the area of research, education, innovation and entrepreneurship. Besides, some universities have also received a special grant (in total DKK 10 million in 2009/10) to test different career guidance initiatives.

In countries, where independent entities providing student services exist, these organisations are financed in various ways. For example in Norway, the Student Welfare Organisations are partly financed by compulsory students' contributions and partly by the government, whereas in Denmark, the Student Counselling service is financed by the state.

4.4. Fees and financial support

Since 2001, as a part of debates related to the social dimension in higher education, the ministers have regularly reaffirmed the need to build higher education systems where students can complete studies without obstacles related to their social and economic background. It is in this context that the question of how higher education funding systems are structured and whether there is the balance between student fees and support available to students gains particular importance.

Issues of student fees and support are difficult to understand and compare accurately and clearly at European level. This is because national realities are complex and there are many dimensions to be considered. For example, the statement, "students pay fees in country x" may seem clear, but it lacks sufficient information to understand the system. Does the term "students" refer to all or some students? If some, what are the criteria that determine which students pay fees? How much do students pay, (the range of fees)? Are the fees paid upon enrolment or after graduation? Even if answers are provided to all of these questions, the information is still insufficient to understand and assess reality. The rest of the picture needs to be filled in with information on the student support system. Are students or their families able to access public financial support in the form of grants, loans or tax relief? If so, under what conditions and criteria?

This section therefore aims to show only some main patterns and approaches in national higher education systems, relating the most important elements of national fee systems with student support. It concentrates on publicly-funded higher education rather than on private sector provision. This can, however, only be an overview of such a complex topic, and more detailed information is needed from national sources.

4.4.1. Student costs

The information on student expenses provides the first part of the picture of how higher education funding systems are structured and whether they support the social dimension in higher education.

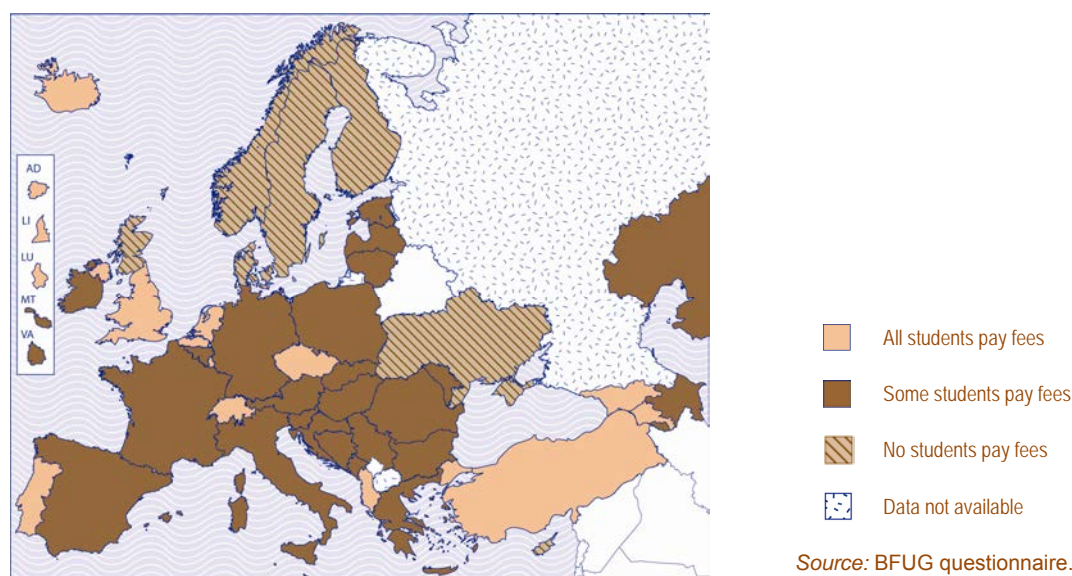
Figure 4.13 gives an overview of the prevalence of fees in the first cycle. No distinction is made here between different types of fees (tuition fees vs. administrative fees, for example) as there are different practices regarding how fees are named in different countries. Thus, for example, an administrative fee in one system may be considered a tuition fee in another, or vice versa. The information presented in Figure 4.13 also does not take account of the amounts of fees charged. However, it does differentiate between countries where all students are charged fees and those where only some students are charged fees. In this map, the main reference is to home students and/or students who are considered under the same fee regime as home students (for example in European Union countries, students from other EU states).

Overall it is evident that across the European Higher Education Area fees are very commonly charged. Indeed only in seven higher education systems is the first cycle organised without recourse to fees. There is a clear cultural and geographical aspect to such no fee models, as these can be found to be predominantly a characteristic of Nordic systems.

For approximately half of the countries of the EHEA, fees are charged to some students. This implies that there is recourse to criteria for distinguishing fee-payers and non-fee-payers in these countries.

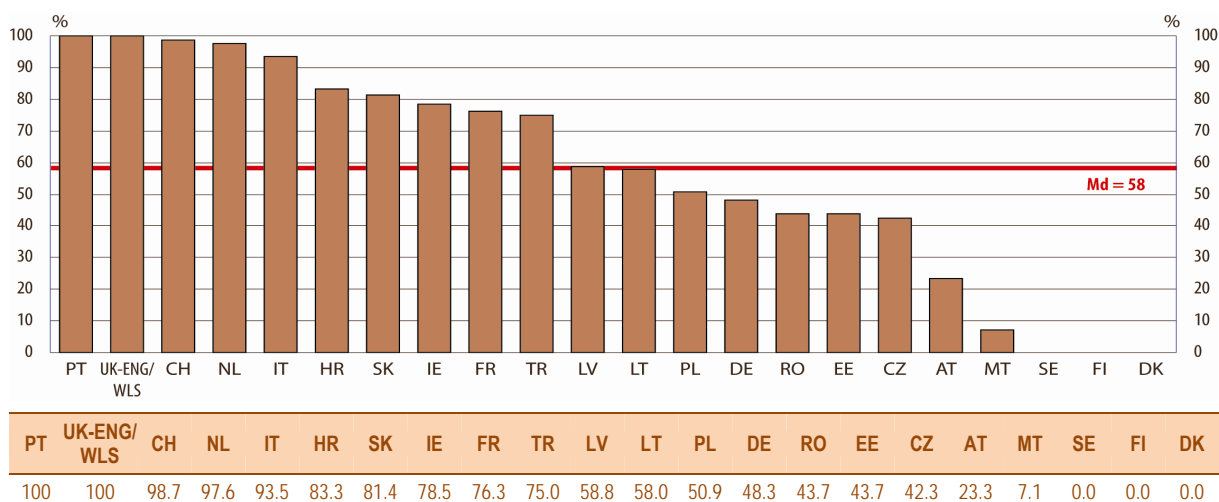
Meanwhile in 14 higher education systems all students are required to pay fees. However, the situation for the Czech Republic should be mentioned specifically as here, although all students pay fees, they in fact pay only a registration fee that is marginal in relation to the fees charged in many other countries.

Figure 4.13: Prevalence of fees in the first cycle, 2010/11



Eurostudent information echoes these findings. Indeed, Figure 4.14 illustrates the great diversity between systems, and provides a more precise picture of the percentages of students paying fees in participating Eurostudent countries. All or practically all students can be found to pay fees in Italy, the Netherlands, Portugal, Switzerland and the United Kingdom (England and Wales) while none pay fees in the Nordic countries. A further 5 countries have above 70 % of fee-payers, while a further 7 have more than 40 % of fee-payers. Apart from the fee-free Nordic countries, only Malta (7 %) and Austria (23 %) have low overall percentages of fee-payers.

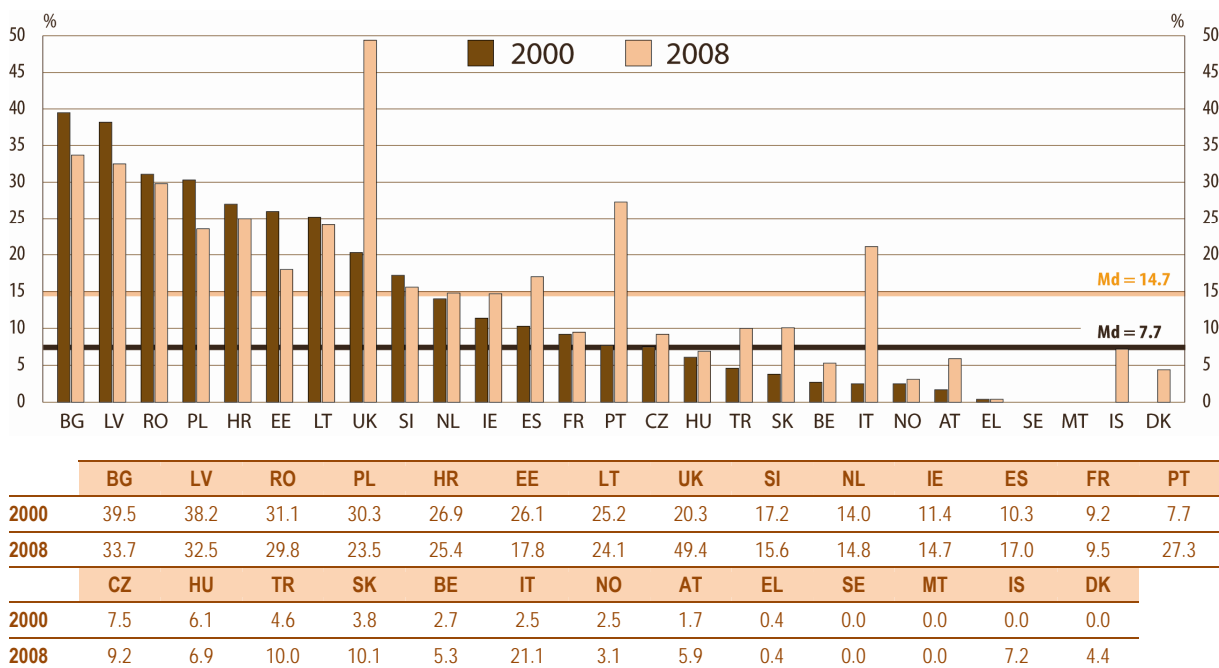
Figure 4.14: Share of Bachelor students who pay fees, 2009/10



Source: Eurostudent.

Differences in approaches to fees are also reflected in Eurostat information on the share of household funding in total expenditure of higher education institutions (Figure 4.15). Across the countries for which data is available, there has been a steady overall increase in this percentage between 2000 and 2008 with the median value reaching nearly 15 %. However, this trend is far from uniform and a considerable number of countries show a static or decreasing share of expenditure on higher education. The country differences are therefore striking. There is a significant group of countries (12) where the share of household expenditure remains less than or equal to 10 % in 2008. A further 6 countries lie between 10-20 % with the same number lying between 20-30 %. The countries with the most significant share of household expenditure are the United Kingdom (49.4 %), Bulgaria (33.7 %) and Latvia (32.5 %).

Figure 4.15: Share of total expenditure for higher education institutions from household funding (2000, 2008)



Note: Data are sorted by share of total expenditure for higher education institutions from household funding in 2000.

Source: Eurostat, UOE.

WHO PAYS FEES?

While it is clear that there are major system differences in terms of the prevalence of fees, it is also true that there are considerable differences in the criteria used to determine which students pay fees, and how much they pay.

In some countries, financial considerations (economic condition of students) are used as criteria for charging fees. In others academic performance, criteria are used as a means of distinguishing who pays fees and/or the level of fees paid. In Slovenia, it is the status of students that determines whether or not they pay fees: part-time students pay, while full-time students do not.

However, the majority of countries use a combination of criteria. Latvia, Lithuania and Hungary combine criteria based on academic performance with those based on the type of study programme. Both the Belgian French and Flemish Communities combine financial criteria related to the economic conditions of students with criteria linked to the type of study programme. Meanwhile, France combines financial criteria with academic performance. Cyprus and Spain combine financial criteria both with academic performance and the type of study programme. For Cyprus, however, it should be borne in mind that in the first cycle Cypriot and EU students studying at public higher education institutions do not pay fees. In the case of Spain, however, the decision of whether or not a student pays fees is determined only by financial criteria related to the family. Other criteria are then used in relation to the amount of fees paid. In the Czech Republic, Poland and Slovakia, higher education institutions are free to set their own fees for programmes taught in a foreign language. In the Czech Republic, this is also the case for charges to students who extend the expected length of studies beyond more than an academic year. However in all other cases, fees are limited to admission charges. In Latvia, although fees are charged to a majority of students, fees per credit for programmes taught in a foreign language are generally higher than those for programmes taught in the national language.

The impact of fees upon individual students depends on a number of factors. The level of fees is a significant issue, although fee levels affect students differently according to their particular economic situation. Moreover public authorities are also able to alleviate the impact of fees through the design of the support systems.

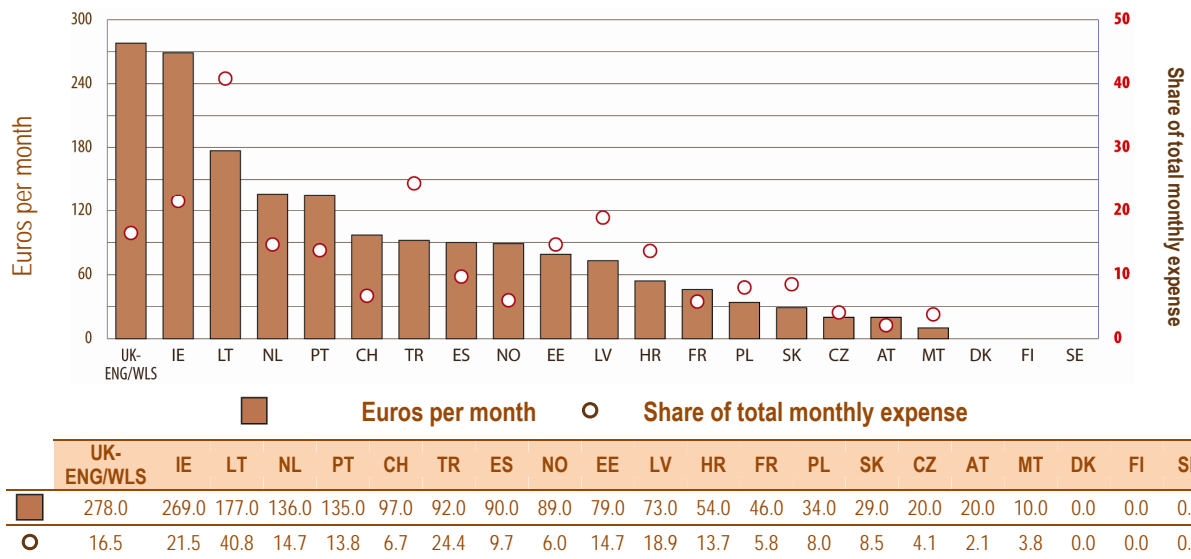
Figure 4.16 shows that in the majority of Eurostudent countries that are charging tuition fees for Bachelor students, the average fee is below EUR 100 per month. High absolute amounts of fees are charged in the United Kingdom (England and Wales), Ireland, and Lithuania, where the monthly values range from over EUR 170 to almost EUR 280. In Denmark, Finland, and Sweden, Bachelor students study free of charge.

The relative meaning of fees expressed as share of students' total monthly expenditure varies greatly between the countries. Bachelor students have to dedicate less than 10 % of total expenditure on fees in half of the countries.

In one group of countries – Ireland, Turkey, and Lithuania – the share of fees roughly ranges between 1/5 and 2/5 of the students' total monthly expenses. Along with accommodation costs, this, therefore, determines a large chunk of the students' budget.

Besides the three Scandinavian countries which waive fees completely, in three other countries – the Czech Republic, Malta, and Austria – the relative impact of fees is rather low (below 5 % of monthly expenditure).

Figure 4.16: Monthly fees as a share of total monthly expenditure for Bachelor students not living with parents, 2009/10



Source: Eurostudent.

These country clusters do not, however, remain intact, when one further element of the design of fee schemes is taken into consideration. That is the question of how many students actually have to pay fees. In Italy, Turkey, Ireland, the United Kingdom (England and Wales), the Netherlands, Portugal, Croatia, the Slovak Republic, Switzerland, and France, at least 75 % or more of the Bachelor students are subject to paying fees. In Italy, the United Kingdom (England and Wales), the Netherlands, Portugal, and Switzerland, it is practically 100 %.

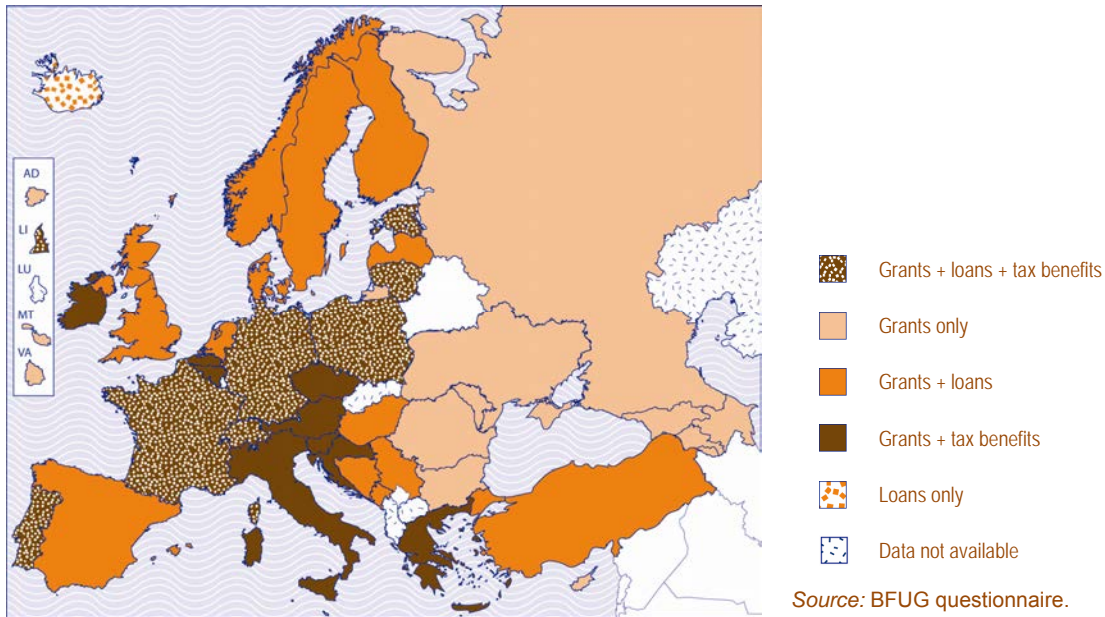
4.4.2. Student income and public support

Fees should not be considered in isolation of information about student support and student income. Indeed it is only when information on fees and support is combined that an accurate picture of the national system can be ascertained from a student perspective.

Figure 4.17 shows the main forms of student support used across the EHEA. Here it is interesting to see that the main patterns of support indicate some significant geographical and cultural differences. 13 systems have grants as the main source of student support, and it is interesting that the great majority of these systems are located in Central and Eastern Europe. Loans are often an important feature of support, but only in the case of Iceland are they the primary, exclusive form. More commonly they are found to operate in conjunction with grants, as is the case in 14 systems. In some systems, such as the French Community of Belgium, the actual take-up of loans is so small that they cannot be considered as a main feature of student support.

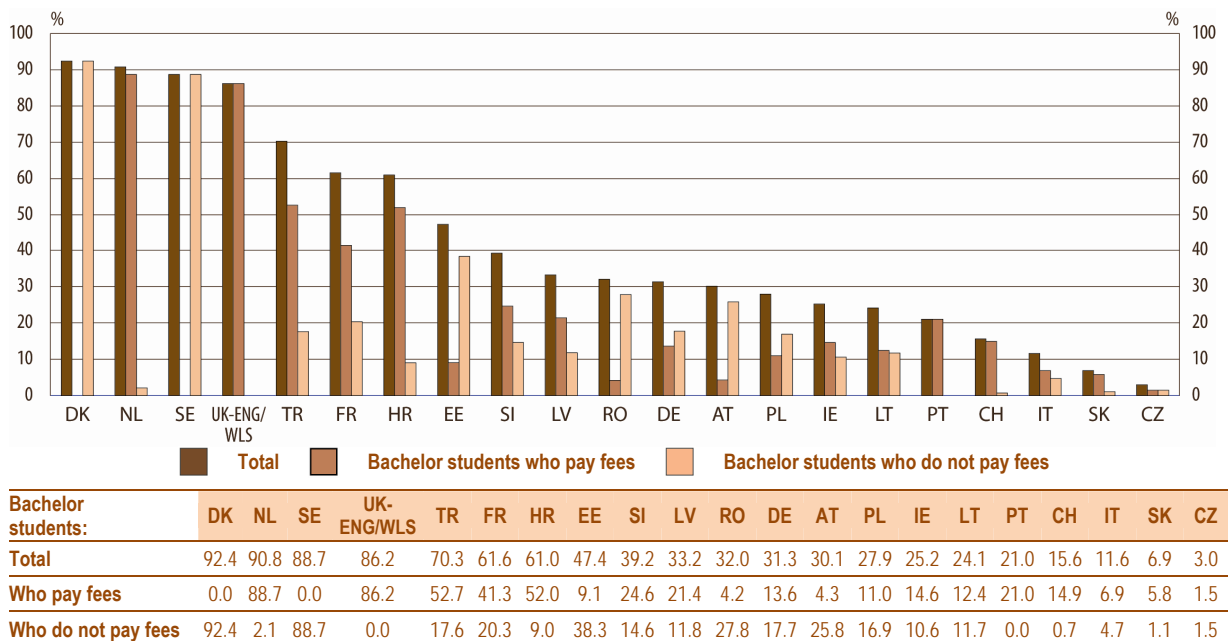
Support is not only channelled to students in the form of grants and loans, however. Tax benefits for parents also play a significant role in many countries. Indeed in seven countries tax benefits for parents are combined with grants for students as the main form of support, while in a further nine countries loans are also part of the combination.

Figure 4.17: Main forms of student support, 2010/11



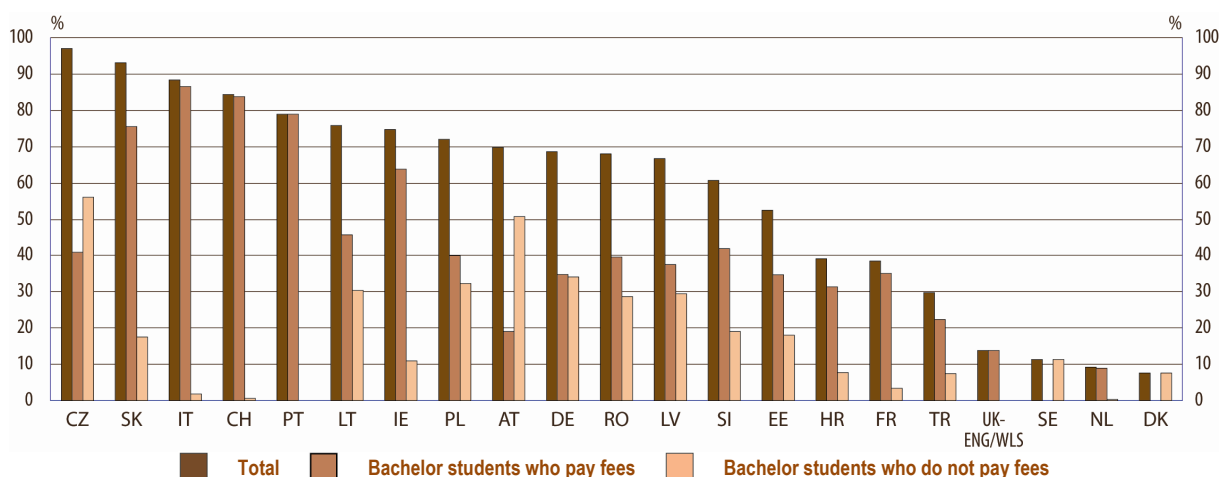
Eurostudent information (Figures 4.18 and 4.19) enables a picture to emerge of how those in receipt of student support may or may not be affected by tuition fees. Some noteworthy issues can be seen. Firstly, it is striking that in a number of countries the likelihood of paying tuition fees is not greatly affected by receiving public funding. This is the case in the Netherlands, France, Croatia, Germany, Latvia, Poland and Portugal, as well as in the Nordic countries that are not concerned by fees. However, in Estonia, Romania and Austria students who do not pay fees are much more likely to receive public support. These findings should also be seen in relation to information from the BFUG questionnaire that shows that in many countries the most significant criteria for distinguishing which students pay fees are the mode of study, type of study programme or field of study chosen rather than to social characteristics of the student population.

Figure 4.18: Percentage of fee-payers among recipients of public support, 2009/10



Source: Eurostudent.

Figure 4.19: Percentage of fee-payers among non recipients of public support, 2009/10



	CZ	SK	IT	CH	PT	LT	IE	PL	AT	DE	RO	LV	SI	EE	HR	FR	TR	UK-ENG/WLS	SE	NL	DK
Total	97.0	93.1	88.4	84.4	79.0	75.9	74.8	72.1	69.9	68.7	68.1	66.8	60.8	52.6	39.0	38.4	29.7	13.8	11.3	9.2	7.6
Who pay fees	40.8	75.6	86.6	83.8	79.0	45.6	63.9	39.9	19.0	34.7	39.5	37.4	41.8	34.6	31.3	35.0	22.3	13.8	0.0	8.9	0.0
Who do not pay fees	56.2	17.5	1.8	0.6	0.0	30.3	10.9	32.2	50.9	34.0	28.6	29.4	19.0	18.0	7.7	3.4	7.4	0.0	11.3	0.3	7.6

Source: Eurostudent.

The quality and strength of the student support system is directly related to the amount of money made available through the public budget. Figure 4.20 presents the evolution of the student support budget between 2000 and 2008 showing the amount of money countries provide as public financial aid to students as a percentage of the overall higher education budget.

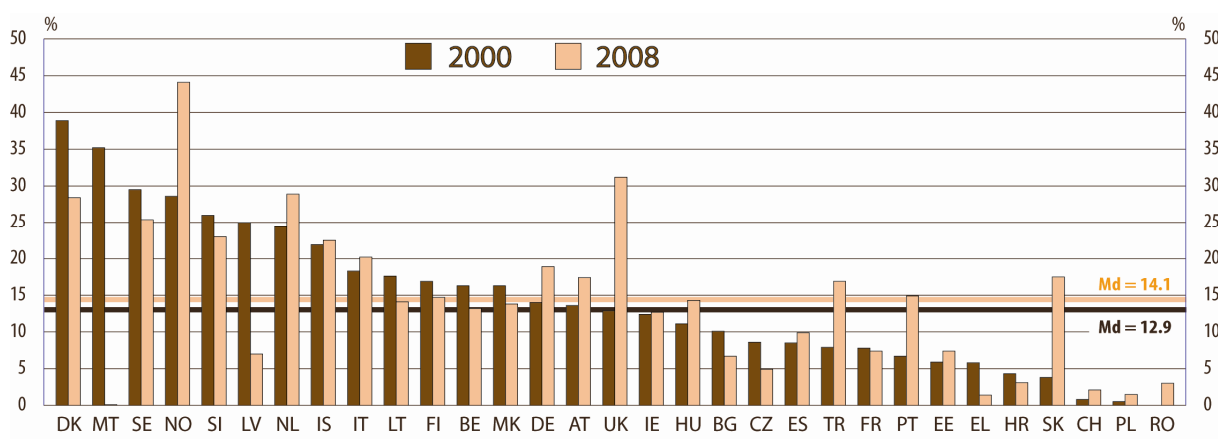
While the median level of investment in student support has increased slightly – from 12.9 % to 14.1 % – there was a significant increase between 2001 and 2002, and since then a small downward trend. More significantly, there are very divergent underlying patterns and realities between European countries. Overall, three relatively balanced groups of countries can be identified. There are those where a significant increase in the share of money allocated to the student financial system has taken place. This is the reality for Germany, Hungary, Portugal, Slovakia, the United Kingdom, Norway and Turkey.

The second group of countries is where the share of investment in financial aid has changed little between 2000 and 2008. This is the case for Estonia, Ireland, Spain, France, Italy, Poland, Finland and Iceland. There are also countries where a downward trend can be observed, such as Bulgaria, Czech Republic, Denmark, Greece, Latvia, Lithuania, Romania, Slovenia and Sweden.

Irrespective of these three national trends, however, very significant differences can be perceived in the percentage of the higher education budget devoted to student support. The percentage ranges from as high as 44.1 % for Norway to as low as 1.5 % for Poland. The countries that invest most – above 25 % – as a percentage of the higher education budget on the student support system are Norway, the United Kingdom, Denmark, the Netherlands and Sweden. The countries that invest least – less than 5 % – as a percentage of the higher education budget are Malta?, Greece, Poland, Switzerland, Romania, Croatia and the Czech Republic. While these figures also need to be considered in relation to the size of the overall higher education budget, it is clear that they signify major differences in student support across Europe.

Another aspect to be noted is the countries where changes have been significant. The United Kingdom stands out as the country with the most significant increase, moving from 12.9 % in 2000 to more than 30 % by 2008. Norway, already starting at a high percentage of investment in 2000 (29 %)

Figure 4.20: Support to students enrolled at tertiary education level as a percentage of public expenditure on tertiary education (2000, 2008)



	DK	MT	SE	NO	SI	LV	NL	IS	IT	LT	FI	BE	MK	DE	AT	UK
2000	38.9	35.2	29.5	28.6	25.6	24.9	24.4	21.9	18.3	17.6	16.9	16.3	16.3	14.0	13.6	12.9
2008	28.4	0.1	25.4	44.1	23.2	7.1	28.9	22.5	20.2	14.1	14.7	13.2	13.8	18.9	17.4	31.2

	IE	HU	BG	CZ	ES	TR	FR	PT	EE	EL	HR	SK	CH	PL	RO
2000	12.4	11.1	10.1	8.6	8.5	7.9	7.8	6.7	5.9	5.8	4.3	3.8	0.8	0.5	0.0
2008	12.7	14.3	6.7	4.9	9.9	16.9	7.4	14.9	7.4	1.4	3.1	17.5	2.1	1.5	3.0

Note: Data are sorted by support to students enrolled at tertiary education level as a percentage of public expenditure on tertiary education in 2000.

Source: Eurostat, UOE.

also moved upwards by 15 % to reach 44 %. Denmark appears as a mirror image of Norway, starting at 39 % in 2000 and ending at 28 % in 2008 – a position that nevertheless still maintains Denmark among the countries investing most in student support. However, the most dramatic fall in financing is in Latvia – from 24.9 % in 2000 to 7.1 % in 2007. As Latvia was later to suffer the most severe higher education budget cuts as a consequence of the financial and economic crisis (see Chapter 2) this fall in student aid funding earlier in the decade is therefore highly significant. The Czech Republic, although cutting "only" 4.4 % during the first 8 years of the decade did so from a low starting point of 8.6 % in 2000. Thus in reality this fall is also highly significant, and likely to have made a major impact.

Information on forms of student support therefore needs to be considered in relation to these levels of funding, and in relation to the question of how effectively efforts are made to target funding.

WHO RECEIVES FINANCIAL SUPPORT?

The philosophical question that underlies the choices made by countries is the nature of a fair system of student financial support. Clearly there are a number of aspects to be considered. Firstly, should available resources be spread as widely as possible, but with the general consequence of reducing the impact of such support? Or should a minority group or groups – however the criteria for membership are constituted – receive a more significant share of the resources? If it is decided that resources should be targeted to increase their impact, which students should qualify for support? In terms of the social dimension, is it fairer and more effective to target support on the basis of financial need? Or to what extent should those who perform well in their studies be rewarded by financial support? Does such funding reinforce social inequity by rewarding students who are already socially advantaged at the expense of those who may have equal potential, but are unable to develop it through social and financial disadvantage? Whether implicitly or explicitly, national systems of student support all take position in relation to these questions.

Criteria for awarding grants

Denmark, Finland and Sweden have a system of universal grants for full-time students provided that certain basic requirements of study performance are met. Therefore, in these countries, no criteria are required. For all other countries, the main question is whether grants are provided on the basis of financial need or academic performance, or a combination of these two main criteria.

The largest share of countries combine the two criteria, providing some grants on the basis of financial need and others on the basis of academic performance. Estonia combines criteria based on the course or field of study with merit.

A small group of countries, consisting of Belgium (both Flemish and French Communities), Ireland, the Netherlands, Finland, the United Kingdom, Liechtenstein, Norway and Switzerland provide grants on the basis of financial need only, although it may be a requirement that students progress in order to continue receiving grants.

Criteria for awarding loans

It is noticeable that whereas universal grants are available only in Denmark, Finland and Sweden, loans are available to all students in 9 national systems (Denmark, Finland, France, Germany, Lithuania, Hungary, the Netherlands, Norway and Sweden), although in Hungary students over 40 are not eligible. In the case of France, very few students actually take out a student loan.

One significant difference between grants and loans is reflected in the finding that need-based criteria are relevant in nearly all national systems for grant allocation, but only considered in two national loan systems (the French Community of Belgium and Poland). Thus when finance is offered in the form of loans, and is to be paid back by students, it is generally more widely available to the student population.

Meanwhile in Bulgaria, Spain, the United Kingdom and Iceland eligibility for loans depends on criteria related to the particular type of study programme. In Spain, loans are limited to new second cycle master programmes, while in the United Kingdom the student loan system is designed for students in the first cycle. In some countries, such as Estonia and Slovakia, only full-time students are able to benefit from student loans.

Tax benefits and other support

Tax benefits and other financial allocations to parents of students can also play a significant role in a number of European countries. Such information does not, however, concern those students who are themselves parents.

Austria, Belgium, Czech Republic, France, Germany, Greece, Poland, Slovenia and Slovakia provide both tax benefits for parents, and other financial allocations to parents. In a further seven countries (Estonia, Ireland, Italy, Latvia, Liechtenstein, Lithuania, and the Netherlands) parents of students in higher education also receive tax benefits, but are not able to claim additional financial allocations. Thus in all these countries, support to families rather than to individual students is a significant aspect of the system.

This contrasts with the picture in the remaining systems where there are neither tax benefits nor other financial entitlements for parents. In the Nordic countries (Denmark, Finland, Iceland, Norway and Sweden), this reality is clearly central to the cultural understanding of higher education as a provision for independent adult students who therefore also receive support directly rather than through their parents.

However, the Nordic countries are by no means the only countries where there are no tax or financial benefits for parents. This is also the reality in two of the larger members of the EU (Spain and all parts of the United Kingdom), in a number of Central and Eastern European countries (Bulgaria, Hungary, and Romania) as well as in Cyprus, Malta and Turkey.

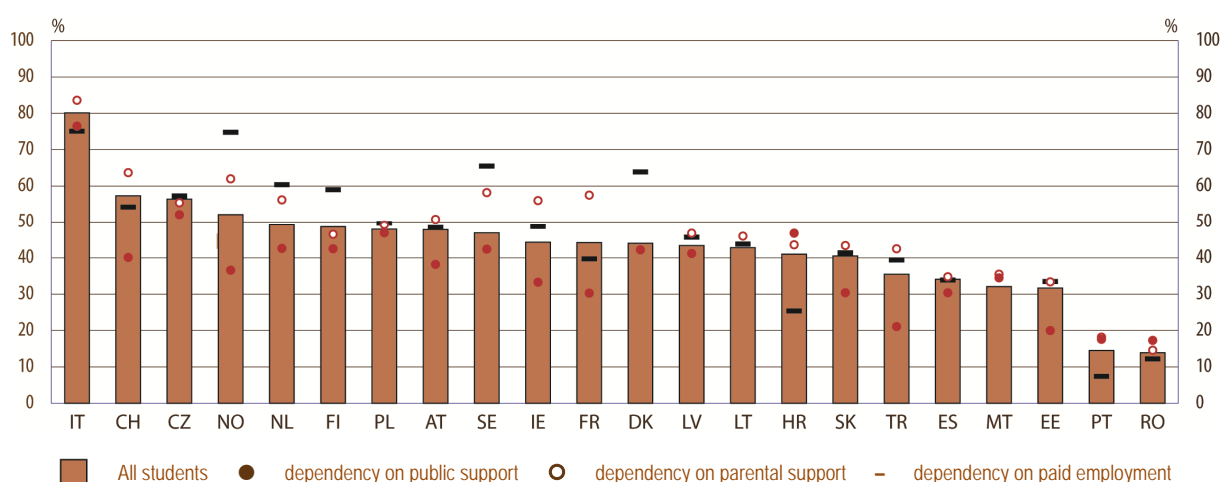
Student perceptions of sufficiency of funding

While countries may have their own system to provide different degrees of financial support to different students, students are in the best position to judge the sufficiency of the funding support that they receive. In this respect, Eurostudent is able to highlight differences in perception.

Figure 4.21 shows how students, not living with their parents and with a dependency upon a certain income source, assess the sufficiency of funding to cover monthly costs. Dependency means that the respective income source amounts to more than 50 % of the students' total income. The focus of the analysis is on the three main components for funding of students: parental support, students' earnings from gainful employment and public support.

Figure 4.21: Students' assessment of sufficiency of funding to cover monthly costs by finance-related characteristics – students not living with parents, 2009/10

Students with a dependency on a specific income source with (strong) agreement in %



	IT	CH	CZ	NO	NL	FI	PL	AT	SE	IE	FR	DK	LV	LT	HR	SK	TR	ES	MT	EE	PT	RO
All students	80.1	57.3	56.4	52.1	49.2	48.6	47.9	47.8	46.9	44.3	44.2	44.0	43.4	42.8	41.0	40.5	35.5	34.1	32.1	31.7	14.5	13.9
Public support	76.5	40.1	52.1	36.6	42.6	42.5	46.9	38.2	42.4	33.3	30.3	42.2	41.2	46.8	30.4	21.1	30.4	34.5	20.0	17.6	17.3	
Parental support	83.6	63.7	55.4	62.0	56.2	46.5	49.2	50.8	58.2	56.0	57.5	46.8	46.0	43.6	43.4	42.5	34.8	35.5	33.4	18.2	14.6	
A paid employment	75.1	54.2	57.3	74.8	60.4	59	49.6	48.4	65.5	48.7	39.7	63.9	45.7	43.8	25.4	41.4	39.4	33.9	33.5	7.4	12.2	

Source: Eurostudent.

The average satisfaction figures for the different components already tell a story: Whilst on average 48 % of students depending on parental support assess their income as sufficient to cover the monthly costs, 47 % of students dependent on paid employment and 37 % of students with a dependency on state support do so. The same picture is drawn if the focus is set on the share of (very) dissatisfied students. There are, however, huge variations between countries, with shares ranging from more than 80 % to less than 10 %.

Concentrating on the highest shares of satisfaction by source, three country clusters become apparent: There are nine countries where a majority of students who are depending on parental support are (very) satisfied with their financial situation: Italy, Switzerland, the Czech Republic, Norway, the Netherlands, Austria, Sweden, Ireland, and France.

Of those students with a dependency on paid employment, a majority considers their income sufficient to cover monthly costs in countries with older students, but not exclusively so; this refers to Italy, Switzerland, the Czech Republic, Norway, the Netherlands, Finland, Sweden, and Denmark.

When public support is the dominant source of income for students, only in Italy and the Czech Republic more than 50 % of the depending students (strongly) agree that this income source provides sufficient means.

Conclusions

Starting from the analysis of statistical data on the participation of different societal groups in higher education, this chapter has examined the social dimension of higher education looking at policy approaches through which the EHEA countries address the under-representation.

Available data on higher education participation and attainment show that the goal of providing equal chances for all has not yet been achieved. This does not mean that no progress has been made, but it is rather that there are still areas where supplementary effort is needed. In particular, the parental educational background still strongly influences chances to achieve a higher education degree and, in many countries, a migratory background also limits the odds to study at this educational level. Yet, a positive point is that almost all EHEA countries claim to work towards increasing and widening participation in higher education. Most of them address this issue through the combination of a general policy approach with measures targeting specific under-represented groups. Policy actions through which the under-representation is addressed take a variety of forms. They often include financial support measures, special admission regimes, outreach programmes as well as the provision of guidance and counselling services. However, the effect of these policy actions is not always monitored and even if the monitoring takes place, its impact on the policy development is not always visible.

Within their discussions on the social dimension of higher education, the ministers have agreed to pay particular attention to selected areas of action. Alternative access routes to higher education have been identified as one of these areas. According to the results of the BFUG reporting, alternative access to higher education, which most often takes form of the recognition of prior learning, currently exists in less than half of the EHEA countries. In the rest of the countries, access to higher education is conditioned by the possession of an upper secondary school-leaving certificate. From the geographical perspective, the countries of Western Europe are characterised by higher flexibility in terms of their entry qualification requirements than other EHEA countries. However, in order to accurately evaluate the situation of each country, it is necessary to take into account a range of factors, including the rate of early school leaving as well as the question of qualification outcomes of upper secondary education.

Another theme integrated in the discussions on the social dimension of higher education – the theme of student services – appears as a complex field characterised by heterogeneity of arrangements, both at national and cross-national levels. It is therefore difficult to provide a comprehensive picture of this area in a comparative international perspective. The information collected in the framework of the BFUG reporting indicates that in most EHEA countries, higher education institutions ensure provision of a relatively wide range of student services. Yet, the reporting does not allow to fully evaluate the extent to which these services are accessible to all students and the degree of their relevance with regard to different student needs.

Finally, the analysis looked at the main patterns of higher education funding systems, relating the most important elements of national fee systems with student support. The objective was to examine whether funding systems are being oriented to support and stimulate the social dimension policy

objective of widening participation. However, as so many factors need to be considered for each particular country, it is difficult to draw clear conclusions on this matter. The results indicate that the diversity of fees and support systems is the most striking characteristic of higher education systems across the EHEA. The realities vary from situations where no students pay fees and all receive support to situations where all students pay fees and few receive support. Moreover, the levels of fees and support are also extremely diverse across different countries. Although the analysis does not provide a complete picture on this complex topic, it is evident that the way higher education funding systems are structured is likely to be having a significant impact on the social dimension of higher education.

Overall, the chapter shows that in many EHEA countries, there are already measures in place to address the under-representation of particular societal groups in higher education. The question however remains as to whether national higher education policy gives sufficient priority to these issues, and to what degree policy is responsive to the results achieved by particular measures.

5. EFFECTIVE OUTCOMES AND EMPLOYABILITY

This chapter discusses data and policies on effective outcomes in higher education. The concept of effective outcomes can be measured through the analysis of two main factors: first, higher education attainment and completion rates, and second, the labour market prospects of graduates (Eurostat & Eurostudent, 2009). This second factor is usually considered with the concept of "employability".

The Bologna context

Within the Bologna Process, employability is understood as "the ability to gain initial meaningful employment, or to become self-employed, to maintain employment, and to be able to move around within the labour market" (Working Group on Employability 2009, p. 5). In this context, the role of higher education is "to equip students with the knowledge, skills and competences that they need in the workplace and that employers require; and to ensure that people have more opportunities to maintain or renew those skills and attributes throughout their working lives" (Working Group on Employability 2009, p. 5).

Employability has been one of the central goals of the Bologna Process from the very beginning, which resulted from a concern about graduate unemployment. It was also related to the emergence of a European labour market (at least within the European Union). The London Communiqué in 2007 asked the BFUG to consider how to improve employability in relation to the different cycles and in the context of lifelong learning⁽⁶⁰⁾. This was done by the Employability Working Group (Working Group on Employability, 2009). Taking up some of the recommendations of the working group report, the Leuven/Louvain-la-Neuve Communiqué in 2009 emphasised the need for, "close cooperation between governments, higher education institutions, social partners and students" in "maintaining and renewing a skilled workforce"⁽⁶¹⁾. The Communiqué highlighted that higher education institutions should be more responsive to employers' needs, and also emphasised the importance of work placements and on-the-job training. The objective of enhancing employability was also underlined by the Budapest-Vienna Declaration⁽⁶²⁾.

Chapter outline

The structure of this chapter is the following. First, it looks at the main output of the higher education system: the number of tertiary education graduates. In doing so, the chapter compares tertiary education attainment levels across the EHEA. In addition, it presents information on higher education completion as well as on national policies for improving the current situation. The chapter then turns to data relevant for assessing the labour market prospects of graduates. Keeping in mind the conceptual limitations of measuring employability, the chapter first looks at unemployment ratios of higher education graduates in comparison to those with lower levels of education. Furthermore, the chapter examines the annual gross income of employees by education attainment in order to evaluate the private returns of obtaining a higher education qualification. Finally, the chapter discusses qualification mismatches.

⁽⁶⁰⁾ London Communiqué: Towards the European Higher Education Area: responding to challenges in a globalised world, 18 May 2007.

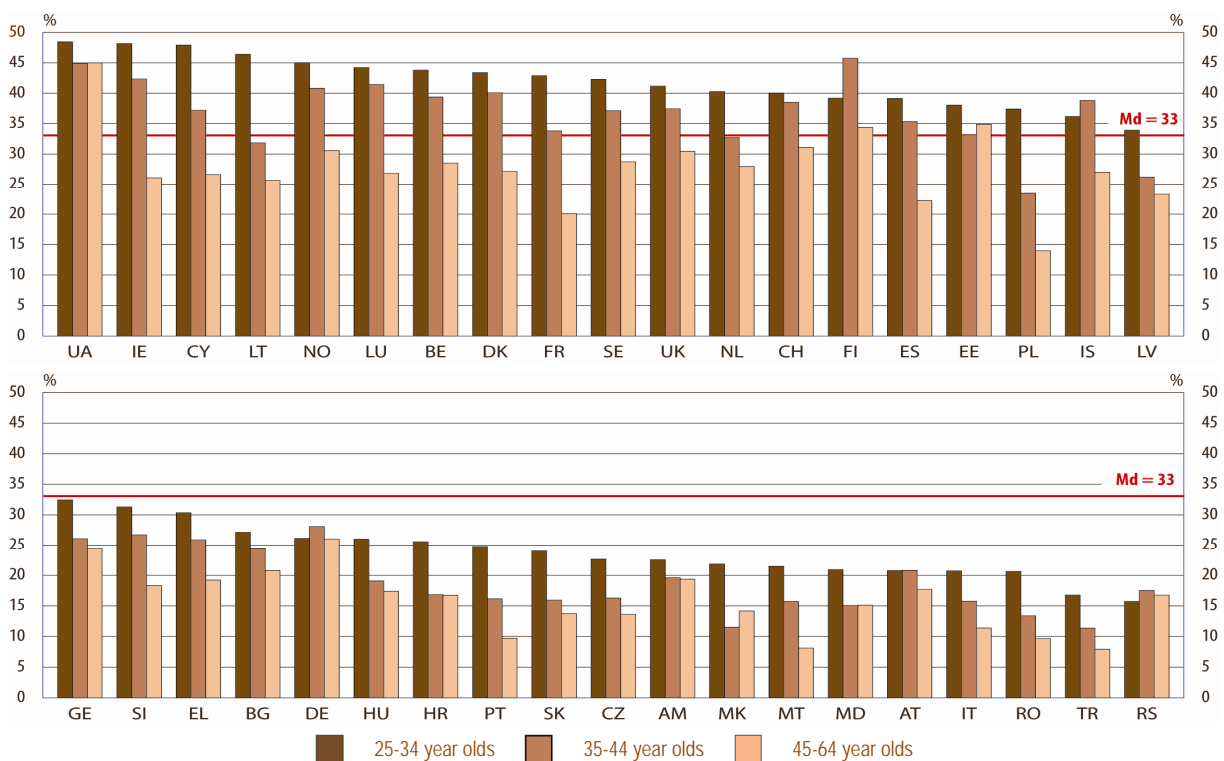
⁽⁶¹⁾ The Bologna Process 2020 – The European Higher Education Area in the new decade. Communiqué of the Conference of European Ministers Responsible for Higher Education, Leuven and Louvain-la-Neuve, 28-29 April 2009.

⁽⁶²⁾ Budapest-Vienna Declaration on the European Higher Education Area, 12 March 2010.

5.1. Higher education output: higher education attainment levels

An important indicator of higher education output is the share of the population having obtained a higher education qualification. Figure 5.1 shows the percentage of persons with higher education across the EHEA. In general, attainment levels are higher in younger age groups. The Bologna median value for the 25-34 age group is 33.2 %, while it is 26.5 % for the 35-44 year olds and 21.5 % for the 45-64 age group. This indicates that an increasing percentage of the population is getting a higher education degree. There are exceptions to this rule, however. In Germany, Finland, Iceland and Serbia, there are more persons with a higher education qualification among the 35-44 year olds than within the younger, 25-34 age group. This can be linked to differences in the average age of entering and/or completing higher education.

Figure 5.1: Percentage of persons with tertiary education, by age group, 2010



	UA	IE	CY	LT	NO	LU	BE	DK	FR	SE	UK	NL	CH	FI	ES	EE	PL	IS	LV
25-34 year olds	48.4	48.2	47.9	46.4	45.0	44.2	43.8	43.4	42.9	42.3	41.2	40.3	40.1	39.2	39.2	38.0	37.4	36.2	33.9
35-44 year olds	44.9	42.3	37.2	31.8	40.8	41.4	39.4	40.1	33.8	37.1	37.5	32.7	38.5	45.8	35.3	33.1	23.4	38.8	26.2
45-64 year olds	45.0	26.1	26.6	25.7	30.6	26.8	28.5	27.1	20.1	28.7	30.5	28.0	31.1	34.4	22.2	34.9	14.0	27.0	23.3
	GE	SI	EL	BG	DE	HU	HR	PT	SK	CZ	AM	MK	MT	MD	AT	IT	RO	TR	RS
25-34 year olds	32.5	31.3	30.4	27.1	26.1	26.0	25.6	24.8	24.0	22.6	22.5	21.8	21.5	20.9	20.8	20.7	20.6	16.8	15.7
35-44 year olds	26.1	26.7	25.9	24.4	28.1	19.1	16.8	16.2	15.9	16.3	19.6	11.5	15.7	15.1	20.8	15.8	13.4	11.4	17.5
45-64 year olds	24.3	18.3	19.2	20.8	26.0	17.4	16.7	9.7	13.7	13.6	19.4	14.2	8.1	15.1	17.7	11.4	9.7	7.9	16.7

Notes: Data for Ukraine refer to 2009.

Data for Malta and Croatia lack reliability due to small sample size.

Data are sorted by tertiary attainment levels in the 25-34 age group. The median value refers to tertiary attainment levels in the 25-34 age group.

Source: Eurostat, Labour Force Survey (LFS).

Among the 25-34 year olds, higher education attainment is the highest in Ukraine (48.4 %), Ireland (48.2 %) and Cyprus (47.9 %); and the lowest in Turkey (16.8 %) and Serbia (15.7 %). Within the 35-44 age group, the percentage of persons with tertiary education is the highest in Finland (45.6 %), Ukraine and Ireland; and the lowest in the former Yugoslav Republic of Macedonia (11.5 %) and Turkey (11.4 %). Finally, within the oldest, 45-64 age group, it is Ukraine, Estonia and Finland with the highest tertiary education attainment levels, and Malta and Turkey with the lowest ones.

Regarding the gender balance, Chapter 4 showed that more women than men finish higher education. Moreover, the chances of men to achieve tertiary education attainment have been decreasing compared to their female counterparts (see Figure 4.4).

5.2. Completion rates and policies for improvement

Another indicator of higher education output is higher education completion, that is, whether students who enter higher education actually finish it. In the past decade, concerns over the level of completion rates have increased in a number of EHEA countries. They are linked to a series of other developments including an increased focus on accountability as well as the need for greater efficiency in resource allocation and spending. They are also closely linked to the issue of equitable access to higher education, as non-completion affects a high number of disadvantaged students.

Non-completion in higher education can be influenced by a number of factors related to the higher education institution and the individual student. They can range from inability to cope with the demands of the programme, the wrong choice of courses, the poor quality of student experience to dissatisfaction with aspects of institutional provision (Yorke & Longden, 2004, 2008). Often various factors act in combination.

This section discusses the current situation regarding non-completion in countries of the EHEA, and examines national policy approaches aiming to improve the effective outcomes of higher education systems. Because data on actual completion rates are available only for a small number of higher education systems, the difference between entry rates and graduation rates is also used as auxiliary information. Policy approaches are presented at the end of this section.

5.2.1. Completion rates

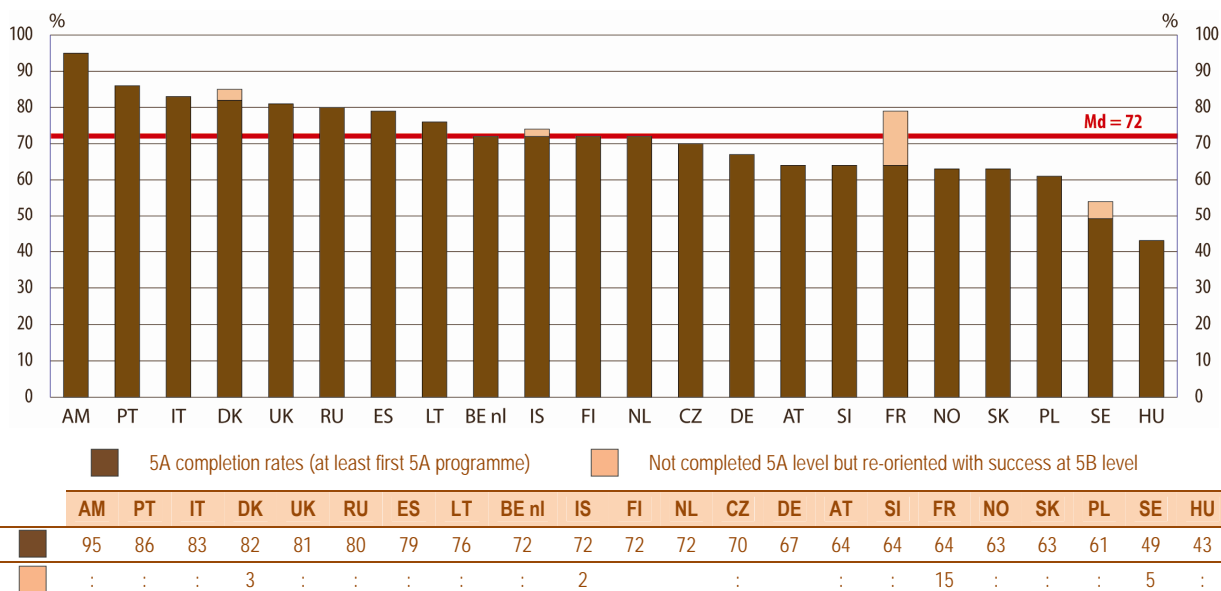
The completion rate shows the percentage of students who enter and complete their studies (graduate) in tertiary type A programmes (ISCED 5A). For some countries, this includes those who enter a tertiary type A programme but who graduate at another level (tertiary type B programmes, ISCED 5B). This indicator measures how effective the higher education system is in turning entrants into successful graduates. Completion rates are calculated based on two main methods. First, the cross section method refers to the number of graduates in the relevant calendar year who have entered in the programme a number of years before (this estimation takes into account different lengths of programmes when possible). Second, the true cohort method is based on panel data (survey or registers) which follow the individual student from entrance to graduation in the programme.

Developing an international methodology for the indicator on completion rates for the provision of comparable data is still in progress. For the year 2008, data is only available for 22 countries of the EHEA. More efforts should be made to collect comparable data and define suitable indicators to enable stronger conclusions.

Nevertheless, this section presents available data on completion, which will be complemented by data on entry and graduation in section 5.2.2. As Figure 5.2 shows, for systems where data is available, the median completion rate is 72 %. The completion rate is the highest in Armenia (95 %). In general,

more than 60 % of higher education entrants are graduating in almost all systems, with two exceptions. The two countries with the lowest completion rates are Hungary (43 %) and Sweden (49 %); in Sweden, however, another 5 % of entrants are successfully reoriented towards an ISCED 5B level programme and graduation ⁽⁶³⁾. Reorientation is also quite considerable in France: in this country, above the 64 % completion rate, 15 % of ISCED 5A higher education entrants are successfully reoriented to ISCED 5B level.

Figure 5.2: Completion rates in tertiary type A programmes (%), 2008



Notes: Cross-section cohort: Austria, Belgium (Flemish Community), Hungary, Lithuania, Poland, Portugal, Slovakia, the United Kingdom and Russia. True cohort: the Czech Republic, Denmark, Germany, Spain, Finland, France, Iceland, Italy, the Netherlands, Norway and Sweden. Method unknown: Armenia.

The median is calculated for ISCED 5A completion rates only.

Source: Eurostat, UOE ad-hoc module on completion rates.

5.2.2. Entry and graduation rates

In order to grasp the reality of higher education completion, another possibility is to compare entry and graduation rates. While such a comparison is not a strict measure of educational progress (e.g. due to the differences in the length of first-cycle programmes within and across countries), it can be used as auxiliary information to assess educational outcomes. Intuitively, in order to register high educational attainment, high entrance rates need to be translated into high graduation rates (Eurostat & Eurostudent 2009, p. 120). In systems with stable entry and graduation rates, the difference between these rates reflects the extent of drop-outs.

Net entry rates and net graduation rates are available for more countries. These rates were computed as the sum of entry rates and graduation rates, respectively, by single year of age, through every single age. The entry and graduation rates for a particular year of age, or an age range, are the ratio between the number of new entrants and graduates (first degree in the education level), respectively, of that age and the population size of the same age (for details on the calculation of the actual indicators, see the Glossary and methodological notes).

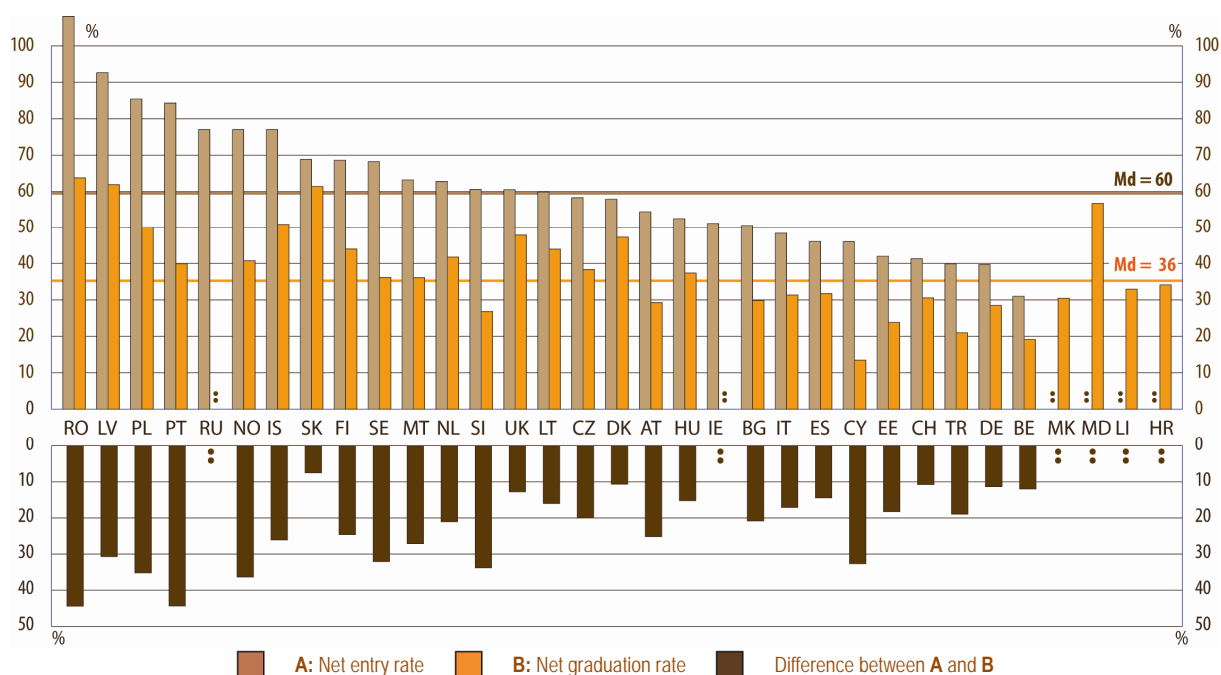
Figures 5.3 and 5.4 show net entry rates and net graduation rates as well as the difference between these two indicators at ISCED level 5A and 5B for the 2008/09 academic year. In this academic year,

⁽⁶³⁾ In addition, in Sweden, data also include students entering single courses who may never intend to finalise a whole degree.

the net entry rate was more than 60 % in half of the EHEA countries at ISCED level 5A, while the median net graduation rate was 36.2 %. The difference between the two indicators was more than 20.8 percentage points in half of the countries. The respective median levels at ISCED level 5B were 18.5 % (net entry rate), 8.5 % (net graduation rate) and 8 percentage points (difference).

The highest net entry rates in the EHEA at ISCED level 5A for the 2008/09 academic year were observed in Romania, Latvia, Poland and Portugal, all countries having a net entry rate of more than 80 %.

Figure 5.3: Net entry rate and net graduation rate (%), tertiary type A programmes, 2008/09



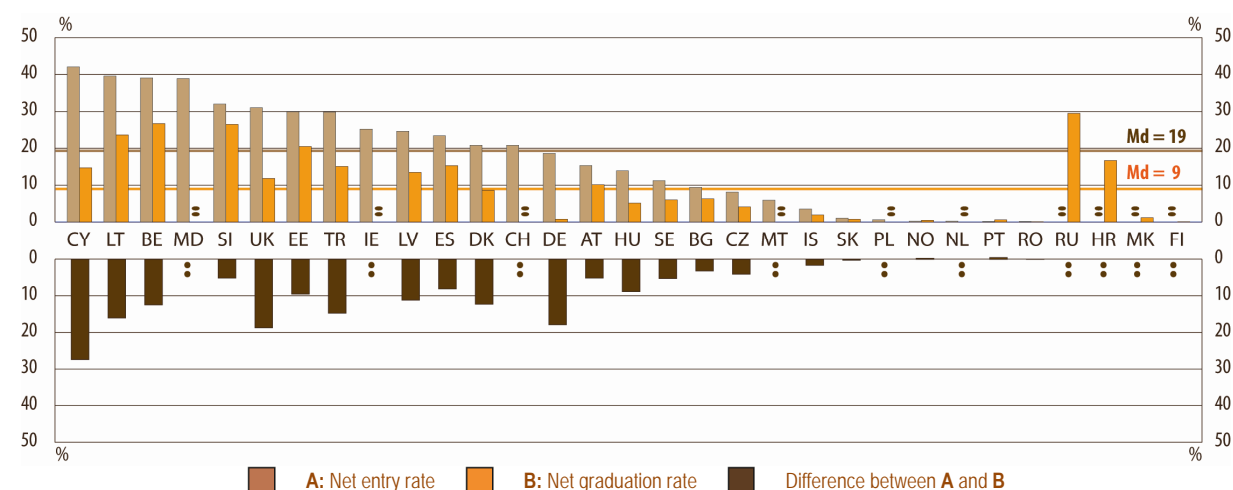
Source: Eurostat, UOE data collection.

	RO	LV	PL	PT	RU	NO	IS	SK	FI	SE	MT	NL	SI	UK	LT	CZ	DK
A	108.1	92.6	85.4	84.3	77.4	77.0	77.0	68.8	68.6	68.2	63.2	62.8	60.6	60.5	59.9	58.3	57.9
B	63.8	61.9	50.2	40.0	:	40.7	51.0	61.4	44.0	36.2	36.1	41.8	26.8	47.8	44.0	38.4	47.3
A-B	44.4	30.6	35.2	44.3	:	36.3	26.0	7.4	24.6	32.0	27.1	21.0	33.7	12.7	15.9	19.9	10.6
	AT	HU	IE	BG	IT	ES	CY	EE	CH	TR	DE	BE	MK	MD	LI	HR	
A	54.4	52.5	51.2	50.6	48.4	46.1	46.0	42.0	41.3	39.9	39.7	31.0	:	:	:	:	
B	29.3	37.4	:	29.9	31.4	31.7	13.4	23.8	30.5	21.0	28.5	19.1	30.4	56.7	33.0	34.1	
A-B	25.1	15.2	:	20.8	17.0	14.4	32.6	18.2	10.7	18.9	11.3	11.9	:	:	:	:	

Notes: Data on graduates refer to 2008 in Moldova.
Data are sorted by net entry rates (where available).

Source: Eurostat, UOE data collection.

Figure 5.4: Net entry rate and net graduation rate (%), tertiary type B programmes, 2008/09



	CY	LT	BE	MD	SI	UK	EE	TR	IE	LV	ES	DK	CH	DE	AT	HU
A	42.1	39.6	39.1	38.9	31.6	30.5	29.9	29.8	25.2	24.6	23.4	20.8	20.8	18.6	15.3	13.9
B	14.7	23.6	26.7	:	26.5	11.8	20.5	15.1	:	13.5	15.3	8.5	:	0.8	10.1	5.1
A-B	27.4	16.0	12.4	:	5.1	18.7	9.5	14.7	:	11.2	8.1	12.3	:	17.9	5.1	8.8
	SE	BG	CZ	MT	IS	SK	PL	NO	NL	PT	RO	RU	HR	MK	FI	
A	11.2	9.4	8.1	5.9	3.5	1.0	0.6	0.2	0.2	0.1	0.1	:	:	:	:	
B	6.0	6.3	4.1	:	1.9	0.7	:	0.5	:	0.6	0.1	29.5	16.6	1.1	0.1	
A-B	5.2	3.2	4.0	:	1.6	0.2	:	-0.3	:	-0.5	0.0	:	:	:	:	

Notes: Data on graduates refer to 2008 in Moldova.
Data are sorted by net entry rates (where available).

Source: Eurostat, UOE data collection.

The same countries were also amongst those with the biggest differences between the net entry rate and the net graduation rate. Romania and Portugal both had a difference of around 45 percentage points between the entry rate and the graduation rate. However, these large differences do not necessarily signal a large drop-out rate. In fact, as can be seen in Figure 5.2, the completion rate in Portugal is the second highest amongst the countries for which data is available. There is a time lag between entrance in higher education and graduation. In these two countries, the net entry rate was increasing consistently (from 44 % in 2002 to 108 % in 2009 for Romania and from 53 % in 2006 to 84 % in 2009 for Portugal), and it takes some years for this increase in the entry rates to be reflected in the graduation rates ⁽⁶⁴⁾. In other words, when there are big changes in a higher education system, large differences between entry and graduation rates reflect how, and how fast, systems change. For example, with a gradual introduction of the Bologna structures, entry and graduation rates are affected at different times until the structures become stable.

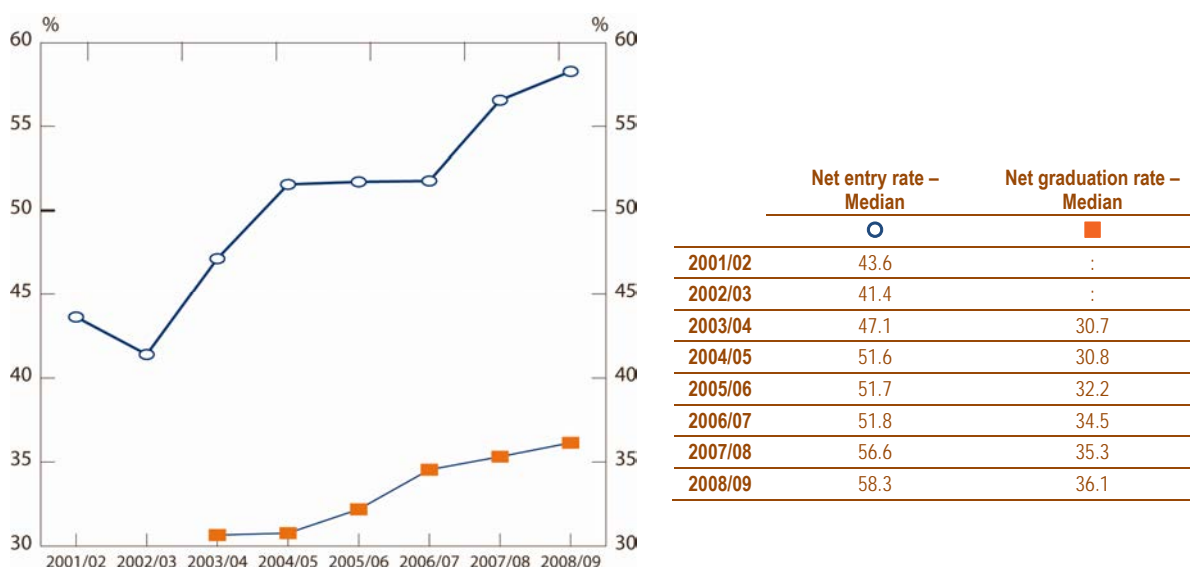
The country with the lowest gap between the net entry rate and the net graduation rate at ISCED level 5A was Slovakia, which with an entry rate slightly over the median had one of the highest graduation rates.

At ISCED level 5B, the countries with the largest gap between net entry rates and net graduation rates were Germany, Cyprus and the United Kingdom.

(64) The large increase of the entry rates in Romania also explains its net entry rate of more than 100 %. The net entry rate is a good approximation to the probability of entering in higher education when the entry levels are relatively stable over time. However, when they increase significantly – as they have in Romania – the large number of late entrants, who did not enter in the previous years, increase the net entry rate.

Figure 5.5 depicts the median net entry rate and the median net graduation rate at ISCED level 5A by academic year, from 2001/02 to 2008/09 (for the country coverage, see the Glossary and methodological notes). The median net entry rate at ISCED level 5A increased significantly in the EHEA for most of the first decade of the 21st century, from around 44 % to around 58 %. The median net graduation rate at ISCED level 5A also increased between the academic years 2003/04 and 2008/09, although at a slightly lower pace, from around 30 % to around 36 %. As a result, the gap between the median entry rate and the median graduation rate at ISCED level 5A has increased from 16 percentage points to 22 percentage points.

Figure 5.5: Median net entry rate and median net graduation rate (%), tertiary type A programmes, by academic year



Notes: Median is the value for the median country.

Source: Eurostat, UOE data collection.

5.2.3. Policies for improving completion rates

Although the majority of the EHEA countries claim to have put in place policies to increase the level of completion of studies, there is a great variety in the scope and content of enacted measures.

Most commonly, countries report that a number of broad policy measures, although not directly targeting the increase of completion rates, are expected to contribute to the improvement of these rates. Measures that aim to promote flexible learning paths, improve student support, recognise periods of study in another higher education institution, including abroad, increase the quality of teaching and others can positively affect completion rates.

A minority of countries (Denmark, Finland, Norway, and the United Kingdom (Scotland)) have adopted comprehensive national strategies that address a range of factors for non-completion. Such strategies combine initiatives at both national and institutional level and include incentives for institutions and students. Furthermore, these measures are supplemented by well-developed monitoring mechanisms.

Initiatives focus on the financing of institutions and the organisation of studies. They can include a funding formula that takes into account whether students have completed a Bachelor or Master programme within the prescribed study period. Moreover institutions can be required to follow up on students that are at risk of drop out, to strengthen study guidance, student advising and flexible

learning paths. In addition, data on completion rates are included in the annual reports of institutions to the Ministry and are used to calculate the public grant for the following year.

The student support system can also have arrangements that support and encourage the timely and successful completion of studies.

Some countries report that they implement several of the above types of policy measure. Others (Armenia, Georgia, Moldova, Montenegro, Portugal, and Turkey) focus on a single measure such as facilitating the transfer between programmes, repeating a course, or being able to return to higher education.

Incentives for higher education institutions

In order to encourage higher education institutions to work towards increasing completion rates, governments use a variety of steering mechanisms. Incentives for higher education institutions to improve student completion rates are usually financial in nature. In a minority of countries (Austria, Belgium (Flemish Community), the Czech Republic, Denmark, Finland, Germany, Iceland, Italy, the Netherlands, Norway, Sweden and the United Kingdom (Scotland)), public budget allocations depend in part on student completion rates. Numbers of completed credit points, student participation rates in examinations and/or statistics of awarded degrees are included in the funding formulas and/or dedicated funds.

Financial incentives to improve completion rates can target both institutions and individual students. Higher education institutions can receive funding per student and per credit that students achieve. Therefore, there is an interest from the higher education institutions side to support students in advancing through their studies. Student grant and loan systems can also be linked to the number of credits the student achieves every year.

Quality assurance measures

In a minority of countries, completion rates are also considered as one of the criteria in external quality assurance procedures (Albania, Cyprus, Denmark, Italy, Liechtenstein, Latvia, Luxembourg, Poland, Slovenia and the United Kingdom (Scotland)) and in the accreditation of programmes (Moldova, Slovenia and the United Kingdom (Scotland)).

Academic and personal support to students

Factors such as the wrong choice of course or subject, poor preparation and lack of readiness and commitment are commonly stated reasons for non-completion of studies. However, in a number of countries, academic guidance services, career guidance services, mentoring and psychological counselling are commonly provided (see Chapter 4).

Recognising the fact that experience during the first year of higher education has a great impact on student completion rates, several countries have put in place special measures that concentrate on pre-admission and first-year counselling and support. In some cases, these measures are specifically targeting socially disadvantaged groups or students in specific academic fields.

In France, the Plan for "Success in Bachelor programmes" aims to raise the graduation rate from Bachelor programmes to 50 % by 2012. Active guidance aims to address the difficulties that some students might have in accessing relevant information.

In the United Kingdom (England), institutions are encouraged to provide clear, comparable information about their courses and thus help students to make better informed choices, which should help reduce

the number who "drop out" because they have chosen the wrong course or did not realise what higher education would entail.

In Ireland, the National Strategy for Higher Education to 2030 recommends the inclusion of induction and preparation programmes in the first-year curriculum, as well as more broad-based courses with more interdisciplinary learning opportunities. In addition, specific measures are implemented to improve progression levels in ICT/technology disciplines.

Monitoring of completion rates

Designing and implementing effective policies on completion rates needs to be supported by well-developed monitoring and reporting at both national and institutional levels.

All countries, except Georgia, Ireland and Turkey, report that completion rates are monitored at national and/or institutional levels. Data is used for the preparation of annual statistical reports, efficiency analyses, admission planning and dialogues with the stakeholders.

Completion rates are often considered important for the reputation of the individual higher education institution and the publication of data at institutional level can offer an incentive to improve completion rates. This is a practice reported by France, Switzerland and the United Kingdom (England).

In a minority of countries, completion rates are used as one of the indicators in the framework of accountability requirements. In Denmark, each higher education institution has set a goal for completion rates in a contract with the Ministry of Science, Innovation and Higher Education which is supervised based on the data for student completion rates.

A recent retention project in the United Kingdom (Scotland) shows that all institutions have developed sophisticated information management systems which enable them to monitor, collect and analyse data on student retention. They have also developed very good reporting mechanisms and are able to integrate reporting on retention into their senior management and academic quality processes.

Countries also report that information on completion is used to inform policy and funding priorities. However, concrete examples of reports and analyses and the way they have impacted policy formulation are rare.

In Ireland, a study on Progression in Irish Higher Education was undertaken by the Higher Education Authority in 2010 and presents empirical evidence relating to the issue of progression through higher education. The report is intended as a reference document that will serve to inform policy and the development of interventions to improve rates of completion and graduation (⁶⁵).

In the United Kingdom (Scotland), a new policy on targeted funding has been developed as a result of the analysis of previous results. All institutions will continue to receive funding aimed at improving retention, but those institutions which recruit large numbers of students from the most deprived neighbourhoods will receive additional funding and will be asked to complete outcome agreements. These agreements will show how institutions intend to use the funding and will specify the anticipated retention outcomes.

To sum up, it appears that in the EHEA a common understanding of the coverage and elements of completion policies has yet to emerge. Across countries, policy approaches range from systematic and coherent efforts to address the issue to isolated, small scale projects, or the absence of any type of targeted measures. An important reason for the differences in approaches could be the level of public and government concerns over the issue and the related actual situation (see sections 5.2.1 and 5.2.2).

5.3. Graduates on the labour market: unemployment and transition from education to work

This section analyses graduates' ⁽⁶⁶⁾ labour market situation in the EHEA countries. As was mentioned above, according to the conceptualisation of the Employability Working Group, one aspect of employability is tertiary education graduates' ability to gain initial (and meaningful) employment. Following this definition, looking at the unemployment ratios of tertiary education graduates can be a good starting point, since these ratios can give indications about the labour market prospects of educated young people.

However, this approach to measuring employability is not without limitations. Employment and unemployment do not only depend on the quality of education young people receive. On the one hand, changes in the general state of the economy and the labour market are the most important determinants of job opportunities. On the other hand, there are many factors that influence the employment prospects of an individual, which means that not all graduates who received the same education have similar labour market opportunities. Such factors include the mode of study (full-time or part-time), the students' location and mobility, graduates' previous work experience as well as their age, gender, ethnicity or social class (Harvey 2001, p. 103). Regarding the last set of factors, the discriminatory practices graduates might face on the labour market are often overlooked by employability discussions (Morley, 2001).

These issues also highlight the difficulties of trying to measure the contribution of higher education institutions in raising graduates' employment prospects (Harvey, 2001; Little, 2001). Due to the fact that gaining meaningful employment depends on a variety of independent factors, using graduate employment and unemployment rates or ratios as indicators for higher education institutions' ability to enhance their graduates' employability might be misleading. Alternative measures include employability audits examining students' competences or graduate satisfaction surveys mapping graduates' satisfaction with their jobs after graduation (Harvey, 2001). While employability audits are based on a different conceptualisation of employability ⁽⁶⁷⁾, graduate satisfaction surveys can be useful tools if one aims to measure the "meaningful" part of the above definition (Harvey, 2001). There exist a few comparative graduate surveys ⁽⁶⁸⁾ dealing with job satisfaction in Europe. Their results inform discussions in sections 5.4 and 5.5.

Besides these conceptual problems, data availability also poses limitations to analysing the employability of graduates. For example, despite the fact that the employability of Bachelor graduates is of concern in some countries, it is not possible to analyse the employability of first- and second-cycle graduates separately due to data unavailability.

For these reasons, this report relies on graduate unemployment ratio as the main indicator for graduates' employment prospects. In addition, an indicator on the average length of transition from education to work is included in this section. Furthermore, in order to grasp the fact that the currently used definition of employability includes graduates' ability to find a *meaningful* job, in sections 5.4 and 5.5, the report will use indicators on graduates' income and qualification mismatch as proxies for job

⁽⁶⁵⁾ See: <http://www.hea.ie/en/node/1386>

⁽⁶⁶⁾ In this section, the term "graduates" refers to persons having attained tertiary education.

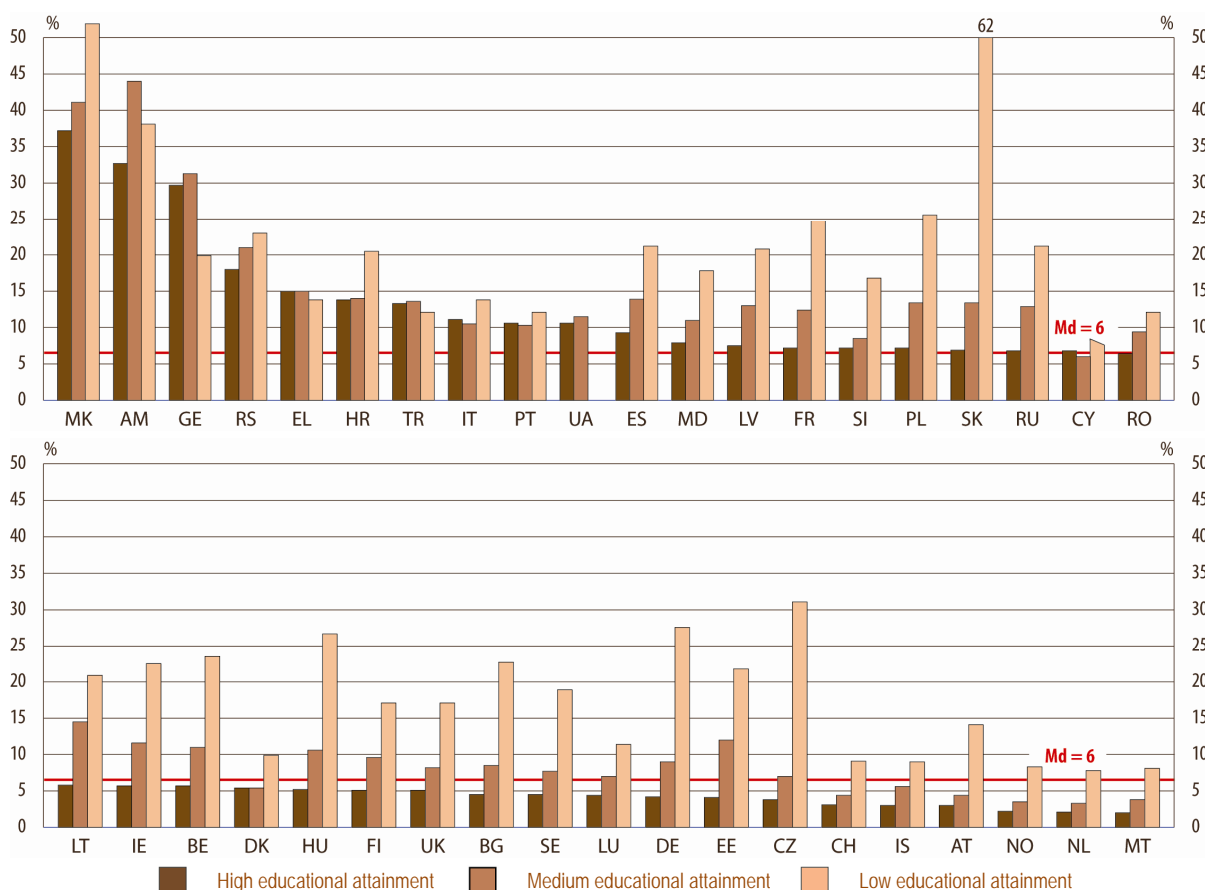
⁽⁶⁷⁾ Using employability audits to construct indicators of employability assumes that employability is defined as a set of competences that graduates acquire and that employers find necessary for a given job (Harvey, 2001).

⁽⁶⁸⁾ Such comparative graduate surveys include the CHEERS projet, conducted between 1998 and 2000 covering twelve countries (Schomburg & Teichler, 2006; Teichler, 2007); the REFLEX project, conducted in 2005-2006 covering sixteen countries (Allen & van der Velden, 2011); and the HEGESCO project, conducted two to three years after REFLEX following its methodology in five additional countries (Allen, Pavlin & van der Velden, 2011).

quality. According to graduate surveys, both of these variables influence graduates' job satisfaction (Støren & Arnesen, 2011).

Unemployment ratios provide valuable information on the relative value of tertiary education degrees. Figure 5.6 shows the unemployment ratio of persons aged 20-34 by educational attainment level. Due to the small size of yearly samples, only the average of the years 2006-2010 can be presented. This does not make it possible to analyse the employment prospects of graduates in the light of recent economic changes.

Figure 5.6: Unemployment ratio of people aged 20-34 by educational attainment level (%), average 2006-2010



	MK	AM	GE	RS	EL	HR	TR	IT	PT	UA	ES	MD	LV	FR	SI	PL	SK	RU	CY	RO
High	37.2	32.7	29.7	18.0	15.2	13.8	13.3	11.1	10.6	10.6	9.3	7.9	7.5	7.2	7.2	7.2	6.9	6.8	6.8	6.4
Medium	41.1	44.0	31.3	20.9	14.8	14.0	13.6	10.5	10.3	11.5	13.9	11.0	13.0	12.4	8.5	13.4	13.4	12.9	6.0	9.4
Low	51.9	38.1	19.9	23.0	13.8	20.5	12.1	13.8	12.1		21.2	17.8	20.8	24.7	16.8	25.6	61.7	21.2	7.6	12.1
	LT	IE	BE	DK	HU	FI	UK	BG	SE	LU	DE	EE	CZ	CH	IS	AT	NO	NL	MT	
High	5.8	5.7	5.7	5.4	5.2	5.1	5.1	4.5	4.5	4.4	4.2	4.1	3.8	3.1	3.0	3.0	2.2	2.1	2.0	
Medium	14.5	11.6	11.0	5.4	10.6	9.6	8.2	8.5	7.7	7.0	9.0	12.0	7.0	4.4	5.6	4.4	3.5	3.3	3.8	
Low	20.9	22.5	23.5	9.9	26.7	17.1	17.1	22.7	18.9	11.4	27.6	21.8	31.1	9.1	9.0	14.1	8.3	7.8	8.1	

Notes: Data refers to 2010 in Georgia and Ukraine. For this reason, the Bologna median does not include these two countries.

Data are based on small sample size in most medium and small countries.

Data are sorted by the unemployment ratio of the highly educated. The median value refers to the unemployment ratio of the highly educated.

Source: Eurostat, Labour Force Survey (LFS).

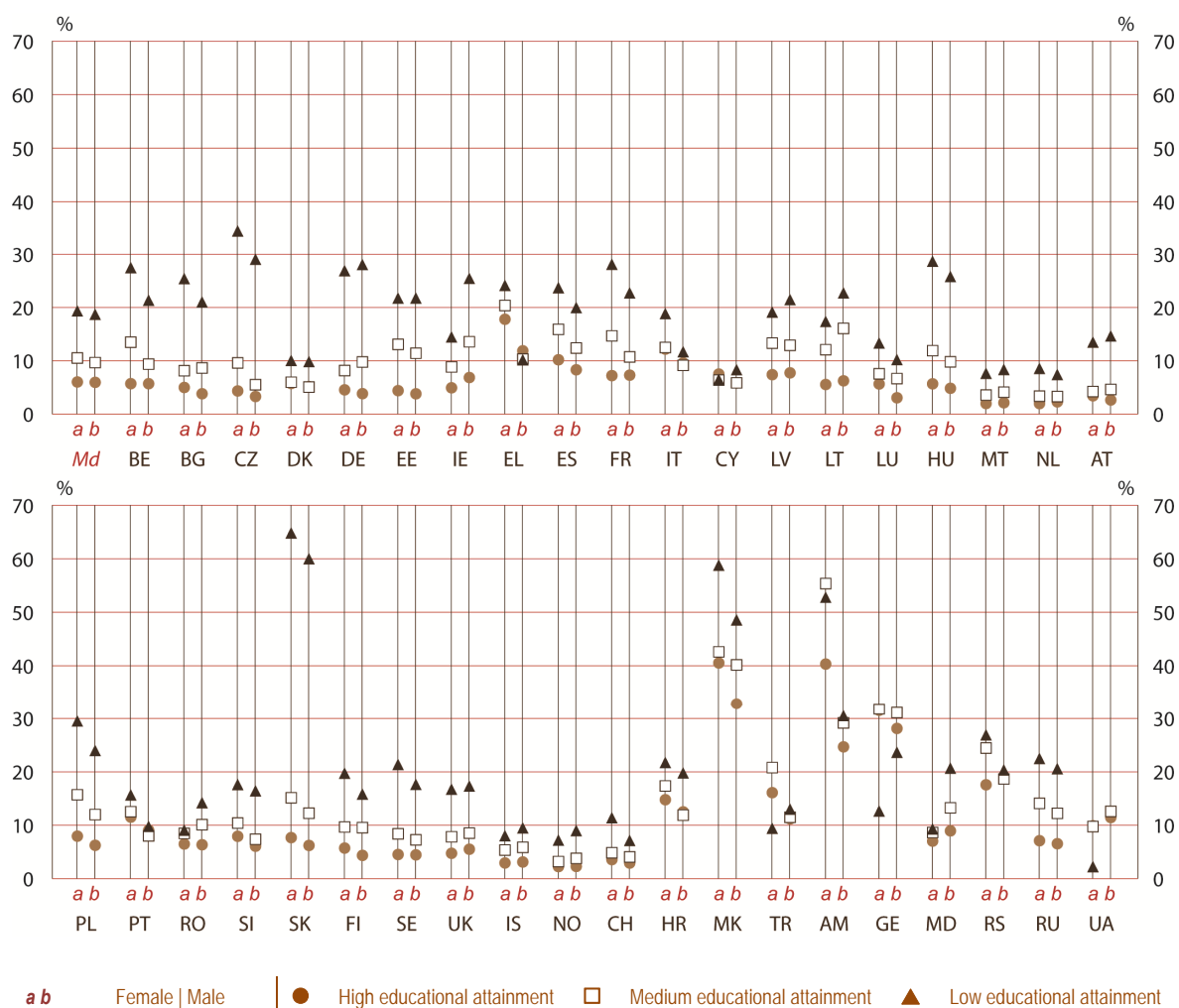
On average, the higher the level of education, the lower the unemployment ratio of young people. In half of the EHEA countries, the unemployment ratio of young people with low educational attainment (at most lower secondary education, ISCED 0-2) is higher than 19 %. The median ratio is 10.6 % for the medium educated (at most post-secondary non-tertiary education, ISCED 3-4) and only 6.4 % for young people with a tertiary qualification (ISCED 5-6).

The biggest gap between the unemployment ratios of young people with low and high educational attainment is in the Czech Republic (31 % vs. 4 %) and Slovakia (62 % vs. 7 %), followed by Germany (28 % vs. 4 %). These are the countries where gaining a higher education degree improves young people's labour market prospects the most. In contrast, countries where there is practically no difference between unemployment ratios for the low and high skilled are Cyprus, Portugal, Greece and Turkey. Interestingly, in the latter two countries, the unemployment ratio of highly educated young people is even higher than that of the low educated. This is also the case in Georgia, to a much greater extent (the unemployment ratio is 20 % for the low educated, 31 % for the medium educated and 30 % for the highly educated).

Nevertheless, as Figure 5.7 shows, the picture can be different for women and men. In the case of Greece and Turkey, for example, where there are no big differences among the unemployment ratios of all persons with different educational backgrounds, differences exist in the case of women. In both countries, the unemployment ratio for women is higher than that of men. However, in Greece, obtaining a higher qualification reduces the probability of unemployment for women (the female unemployment ratio of low educated women is 24 % vs. the 18 % of the highly educated). In Turkey, it is medium educated women who are in the worst situation in terms of employment prospects, while the unemployment ratio is the lowest for women with low educational background.

In general, the higher the level of education, the smaller the gender differences are. While median ratios are almost identical for the two genders, on average, obtaining a higher qualification improves women's employment prospects more than that of men. The countries where this is not true, and where there are relatively big differences between men and women among the low educated with male unemployment ratios being higher than female unemployment ratios, are Ireland, Moldova and Georgia. However, the gender gap is also reduced in the highest education category in these countries. In Georgia however, as was discussed above, while the differences between men and women are smaller among the highly educated, the unemployment ratio is higher for them than for the low educated. The biggest differences between the unemployment ratios of women and men, regardless of educational attainment, are in Armenia.

Figure 5.7: Unemployment ratio of people aged 20-34 by educational attainment level and by sex (%), average 2006-2010



Notes: Data refer to 2010 in Georgia and Ukraine. For this reason, the Bologna median does not include these two countries.

Data are based on small sample size in most medium and small countries. Breakdowns by gender lack reliability for the same reason in Ireland, the Czech Republic, Slovakia, Switzerland and the former Yugoslav Republic of Macedonia.

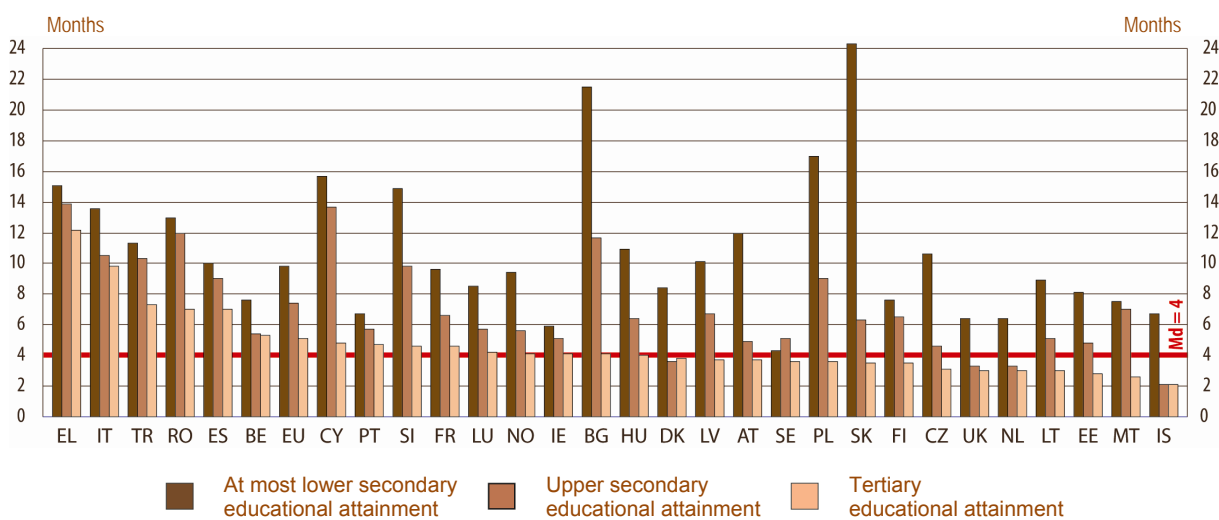
Data are sorted by the total unemployment ratio of the highly educated.

Source: Eurostat, Labour Force Survey (LFS).

Another way of comparing the employment perspectives of young people with different educational attainment levels is to examine the average lengths of transition from education to work (Figure 5.8). The duration of this transition period is defined as the difference between the date when leaving formal education for the last time and the date when starting the first job of at least 3 months (EACEA/Eurydice 2012, p. 179). As was described in *Key Data on Education in Europe 2012*, in all countries, persons with high educational attainment find their first job position faster than the group of people with only secondary education (EACEA/Eurydice 2012, p. 178). This means that higher educational attainment does not only reduce the chances of unemployment, but also implies shorter employment search periods. Differences in the average length of transition between persons with low and high educational attainment are the biggest in Slovakia, Bulgaria and Poland.

Among the highly educated, the average transition from education to work was the longest in Greece (12.2 months) and Italy (9.8 months) in 2009. The shortest average search periods were registered in Iceland, (2.1 months), Malta (2.6 months) and Estonia (2.8 months).

Figure 5.8: Average length of transition from education to work by educational attainment level, 2009



	EL	CY	RO	BG	IT	TR	SI	PL	ES	MT	LV	FR	FI	HU	SK
At most lower secondary	15.1	15.7	12.5	21.5	13.6	11.3	14.9	17	10.2	7.5	10.1	9.6	7.6	10.9	24.3
Upper secondary	13.9	13.7	12	11.7	10.5	10.3	9.8	9	8.8	7	6.7	6.6	6.5	6.4	6.3
Tertiary	12.2	4.8	7.3	4.1	9.8	7.3	4.6	3.6	7	2.6	3.7	4.6	3.5	4	3.5
	PT	LU	NO	BE	SE	LT	IE	EU	AT	EE	CZ	DK	UK	NL	IS
At most lower secondary	6.7	8.5	9.4	7.6	4.3	8.9	5.9	7.4	12	8.1	10.6	8.4	6.4	6.4	6.7
Upper secondary	5.7	5.7	5.6	5.4	5.1	5.1	5.1	5.1	4.9	4.8	4.6	3.6	3.3	3.3	2.1
Tertiary	4.7	4.2	4.1	5.3	3.6	3	4.1	9.8	3.7	2.8	3.1	3.8	3	3	2.1

Notes: The duration of the transition from education to work is calculated as the difference between the date when leaving formal education for the last time and the date when starting the first job of at least 3 months. Results refer to persons who had a first significant job. The indicator is calculated by dividing the number of employed persons within age group 25-64 years having attained a specific level of education, by the total population of the same age group.

Most results are based on responses of persons who left formal education within the last 5 years to avoid recall problems on dates of transition events. This is particularly the case for the United Kingdom where the rate of no answers to the "date of first job" was significantly high beyond that threshold. The 5-year period also appears to be the most appropriate threshold value given the sample size per country. In some countries, compulsory military or community service contributes to a longer average duration of transition. This is specially the case for Bulgaria (1.2 months), Greece (4.3 months), Cyprus (2.6 months) and Austria (1.5 months). Other countries have either few or no persons in these cases.

Data are sorted by the average length of transition between education to work for persons with tertiary education attainment. The median value refers to the average length of transition for persons with tertiary education attainment.

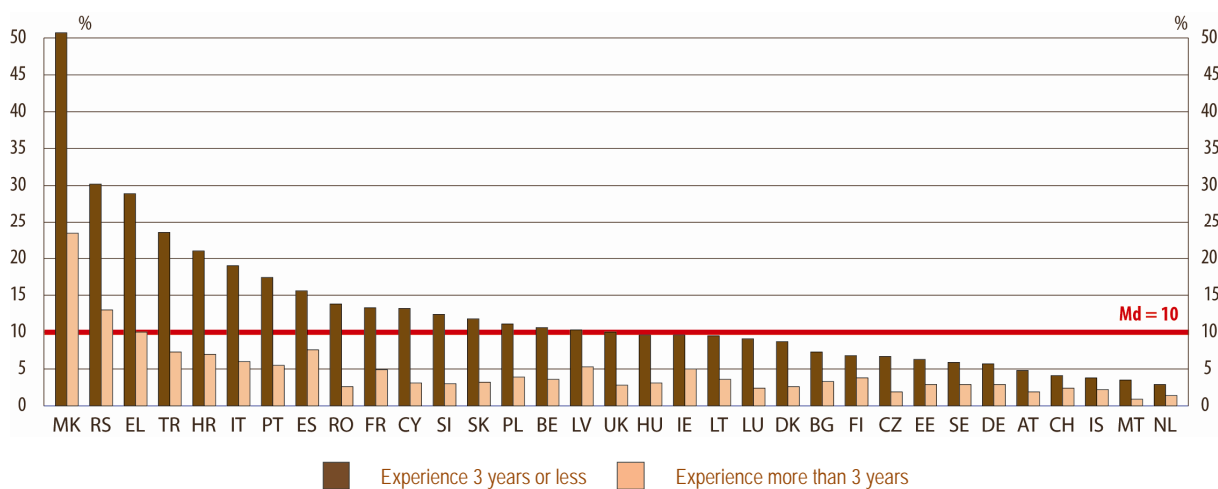
Source: Eurostat, Labour Force Survey (LFS) ad-hoc module.

Besides making the comparison among young people with different educational attainment levels, one can also take a closer look at differences among the highly educated. Figure 5.9 depicts the unemployment ratio of tertiary education graduates aged 20-34 by the number of years since graduation (again the average of the years 2006-2010). The graph differentiates between young people who graduated three years or less before data collection and those whose graduation was more than 3 years before data collection. This indicator captures the labour market entry prospects of recent graduates in comparison to the employment situation of more experienced young people.

Overall, the unemployment ratio of recent graduates is considerably higher than that of more experienced young people. In half of the EHEA countries, the unemployment ratio of recent graduates is higher than 10 %, which is more than three times more than the median ratio for young people three or more years after graduation (3.2 %). Countries with the largest gaps between recent graduates and those with more experience are Cyprus (13.2 % and 3.1 %), Romania (13.8 % and 2.6 %) and Slovenia (12.4 % and 3 %); while countries with the smallest gaps are Finland (6.8 % and 3.8 %), Iceland (3.8 % and 2.2 %) and Switzerland (4.1 % and 2.4 %).

This discrepancy between recent graduates and more experienced young people is relatively similar in the case of women and men (see Figure 5.10 depicting unemployment ratios for women and men separately). In approximately two thirds of the countries where data is available, the gap is slightly bigger in the case of men than in the case of women.

Figure 5.9: Unemployment ratio of tertiary education graduates aged 20-34, by the number of years since graduation (%), average 2006-2010

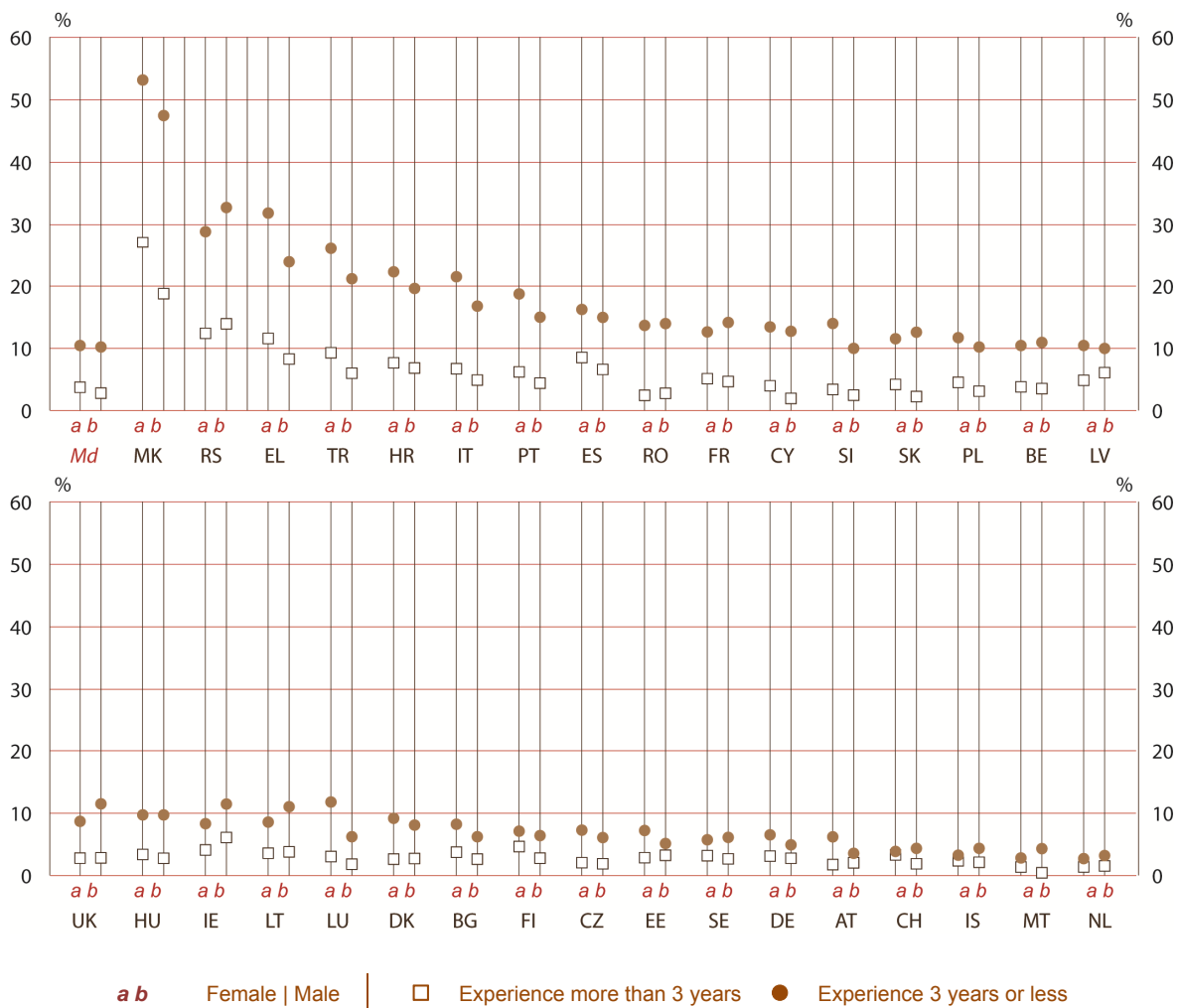


	MK	RS	EL	TR	HR	IT	PT	ES	RO	FR	CY	SI	SK	PL	BE	LV	UK
3 years or less	50.7	30.2	28.9	23.5	21.3	19.5	17.4	15.6	13.8	13.3	13.2	12.4	11.8	11.1	10.6	10.3	10.0
More than 3 years	23.4	13.0	10.0	7.3	7.3	6.0	5.5	7.6	2.6	4.9	3.1	3.0	3.2	3.9	3.6	5.3	2.8
	HU	IE	LT	LU	DK	BG	FI	CZ	EE	SE	DE	AT	CH	IS	MT	NL	
3 years or less	9.6	9.6	9.5	9.1	8.7	7.3	6.8	6.7	6.3	5.9	5.7	4.8	4.1	3.8	3.5	2.9	
More than 3 years	3.1	5.0	3.6	2.4	2.6	3.3	3.8	1.9	2.9	2.9	2.9	1.9	2.4	2.2	0.9	1.4	

Notes: Data are based on small sample size in most medium and small countries.
The category "experience 3 years or less" excludes the first year after graduation.
Data are sorted by the unemployment ratio of recent graduates (graduated 3 years or less before data collection).
The median value refers to the unemployment ratio of recent graduates.

Source: Eurostat, Labour Force Survey (LFS).

Figure 5.10: Unemployment ratio of tertiary education graduates aged 20-34, by the number of years since graduation and by sex (%), average 2006-2010



Notes: Data are based on small sample size in most medium and small countries.
 The category "experience 3 years or less" excludes the first year after graduation.
 Data are sorted by the total unemployment ratio of recent graduates (graduated 3 years or less before data collection).

Source: Eurostat, Labour Force Survey (LFS).

These data show that while obtaining a tertiary qualification improves the employability of young people in most countries, recent graduates face difficulties in the labour market. This conclusion again highlights problems concerning the evaluation of higher education institutions' performance based on unemployment indicators. One potential way to interpret these data is that employers value factors such as work experience in their employment decisions. These factors are clearly outside higher education institutions' control. Nevertheless, one can also argue that including work placements in higher education programmes might help to change current unemployment patterns.

5.4. Private returns on education: income and educational attainment

The expected income of persons with tertiary qualifications forms part of discussions on graduates' labour market prospects. The assumption is that higher educational attainment – and thus higher levels of investment in education – should be compensated by better paid jobs after graduation. In line with the concept of employability, the definition of a "meaningful" job may include the income (seen as the economic reward) that is received for it. Graduate surveys indeed find a positive relationship between wages and job satisfaction (see e.g. Støren & Arnesen, 2011). Nevertheless, using income-based indicators for measuring employability have similar limitations as indicators on employment and unemployment.

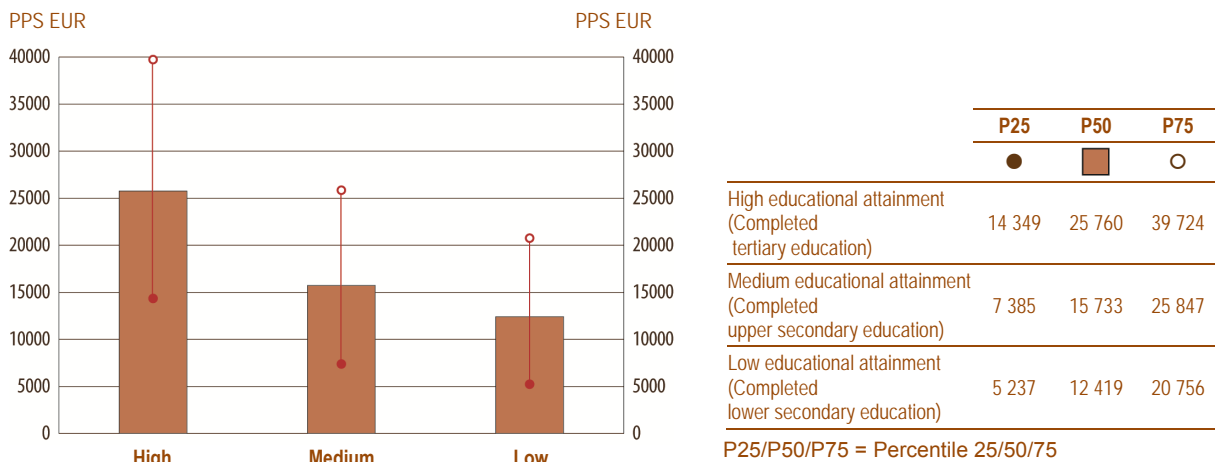
The assumption about the relationship between educational attainment and income generally holds true in the EHEA, though the extent of returns on education varies across countries. Figure 5.11 shows the 25, 50 and 75 percentiles of employees in the EHEA by educational attainment, confirming the added value of receiving a higher education qualification. Completing tertiary education has a significant impact on gross income. In 2010, the median income of employees with tertiary education was double that of those who only completed lower education and 60 % higher than that of those only completing upper secondary (for the country coverage, see the Glossary and methodological notes). For employees with tertiary education, only 25 % had an annual gross income of less than 15 000 Euros in Purchasing Power Standard (PPS) (25 % percentile), while half earned at least 26 000 Euros (median) and 25 % earned more than 40 000 Euros (75 % percentile).

However, tertiary education is not a guarantee for higher income. 25 % of employees who completed only lower secondary levels of education earned more than 20 000 Euros PPS, while 25 % of those who completed tertiary education earned less than 15 000 Euros. Such differences in wages can be potentially linked to the fact that not all tertiary graduates are occupying jobs that require a tertiary qualification (see section 5.5).

Figure 5.12 depicts percentage differences between the median annual gross income of employees with tertiary and with lower levels of education by country. In 2010, in every country the median gross income of those who completed tertiary education was higher than of those who completed only upper secondary or lower secondary education.

The effect of completing tertiary education instead of upper secondary on the median income ranged from around 20 % in Sweden and Denmark to 100 % in Portugal, Lithuania and Latvia. Differences between the median earnings of employees with tertiary and lower secondary education are even more diverse. The countries with the smallest differences (around 60 %) are Belgium and France, while in Switzerland the median income of employees with tertiary qualifications is more than four times that of those who only completed lower secondary education. Such a high percentage indicates a very high premium on gaining a tertiary education degree.

Figure 5.11: 25, 50 and 75 percentiles of annual gross income of employees in the EHEA by educational attainment, in PPS EUR, 2010



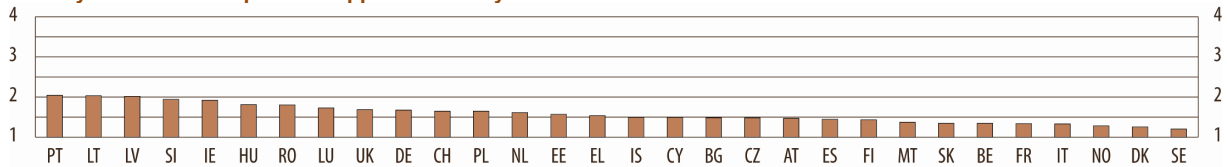
Notes: Calculation based on the variables 'Employee cash or near cash income' and 'Non-Cash employee income' which were added up to create the gross cash and non-cash employee personal income. For details, see the Glossary and methodological notes.

The age group covered is 16+.

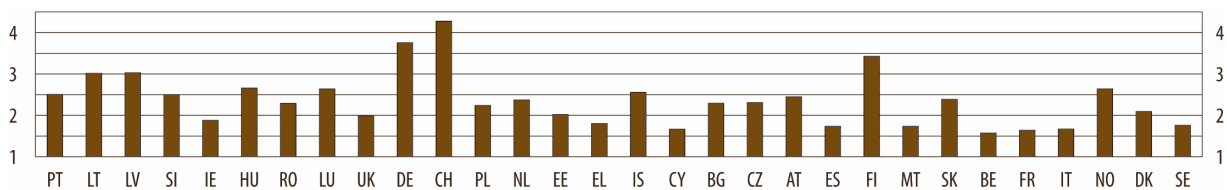
Source: Eurostat, EU-SILC (Statistics on Income and Living conditions).

Figure 5.12: Percentage difference between median annual gross income of employees with tertiary education and with lower levels of education, 2010

Tertiary education compared to upper secondary education



Tertiary education compared to lower secondary education



Notes: Data refer to 2009 for Cyprus and Ireland.

The age group covered is 16+.

Data are sorted by percentage differences between the median annual gross income of employees with tertiary education and with upper secondary education.

Source: Eurostat, EU-SILC (Statistics on Income and Living conditions).

5.5. Higher education qualifications and labour market demand: qualification mismatches

Tertiary education graduates do not only have to find a (well-paying) job after graduation, but ideally they have to find a "meaningful" one that matches their knowledge and skills acquired through education. An imperfect matching between educational attainment and the educational requirements of an occupation signifies a skills (or qualification) mismatch. The most commonly referred mismatch is vertical mismatch, in which case there is a discrepancy between the acquired and required **level** of education or skills (Cedefop 2010, p. 13). According to graduate surveys, being vertically mismatched has a strong negative influence on job satisfaction (Støren & Arnesen, 2011).

Vertical mismatch at the individual level can take the form of over-education or under-education. Over-education can be the most easily grasped as over-qualification: an individual is over-qualified if he or she has a higher qualification than the job requires (Cedefop 2010, p. 13). Conversely, under-qualification refers to having a lower qualification than required by a given job (Ibid.). Certainly, there might be a discrepancy between an individual's qualification level and his or her skills and abilities to perform certain jobs. This means that over-education can also be only formal (Ibid.). In other words, it is possible that an individual has formally too high qualifications and at the same time his or her actual competences match the job requirements. Nevertheless, examining over-qualification rates (i.e. the proportion of persons working in occupations for which their qualification is too high) can be a useful starting point when attempting to evaluate tertiary education based on employability criteria.

The phenomenon that tertiary education graduates take up jobs requiring lower qualifications can occur for different reasons. First, it might indicate that tertiary education institutions were not able to match employment needs by providing graduates with the necessary skills (see Allen & de Weert, 2007). In this case, employability-enhancing measures can contribute to decreasing over-qualification rates. However, as was discussed in section 5.3, there are many other factors influencing qualification mismatches that are outside higher education institutions' control. For example, there might not be enough jobs demanding higher qualifications for the amount of tertiary graduates. This phenomenon can be referred to as skills surplus⁽⁶⁹⁾ and might be reduced by fostering innovation as well as via labour market forecasting and examining the relationship between the education system and labour market needs. Or else, graduates might not find or get the matching jobs due to labour market imperfections or discrimination. Different over-qualification rates for women and men or for the foreign born and natives⁽⁷⁰⁾ can indicate such problems, especially in comparison with participation rates. In this case, adequate policy responses concentrate mainly on the labour market.

This section looks at over-qualification rates defined as the percentage of young people with tertiary education occupying a post not regarded as necessitating a tertiary qualification (ISCO occupation level 4 to 9). Relying on such an indicator has many limitations, however. First of all, assigning a fixed educational level to a given occupational category is relatively rigid and cannot adapt fast to the changing world of work. It also overlooks differences within the same occupation category (van der Velden & van Smoorenburg 1997, p. 1). For these reasons – while having its own caveats – self-assessment is found to be a more accurate measurement of vertical mismatch than methods based on occupational classifications (van der Velden & van Smoorenburg, 1997). In addition, even if one tries to measure vertical mismatch based on occupational classifications, a more detailed job-category

⁽⁶⁹⁾ Skills surplus occurs "when the supply of people with a particular skill exceeds the demand for it" (Cedefop 2010, p. 13).

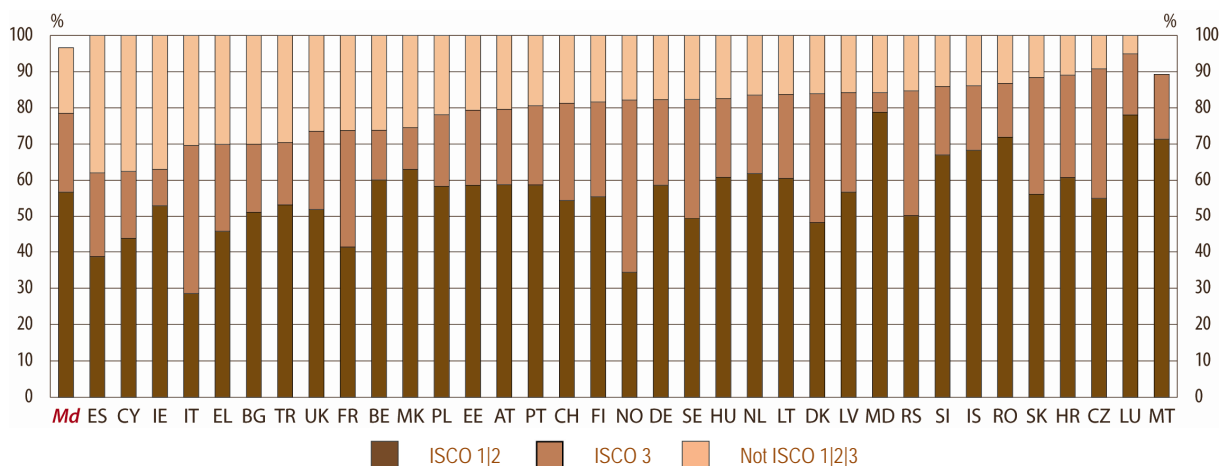
⁽⁷⁰⁾ Based on data from 2009, Eurostat (2011b, p. 76) concludes that "in the age group 20-64, the over-qualification rate of foreign born persons in the EU is much higher than the over-qualification rate of the total population (33% to 21 %)".

list is needed than the 9-level scale used in this report (Koucký & Zelenka, 2011). Nevertheless, such an indicator can serve as a starting point for further analysis.

Based on data from 2010, Figure 5.13 shows the percentage of people aged 25-34 who are employed in occupations usually requiring tertiary qualifications (ISCO 1, 2 and 3) and those who are not. Data is not available for the whole EHEA. In countries where data is available, roughly one fifth (20.6 %) of young people with tertiary education can be regarded as over-qualified for the job they occupy, thus are employed in occupations not requiring tertiary qualifications. This percentage remained quite stable between 2000 and 2010, despite the growing participation rates and the "massification" of higher education (see Chapter 1). This suggests that over-qualification rates are influenced more by labour market structures and innovation than by the growing number of students. The median over-qualification rate is 18.1 %.

Among the countries for which data is available, there are six with an over-qualification rate around or above 30 %: Bulgaria (30 %), Greece (30.1 %), Italy (30.4 %), Ireland (37 %), Cyprus (37.6 %) and Spain (38 %). The seven countries with over-qualification rates under 15 % are Slovenia (14.1 %), Iceland (13.9 %), Romania (13.2 %), Slovakia (11.6 %), Croatia (11 %), the Czech Republic (9.2 %) and Luxembourg (5.1 %).

Figure 5.13: 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 not in ISCO 1, 2 or 3 (2010)



	Md	ES	CY	IE	IT	EL	BG	TR	UK	FR	BE	MK	PL	EE	AT	PT	CH	FI
ISCO 1 2	56.7	38.7	43.7	53.0	28.5	45.7	51.2	53.2	51.9	41.3	60.1	63.0	58.3	58.6	58.8	58.7	54.4	55.5
ISCO 3	21.7	23.3	18.8	10.0	41.0	24.3	18.8	17.2	21.6	32.4	13.7	11.5	19.8	20.8	20.9	21.9	26.8	26.2
Not ISCO 1 2 3	18.1	38.0	37.6	37.0	30.4	30.1	30.0	29.6	26.5	26.2	26.2	25.5	21.9	20.6	20.4	19.4	18.7	18.4
	NO	DE	SE	HU	NL	LT	DK	LV	MD	RS	SI	IS	RO	SK	HR	CZ	LU	MT
ISCO 1 2	34.4	58.6	49.3	60.8	61.9	60.5	48.0	56.7	78.8	50.3	67.0	68.3	71.9	56.1	60.8	55.0	78.0	71.4
ISCO 3	47.8	23.6	33.0	21.7	21.7	23.2	35.9	27.4	5.5	34.4	18.9	17.9	14.9	32.3	28.3	35.8	16.9	17.9
Not ISCO 1 2 3	17.8	17.8	17.7	17.5	16.5	16.3	16.1	15.8	15.8	15.3	14.1	13.9	13.2	11.6	11.0	9.2	5.1	:

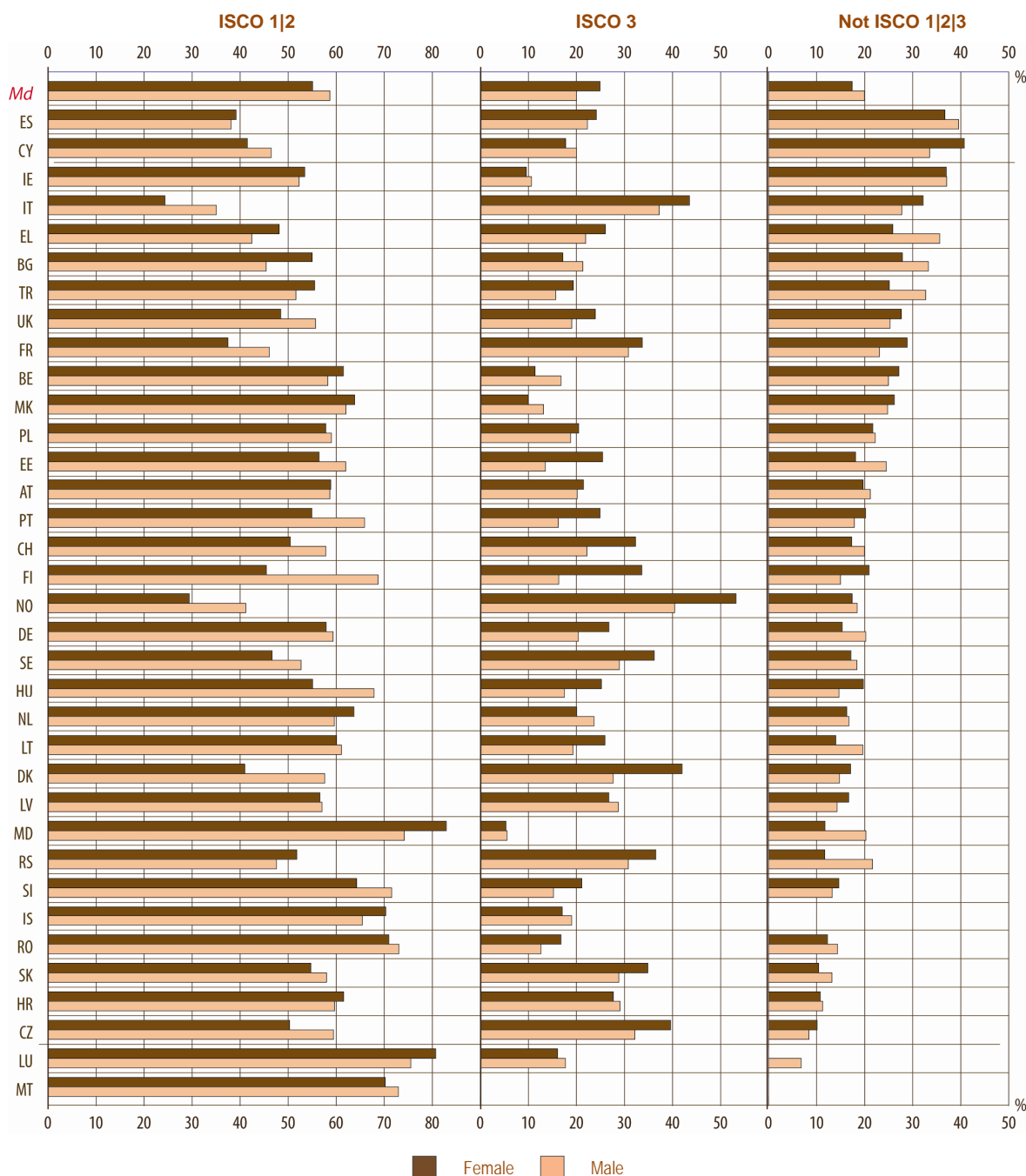
Notes: Data for Luxembourg, Malta, Slovenia, Croatia and the former Yugoslav Republic of Macedonia lack reliability due to small sample size. Certain results are not published for Luxembourg, Malta and Iceland due to very low sample size.

Data are sorted by the percentage of people not working in ISCO 1, 2 or 3.

Source: Eurostat, Labour Force Survey (LFS).

There are no big differences between female and male over-qualification rates (see Figure 5.14). On average, women are slightly more likely to take up jobs under the level of their qualifications, but countries differ a lot in this regard. For example, in Moldova and Russia, young men are almost twice as likely to be over-qualified than women, while in Finland and Hungary, young women are around 1.4 times more in this situation.

Figure 5.14: 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 not in ISCO 1, 2 or 3, by sex (2010)



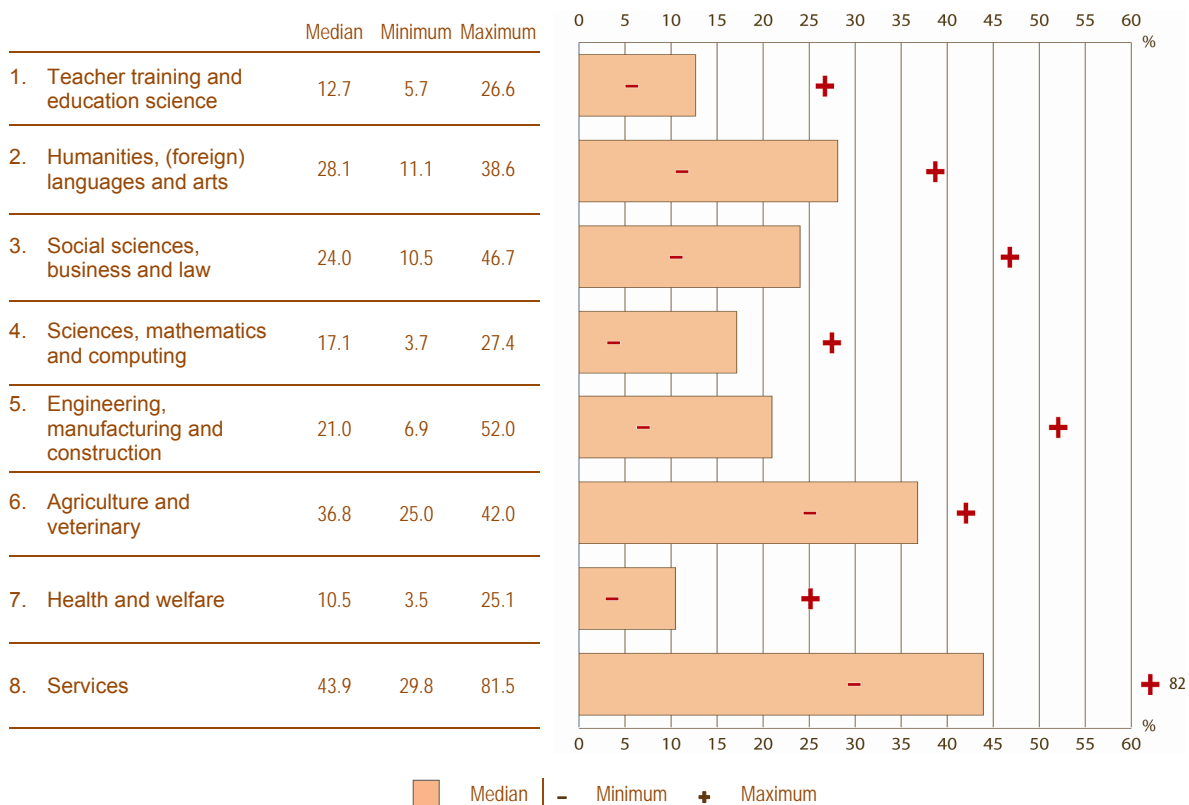
Notes: Data for Luxembourg, Malta, Slovenia, Croatia and the former Yugoslav Republic of Macedonia lack reliability due to small sample size. Certain results are not published for Luxembourg, Malta and Iceland due to very low sample size.

Data are sorted by the total percentage of people not working in ISCO 1, 2 or 3.

Source: Eurostat, Labour Force Survey (LFS).

Figure 5.15 depicts vertical mismatch by the field of study of tertiary education graduates. Due to insufficient yearly data, the figure shows the average of the years 2006-2010 (for the country coverage, see the Glossary and methodological notes). Data shows that young people with a qualification in "services" ⁽⁷¹⁾ are the most likely to take up jobs under their qualification level. More than 44 % of young people are over-qualified in this field in half of the countries considered. Among the countries where data is available, Greece and Cyprus are the countries with the highest over-qualification rate in services, with over three quarters of young people occupying posts below their qualification level (76.2 % in Greece and 81.5 % in Cyprus). The over-qualification rate in services is the lowest in the Czech Republic, but it is also 29.8 %.

Figure 5.15: Percentage of people aged 25-34 with tertiary education (ISCED 5-6) who are vertically mismatched (not in ISCO 1, 2 or 3) by field of study, average 2006-2010



Source: Eurostat, Labour Force Survey (LFS).

Study fields with the lowest over-qualification rates are health and welfare (median: 10.5 %) and teacher training and education science (median: 12.7 %). Again, countries differ: over-qualification rates in health and welfare range from 5.5 % (Czech Republic) to 25.1 % (Spain); in teacher training and education science from 5.7 % (Turkey) to 26.6 % (Spain). However, it has to be stressed again that data is not available for all countries in all study fields.

There are large differences between countries and study fields regarding graduates' abilities to find jobs matching their qualification level. However, limitations of the figures stemming from potential discrepancies between qualifications and the skill levels as well as from the reliance on the ISCO classification have to be kept in mind. More in-depth analyses are required to investigate the extent of vertical mismatch and the reasons behind country and study field differences.

⁽⁷¹⁾ "Services" include a wide range of occupations from restaurant and tourism to defence and military services (for more details, see the ISCED classification for fields of education, e.g. Andersson & Olsson, 1999).

Conclusions

Raising attainment and completion rates and improving graduate employability continue to be a challenge in the EHEA. However, limits in measuring employability and gaps in data availability hinder the assessment of the current situation.

Within the EHEA, an increasing proportion of the population is obtaining a higher education qualification. Regarding higher education completion, data availability is limited and the methodology of developing a suitable indicator is still in progress. For 2008, completion rates are available for only 22 countries, for which the median rate is 72 %. Available data point towards differences between systems. The diversity of the current situation is confirmed by statistical information on net entry and graduation rates. Moreover, although the majority of the EHEA countries report that they have put in place policies to increase completion levels, there is a great variety in the scope and content of enacted measures. Only a small minority of countries have adopted comprehensive national strategies that address a range of factors for non-completion. Such strategies combine initiatives at both national and institutional level and include incentives for institutions and students. Furthermore, these measures have been supplemented by well-developed monitoring mechanisms. Other countries report that broad policy initiatives, although not directly targeting the increase of completion rates, are expected to contribute to the improvement of these rates. In other cases there are either only isolated, small-scale projects or no targeted measures to tackle this problem.

Although the notion of "employability" is widely used in policy debate, there are problems in defining the indicators that can reliably show whether the situation is improving or worsening. Instead, data usually reflect the labour market situation for higher education graduates in relation to persons with lower educational attainment levels. Statistical information on unemployment ratios shows that obtaining a tertiary qualification improves the employment prospects of young people in most countries. Similarly, persons with high educational attainment find their first job position faster than the group of people with only secondary education and they also earn more on average. However, there are differences among tertiary education graduates: recent graduates can face difficulties entering the labour market. In half of the EHEA countries, the unemployment ratio of recent graduates is higher than 10 %, which is more than three times the median rate for young people three or more years after graduation. Furthermore, around 20 % of graduates can be regarded as over-qualified for the job in which they are employed, with "services" graduates being the most likely to be in this situation. This percentage has remained stable between 2000 and 2010, suggesting that over-qualification rates are influenced more by labour market structures and innovation than by the growing number of students. This also highlights difficulties in evaluating the impact of employability policies, as changes in the general state of the economy are an important determinant of the availability and quality of job opportunities.

6. LIFELONG LEARNING

The Bologna context

Lifelong learning has been on the Bologna Process agenda from the very beginning and gained particular prominence with the Prague Communiqué in 2001, which stated that

Lifelong learning is an essential element of the European Higher Education Area. In the future Europe, built upon a knowledge-based society and economy, lifelong learning strategies are necessary to face the challenges of competitiveness and the use of new technologies and to improve social cohesion, equal opportunities and the quality of life ⁽⁷²⁾.

In the succeeding communiqués ⁽⁷³⁾, higher education ministers returned to the theme of lifelong learning and highlighted various areas that contribute to building the culture of lifelong learning in the EHEA. They underlined the necessity to enhance the development of flexible learning pathways, to create opportunities for the recognition of prior learning, to establish national qualifications frameworks and to build closer cooperation between higher education institutions and various external partners, including employers.

In 2008, on request of the French authorities, the European University Association (EUA) elaborated the European Universities' Charter on Lifelong Learning (EUA, 2008), written in the form of ten commitments from universities and ten commitments from governments in addressing the implementation of lifelong learning. The document was prepared on the basis of extensive consultation with EUA member universities, rectors' conferences and a wide range of European higher education stakeholder organisations. The commitments cover various aspects of lifelong learning, in particular the need to ensure the provision of flexible, relevant and innovative programmes targeting a diversified student population and the need to establish systems for the recognition of all forms of prior learning. The Charter also refers to the necessity to reinforce structured dialogue between higher education institutions and a range of stakeholders at different levels.

The contribution of the Charter has been acknowledged by the Leuven/Louvain-la-Neuve Communiqué (2009), which recognises the link between lifelong learning and the widening participation agenda and calls for policies supporting lifelong learning through adequate organisational structures and funding mechanisms ⁽⁷⁴⁾. The Communiqué also intends to further specify the concept of lifelong learning, stating that

Lifelong learning involves obtaining qualifications, extending knowledge and understanding, gaining new skills and competences or enriching personal growth. Lifelong learning implies that qualifications may be obtained through flexible learning paths, including part-time studies, as well as work-based routes ⁽⁷⁵⁾.

⁽⁷²⁾ Towards the European Higher Education Area. Communiqué of the meeting of European Ministers in charge of Higher Education, Prague, 19 May 2001.

⁽⁷³⁾ Berlin 2003, Bergen 2005, London 2007, Leuven/Louvain-la-Neuve 2009.

⁽⁷⁴⁾ The Bologna Process 2020 – The European Higher Education Area in the new decade. Communiqué of the Conference of European Ministers Responsible for Higher Education, Leuven and Louvain-la-Neuve, 28-29 April 2009.

⁽⁷⁵⁾ Ibid.

Chapter outline

Based on policy priorities identified within the above-mentioned documents, this chapter aims to examine selected aspects of lifelong learning in the higher education sector. To achieve this objective, it first looks at how different countries understand and interpret the concept of lifelong learning in higher education. It then examines the extent to which lifelong learning has become a recognised mission of higher education institutions as well as financial arrangements in place to promote lifelong learning provision. A substantial part of the chapter is dedicated to the theme of flexible modes of delivery of higher education programmes, with a specific focus on part-time higher education studies. This part is followed by the analysis of the extent to which higher education institutions across the EHEA offer possibilities for the recognition of prior learning. Taking into account the information provided in all sections of the chapter, the final part looks at how successful different higher education systems are in attracting non-traditional learners to participate in formal higher education programmes.

The reader should be aware that other chapters of the report also provide information closely related to the theme of lifelong learning in higher education. Therefore, the content of this chapter should be complemented with information provided in other parts of the report, in particular in Chapter 4 on the social dimension in higher education and Chapter 5 on higher education outcomes and employability.

6.1. National understanding of the concept of lifelong learning

The European Universities' Charter on Lifelong Learning recognises that "the terminology of lifelong learning embraces many concepts [...] and is subject to considerable local, regional and national interpretation" (EUA, 2008). This calls for the investigation of how different EHEA countries understand and interpret the concept of lifelong learning within their respective higher education systems.

The results of the BFUG reporting exercise show that while in the majority of EHEA countries steering documents related to higher education refer to lifelong learning, they do not necessarily provide a definition of this term. Where such definition exists, it often has a very broad character, referring to learning 'from cradle to grave' or to all learning activities undertaken by individuals throughout their lives, be they formal, non-formal or informal. A good example of this is the United Kingdom (Scotland) strategy adopted in 2007: Skills for Scotland – a Lifelong Skills Strategy.

It is only when countries start to report on the main forms of lifelong learning provision in which higher education institutions are involved that certain cross-national differences emerge. These differences mainly relate to the range of provision individual countries associate with lifelong learning in higher education. While some types of provision are referred to by virtually all countries, others are less frequently or rarely mentioned.

The provision most strongly associated with lifelong learning in higher education includes non-formal courses for individuals offered by higher education institutions alongside their formal degree programmes. Virtually all EHEA countries are referring to this type of provision, although they may use various expressions to describe it, including "short-term further education courses" (Finland), "courses outside the academic degree scheme/study programmes" (the Holy See and Serbia) or "courses for personal development" (the United Kingdom – England, Wales and Northern Ireland).

Alongside non-degree courses for individuals, a significant proportion of EHEA countries refer to degree programmes provided under various arrangements different from traditional full-time schemes. Here, countries make a reference to flexible higher education studies, part-time programmes, open learning, distance learning, e-learning, external studies, evening or week-end courses, etc. Yet, there

are some countries, which do not make a reference to this type of provision, even if their systems provide a possibility for students to register with a formal status other than the status of a full-time student. This concerns countries such as Armenia, the Holy See, Latvia, Moldova, Romania and Slovakia (see Figure 6.2), and it could indicate that these countries do not include formal higher education programmes provided under flexible arrangements in their national concept of lifelong learning in higher education.

With regard to the two types of provision described above, i.e. non-formal courses for individuals and degree programmes provided under flexible arrangements, it is important to note that the boundary between them can sometimes be blurred. This is in particular the case in countries where individuals can follow distinct modules or courses of degree programmes, without necessarily being regular students of these programmes. Such a possibility already exists in many EHEA countries.

Another type of provision frequently seen as lifelong learning in higher education is the area of continuing and professionally-oriented upgrading of already achieved higher education qualifications. With regard to this type of provision, several countries make a direct reference to continuing professional development of those working in regulated professions (e.g. teachers, medical doctors, etc.).

While all the above-mentioned types of higher education provision are referred to by at least half of EHEA countries, and can therefore be regarded as the most common components of lifelong learning in higher education, certain activities are mentioned by a less significant number of countries. For example, despite the policy importance accorded to the theme of the recognition of prior learning, only a few countries (Belgium, Estonia, France, Iceland, Italy, Luxembourg, Montenegro, the Netherlands, Portugal and Switzerland), expressly refer to this type of activity. The information provided in section 6.5, which examines the level of development of the recognition of prior learning across the EHEA, can partly explain why the number of countries referring to this type of provision is still quite low.

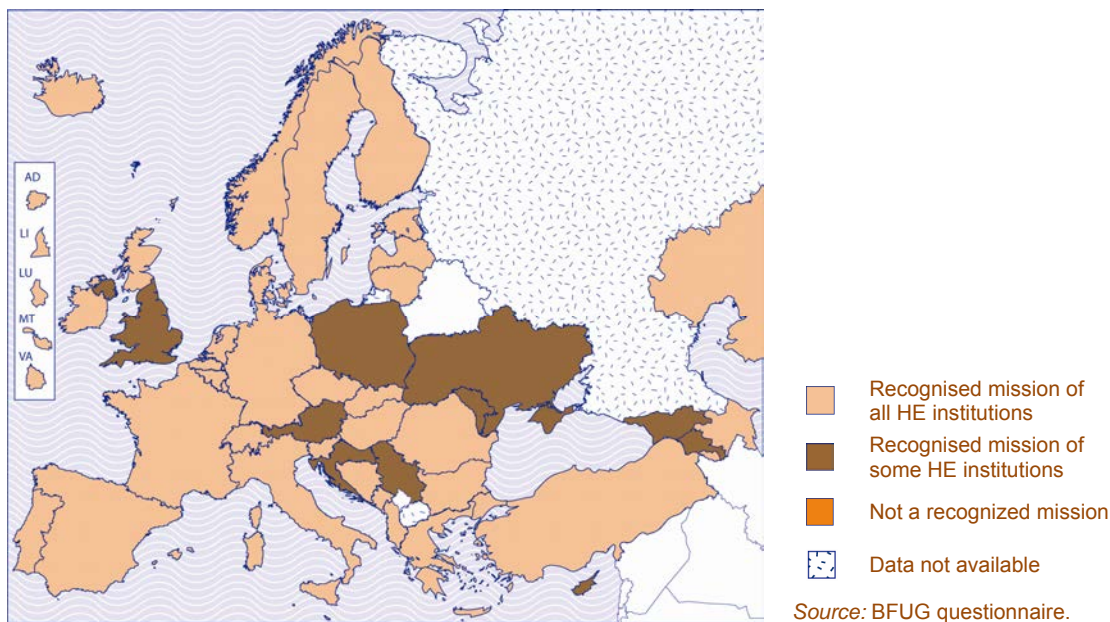
Other types of activities which are referred only by a limited number of countries include tailor-made provision for industry/companies and other external partners (Germany, Hungary, Italy, Malta, Moldova, the Netherlands, Slovenia and the United Kingdom (Scotland)), provision of public lectures, seminars, conferences, round tables and workshops (Austria, Liechtenstein, Moldova, Slovenia and the United Kingdom), targeted guidance and counselling services (France, Ukraine and the United Kingdom (Scotland)), access provision to attract non-traditional learners (Portugal and the United Kingdom) and the possibility for the general public to use various higher education resources, including higher education libraries (Estonia and Ukraine). Although this does not mean that these activities exist only in the countries listed above, it could indicate that they are not always thought of as the elements of lifelong learning in higher education.

Overall, lifelong learning in higher education appears as a fragmented concept – a mosaic of different types of learning provision where the number of elements varies from one country to another. While in some countries, a wide range of higher education activities are viewed in the light of their contribution to lifelong learning, in other instances, the list of lifelong learning provision in which higher education institutions are commonly involved is still relatively short.

6.2. Lifelong learning as a recognised mission of higher education institutions

The central position of lifelong learning in policy debates is reflected by the fact that in more than three-quarters of EHEA countries, lifelong learning is a recognised mission of all higher education institutions. In the rest of the EHEA countries, namely Armenia, Austria, Croatia, Cyprus, Georgia, Moldova, Poland, Serbia, Ukraine and the United Kingdom (England, Wales and Northern Ireland), it is a recognised mission of at least some higher education institutions (see Figure 6.1). Countries classified in the second category commonly point out that higher education institutions have a certain degree of autonomy in this regard, and can decide whether and to what extent they will include lifelong learning in their mission statement.

Figure 6.1: Lifelong learning as a recognised mission of higher education institutions, 2010/11



Regardless of whether lifelong learning is a recognised mission of all higher education institutions or only of some of them, several countries point out considerable cross-institutional variations in the extent to which lifelong learning has been implemented. This means that while in the case of some institutions lifelong learning appears as the main mission (e.g. institutions focusing on the provision of flexible higher education programmes such as open universities), in other instances, activity flows relating to lifelong learning might be less significant. In this context, Norway provides an interesting example, indicating that while in 2010 the average share of students studying under flexible arrangements was 6.3 %, some higher education institutions had up to 40 % of students within the flexible offer.

Higher education institutions can also specialise in certain types of lifelong learning activities, whereas other elements of lifelong learning might not be included in their offer. For example in Austria, the *Fachhochschule* sector (i.e. professionally-oriented higher education sector) is characterised by a considerable share of flexible programmes (nearly 50 % of study programmes take a form of evening classes), but the provision of alternative access routes based on the recognition of prior learning is still very limited in this sector. Another example is provided by Lithuania, where some higher education institutions have been involved in projects related to the recognition of prior learning, whereas a few other institutions have a well-established provision of courses targeting the continuing professional development of teachers and trainers.

The majority of EHEA countries do not identify any legal restrictions that could prevent higher education institutions to offer lifelong learning provision or services. Only a few countries refer to legal constraints related to different segments of lifelong learning in higher education. Such constraints include the lack of regulations on the recognition of prior learning (Latvia), the impossibility to propose degree programmes under flexible arrangements (Serbia), restrictions related to the registration of participants in separate modules of degree programmes (the Netherlands) or the impossibility for institutions of professional higher education to offer second-cycle studies (Denmark).

6.3. Financing lifelong learning

From the policy perspective, information on financial arrangements related to lifelong learning is commonly regarded as an issue of particular interest. However, virtually all comparative analyses covering this field highlight that this theme is particularly difficult to cover (for example EACEA/Eurydice, 2010). This is, to a certain extent, a result of a lack of conceptual clarity regarding lifelong learning, which means that depending on the context, the concept can refer to a larger or narrower range of higher education provision. The second difficulty relates to the fact that lifelong learning in higher education commonly involves diverse funding sources and it is often difficult to identify the relative contribution of each individual source.

The BFUG reporting exercise shows that when describing how lifelong learning is financed, countries often refer to different types of higher education provision, specifying financial arrangements related to each type. Most commonly, a distinction is made between programmes leading to higher education degrees, including programmes provided under various flexible arrangements, and non-degree higher education provision. While the first type of provision is often partially or completely covered from the public budget, in the case of the second type, the contribution from the public budget is generally less significant. Nevertheless, certain types of non-degree programmes (e.g. continuing professional development of those working in regulated professions, courses for the unemployed, programmes targeting retired citizens, etc.) are commonly financed/co-financed from public resources.

In around two-thirds of EHEA countries, higher education institutions do not dispose of a public budget earmarked specifically for lifelong learning. This means that resources for lifelong learning come from general budgets of higher education institutions, these means being often combined with other financial resources. In 15 higher education systems (out of 47 for which data is available), there are budgets earmarked specifically for lifelong learning, but these financial resources are sometimes targeted towards particular types of lifelong learning provision. This is the case in the Czech Republic, where the lifelong learning budget is intending to finance universities of the third age, or in Georgia and Slovenia, where it is commonly used to cover in-service training of teachers and trainers.

Apart from general or special budgets of higher education institutions, other public resources contribute to financing lifelong learning in higher education. These include resources from EU structural funds, resources from ministries other than those responsible for higher education and means allocated in the framework of various projects/programmes, be they national, regional or local. Public financial support can also take an indirect form, in particular through tax incentives targeting individuals taking part in lifelong learning activities.

Only a very few countries are able to quantify the degree to which lifelong learning provision in higher education is financed from public sources. Where the information on the degree of public funding is available, it varies significantly from one country to another, which may be partly related to different understandings of the concept of lifelong learning in higher education. While Romania and Bosnia and Herzegovina state, respectively, that public funding of lifelong learning in higher education is nil or only very modest, the Netherlands estimates that around 16 % of lifelong learning provision is funded from

the public budget, and France and Hungary evaluate this amount at around 30 %. Austria and Norway report higher levels of public funding. Austria evaluates its proportion at 85 %, while Norway indicates that most funding for lifelong learning comes from the public budget. Iceland and Malta are the only countries reporting that lifelong learning in higher education is fully publically funded.

Private investment in lifelong learning in higher education directly depends on the extent of public funding. Where private investment is requested, it is most often made by participants themselves. Yet, it can also be made by their employers, in particular if the employer has requested the employee to undertake the programme in question, or if there are any specific local or sectoral arrangements between employers and employees with regard to continuing education and training. Besides, lifelong learning can also be financed or co-financed from collective funds, to which employers make contributions. This is the case in the Flemish Community of Belgium, France and Spain, where legislation obliges companies to contribute to the cost of continuing education and training through mandatory contributions, which depend on the type of company and the number of employees. Financial resources collected can be used to finance various education and training schemes and can also provide support for individuals taking part in higher education provision.

The list of different sources that are used to finance lifelong learning in higher education can be completed by means earned by higher education institutions themselves. Despite the fact that Latvia is the only country referring to this source, it is likely that there are other countries, where it is legally possible for higher education institutions to finance or co-finance lifelong learning with the resources they have earned either through the provision of various services or through private donations.

6.4. Promoting flexible delivery of higher education programmes

In a larger sense, flexibility in higher education refers to different ways of enabling individuals to follow educational paths adapted to their needs. This section focuses on one aspect of flexibility in higher education, namely flexible modes of delivery of higher education programmes. As shown in section 6.2, a significant proportion of EHEA countries see this type of provision as one of the key elements of lifelong learning in higher education.

The present section is divided into four sub-sections. The first one concentrates on different policy approaches to flexible provision of higher education studies. It is followed by a sub-section focusing on the extent to which higher education systems provide formal student statuses other than full-time and the impact of these alternative statuses on study conditions of students. The third part looks at the extent to which higher education institutions ensure the provision of part-time studies, while the last part examines the degree of student participation in this type of study.

6.4.1. Policy approaches targeting flexible delivery of higher education programmes

One of the objectives of the BFUG reporting was to examine whether and to what extent policies in different EHEA countries promote flexible delivery of higher education programmes. According to the information provided by central authorities, in virtually all EHEA systems (43 out of 47 for which data is available), there are policies promoting flexible higher education provision. Yet, countries see their policy support in very different perspectives and are referring to diverse types of policy actions.

Several countries, or regions within countries (Armenia, Azerbaijan, the French Community of Belgium, Bosnia and Herzegovina, Bulgaria, Croatia, the Czech Republic, Georgia, Greece, Portugal,

Romania, Serbia and Slovenia), associate their policy support with legal frameworks, which create preconditions for the implementation of flexible higher education studies. This commonly means that legislation expressly enables higher education institutions to provide programmes under flexible study arrangements and/or it enables students to spread their courses over a longer period than the duration of traditional full-time studies.

Some countries (Andorra, Austria, Cyprus, Finland, the Netherlands and Portugal) see their policy support in close relation to those higher education institutions that pay particular attention to flexible studies. Finland for instance reports that Polytechnics (i.e. vocational higher education institutions) commonly offer e-learning possibilities as well as possibilities of evening or week-end tuition. Norway also partly belongs to this group. Although the country does not refer to any institution(s) that would focus on the provision of flexible studies, it has established an agency under the Ministry of Education and Research (Norway Opening Universities) dedicated to the promotion of flexible courses and study programmes at Norwegian higher education institutions.

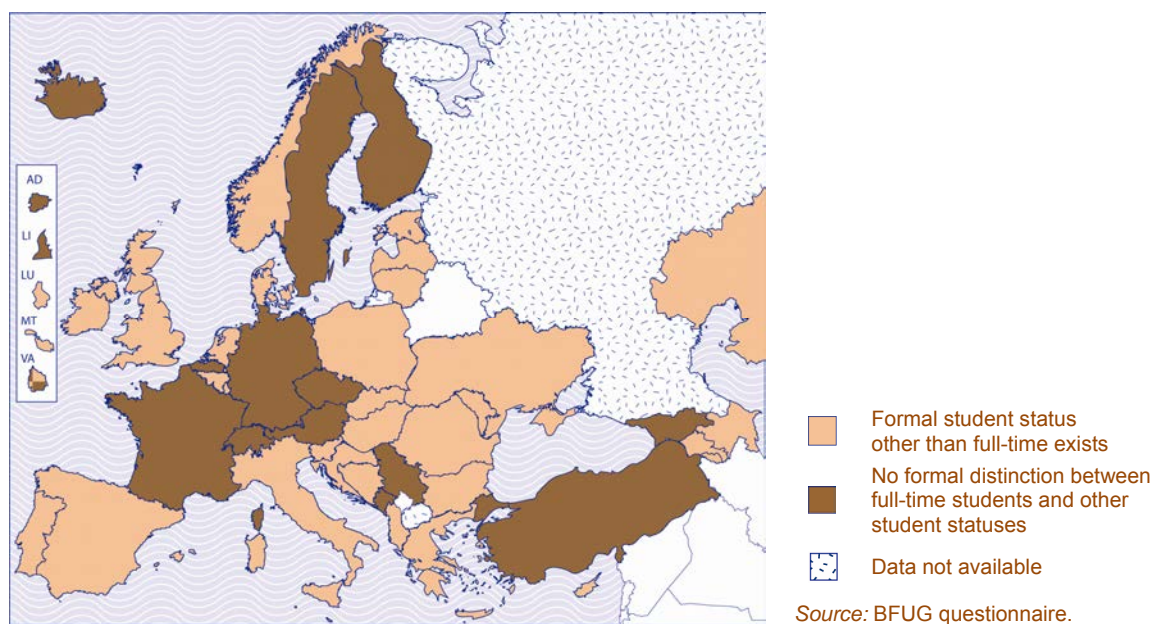
Among other policy initiatives promoting flexibility, countries, or regions within countries, refer to the implementation of the recognition of prior learning (Denmark, the Flemish Community of Belgium and Luxembourg) or modularisation of higher education programmes (Germany, Ireland, Liechtenstein and Luxembourg). Besides, some central authorities point out financial arrangements related to flexible higher education programmes, in particular the fact that full-time students and those following flexible studies are treated equally in terms of student fees and/or student financial support (for more details see section 6.4.2, Figure 6.3).

Finally, a few countries make a reference to their strategic policy documents, which include an explicit reference to the policy objective to enhance flexible higher education provision and possibilities for students to engage in flexible studies. Such documents exist in Estonia (Higher Education Strategy 2006-2015), Ireland (The National Strategy for Higher Education to 2030), Slovenia (Master Plan for Higher Education 2011-2020) and the United Kingdom (Scotland) (Letter of Guidance of the Scottish Government to the Scottish Funding Council).

6.4.2. Studying in higher education with a formal status other than the status of a full-time student

Alongside the status of a full-time student, the majority of countries formally recognise at least one additional student status. Figure 6.2 provides a picture of the situation across the EHEA. It shows that out of 47 higher education systems for which data is available, in around two-thirds there is an official student status other than the status of a full-time student. In the remaining higher education systems, a variety of situations can be observed. In most of them, there is only one official student status – i.e. the status of "student" – without any further distinctions. In other instances, there might be several formal student statuses, but the distinction is not based on the dichotomy "full-time student status" – "alternative student status" (e.g. in the Czech Republic, legislation distinguishes between "on-site", "distance" and "combined" studies). The Holy See presents a special case, as its higher education institutions are mainly located outside its own territory and therefore they follow diverse patterns in terms of the provision of alternative student statuses.

Figure 6.2: Existence of a formal student status other than the status of a full-time student, 2010/11



In countries formally distinguishing between full-time students and students with other statuses, the most common alternative student status is the status of a part-time student. Yet, countries that formally recognise a part-time student status do not necessarily define it in the same way.

Most commonly, the definition of a part-time student status is based on the workload of students, often measured in ECTS credit points. Where this concept is being used, part-time students are generally defined as those who achieve less than 60 ECTS credits per academic year and/or less than 30 ECTS credits per semester (e.g. Ireland and Malta). There are also variations, such as in Cyprus, where part-time students are expected to achieve less than 25 credit points per semester, or in Luxembourg, where they are expected to register only for 15-20 ECTS credits per semester.

The workload of part-time students can also be expressed in study hours/weeks, rather than in ECTS credit points. This is the case in the United Kingdom (England, Wales and Northern Ireland), where a part-time student is a student who does not fall under the category of a full-time student, and where studying full-time means studying at least 21 hours per week for at least 24 weeks per year.

In the United Kingdom (Scotland) and Latvia, the definition of a part-time student combines the two above-mentioned approaches, which means that it refers to credit points as well as to hours dedicated to higher education studies. In Scotland, part-time students are defined as those studying for less than 120 SCQF credits (60 ECTS), less than 24 weeks a year, and less than an average of 21 hours a week. In Latvia, they are defined as students, who are expected to achieve less than 40 LV credits (60 ECTS) per year and their study workload is expected to be less than 40 hours a week.

Although Estonia also founds its definition on the student workload, it defines part-time students in terms of the percentage of the workload of full-timers. It is expected that part-time students cumulatively complete less than 75 % of the annual study load of full-time students.

In a few countries (e.g. Bulgaria, Hungary and Moldova), the definition of part-time students does not refer to the workload of students, but to their limited direct participation in study sessions. This means that part-time students should in principle achieve the same number of credits as full-time students, but they are expected to dedicate more time to self-study activities.

Several countries participating in the BFUG reporting exercise state that the status of a part-time student exists within their respective higher education systems, but they do not supply its definition.

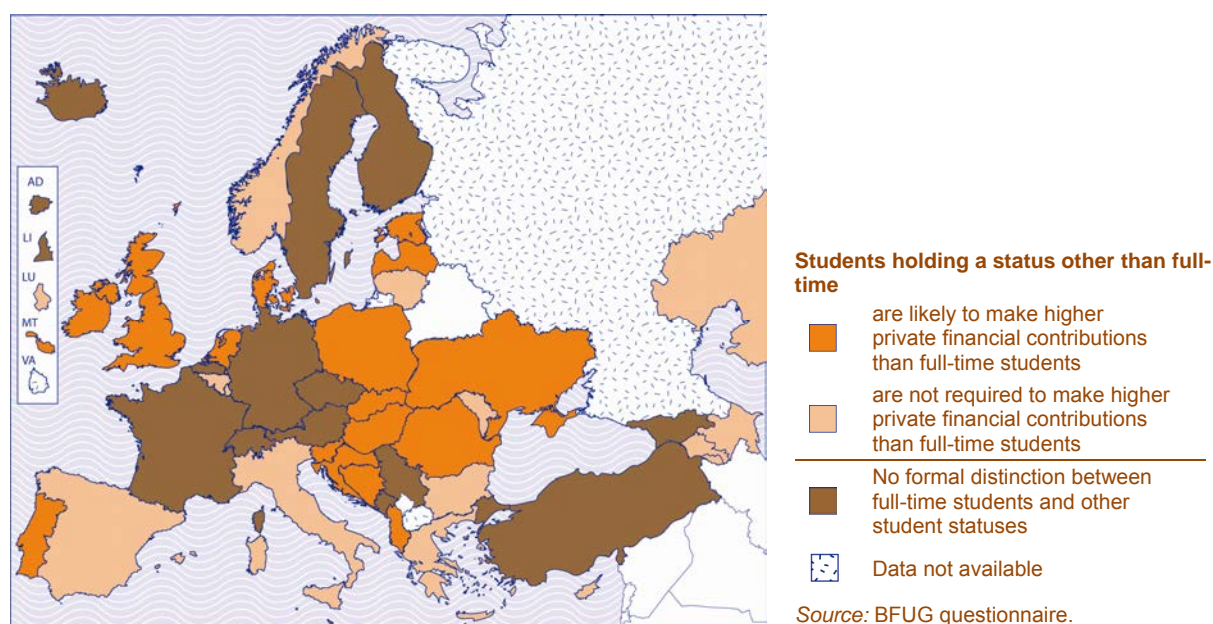
Two of these countries, Italy and Poland, indicate that steering documents related to higher education expressly refer to the possibility to offer part-time studies, but it is up to individual higher education institutions to define requirements related to the part-time student status. It is likely that this also applies to other countries, where the formal part-time status exists, but no definition is provided.

Even if the status of a part-time student is the most common student status other than full-time, there are also countries referring to other student statuses, including the status of an external student (Slovakia and Ukraine) or distance learning student (Bulgaria, Hungary and Ukraine). Besides, in some countries, there are more than two formal student statuses. For example in the Netherlands, alongside full-time and part-time student status, there is also a dual student status, covering those who combine studies with a work experience in a related field.

Denmark and the French Community of Belgium represent rather specific cases, as their distinction between different student statuses refers to the existence of different higher education sub-systems. The first country refers to students studying within the system of professional higher education for adults, whereas the French Community of Belgium refers to students following studies within the sub-system of Education for Social Advancement (i.e. a sub-system targeting mature students).

Formal status other than full-time often has an influence on the conditions under which students follow their studies, in particular on financial aspects related to studies. This includes tuition fees, grants, loans or other financial subsidies students might be eligible for. Figure 6.3 provides an overview of the situation in the EHEA.

Figure 6.3: Impact of formal student status on financial arrangements related to higher education studies, 2010/11



In several countries (Albania, Bosnia and Herzegovina, Croatia, Denmark, Estonia, Hungary, Ireland, Latvia, Malta, the Netherlands, Poland, Portugal, Romania, Slovenia, Slovakia, Ukraine and the United Kingdom), part-time studies are likely to be related to higher private financial investment than full-time studies. This expectation can be expressed in various ways, directly or indirectly. For example, in Slovenia and the United Kingdom, tuition fees related to part-time studies are unregulated and can be set by higher education institutions themselves, whereas tuition fees related to full-time studies are centrally regulated. Similarly in Estonia, part-time students are not expressly required to pay higher fees, but as there are only a very few state-funded places for this category of students, they often have to cover their tuition expenses. In Ireland, part-time students are not eligible to participate in the Free Fees Initiative, which provides that tuition fees are paid for full-time students.

Student support is another area where differences between full-time and part-time students can be observed. For example in Ireland, Latvia and the Netherlands, part-time students are not eligible for student grants and scholarships, and in Malta, only certain categories of part-time students are eligible for this type of support. Hungary reports that contrary to full-time student, part-time students cannot apply for need-based student support. In Croatia, those studying part-time do not have the right to many student benefits, including subsidized board and lodging, and health insurance, while in Estonia, part-time students cannot take out student loans. Although the United Kingdom offers financial support to both full-time and part-time students, each category of students is covered by a different financial support scheme.

Some countries or regions within countries (Armenia, Azerbaijan, the French Community of Belgium, Bulgaria, Cyprus, Greece, Italy, Kazakhstan, Lithuania, Luxembourg, Moldova, Norway and Spain) indicate that there is no difference between full-time and part-time studies in terms of fees and financial support. Depending on the country-specific definition of part-time students (see the information provided at the beginning of this section) this can have different meanings. In countries where part-time students are expected to achieve a less significant number of credits per academic year than full-time students, fees and support are calculated in relation to students' workload, i.e. if students take fewer credits, they pay lower fees and are eligible for lower amount of financial support (e.g. in Italy and Lithuania). In countries where full-time and part-time student are expected to achieve the same number of credits, fees and support are the same for both categories of students (e.g. in Bulgaria and Moldova).

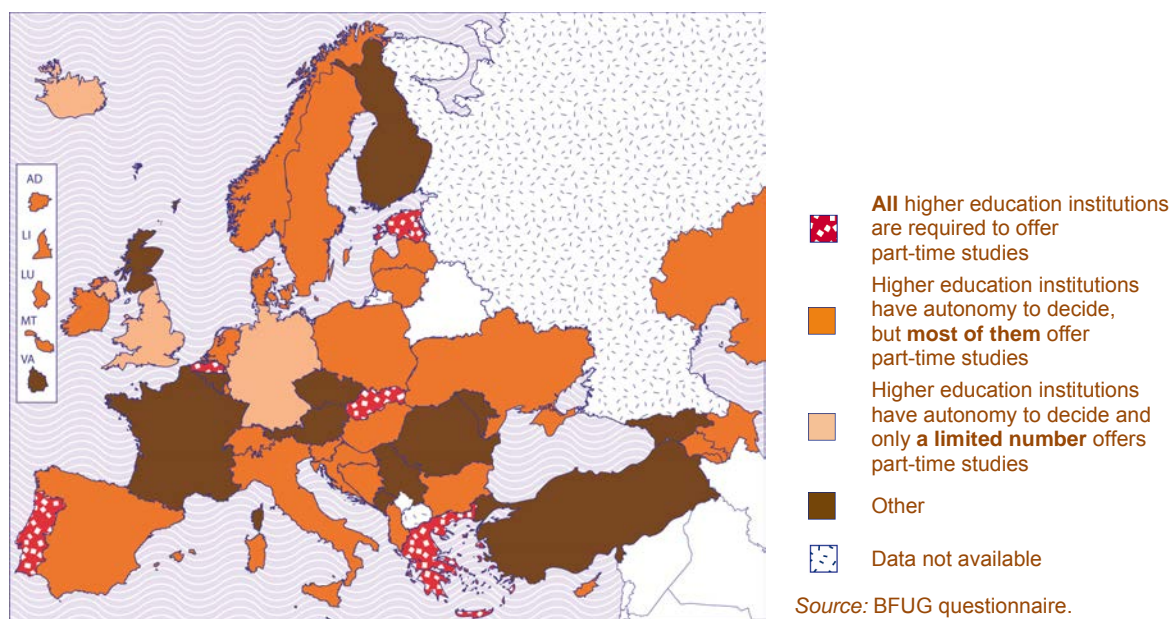
Among countries where part-time students are likely to make higher private financial contribution than full-time students, only two countries – Ireland and Slovenia – indicate that they are considering a reform of the system in favour of part-time students. In Ireland, the National Strategy for Higher Education to 2030 recommends that disincentives to part-time studies are removed, while in Slovenia, the Master Plan for Higher Education 2011-2020 includes a policy intention to abandon tuition fees for part-time studies.

6.4.3. Provision of part-time studies by higher education institutions

In many EHEA countries, higher education institutions have autonomy to decide whether they will offer studies other than full-time (see Figure 6.4). Most of these countries specify that the majority of higher education institutions offer part-time studies, whereas three systems (Germany, Iceland and the United Kingdom (England, Wales and Northern Ireland)) indicate that only a limited number of institutions offer this type of study. The Flemish Community of Belgium, Estonia, Greece, Portugal and Slovakia are the only systems reporting that all higher education institutions are required to offer part-time studies.

When comparing Figures 6.2 and 6.4, the reader can note that seven higher education systems with no formal distinction between full-time student status and other student statuses, namely Andorra, the Flemish Community of Belgium, Germany, Iceland, Liechtenstein, Sweden and Switzerland, indicate the extent to which higher education institutions ensure part-time provision. The contextual information provided by some of these countries allows better understanding of their situation. For example, in the Flemish Community of Belgium, there is no part-time student status, but all higher education institutions are required to offer flexible study pathways allowing students to take less than 60 ECTS per academic year. Germany indicates that even if there is no formal part-time status, higher education institutions have autonomy to offer part-time studies and several *Länder* have adopted legal regulations covering this type of study.

Figure 6.4: Provision of part-time studies by higher education institutions, 2010/11



The category "other" refers to those situations, which cannot be described using the pre-defined categorisation. In Moldova for instance, the extent to which part-time studies are offered is defined annually by the Ministry of Education, depending on the labour market requirements. Consequently, the degree of part-time provision changes from one year to another. In the French Community of Belgium, the part-time provision depends on the higher education sub-sector. All programmes organised within the sub-sector of Education for Social Advancement (i.e. a sub-sector targeting mature students) are part-time programmes, whereas with regard to traditional higher education, part-time programmes are offered by the majority of institutions. In the United Kingdom (Scotland), higher education institutions are not expressly required to offer part-time studies, but all of them do so.

The above-mentioned category is also indicated by several countries with no formal status of part-time studies and/or part-time students (Austria, the Czech Republic, Finland, France, Georgia, Montenegro, Serbia and Turkey; see also Figure 6.2). Yet, as already mentioned in previous parts of this section, the absence of a formal part-time status does not necessarily mean that higher education institutions do not ensure flexible provision. In this context, Montenegro reports that higher education institutions commonly offer possibilities for students to apply for a limited number of credits and follow de facto part-time studies. A similar situation is indicated by Finland, in which case it is also confirmed by Figure 6.9 in section 6.4.4., showing that around 25 % of higher education students in this country are low intensity students (i.e. students who dedicate only up to 20 hours a week to their studies). In the Czech Republic, higher education legislation does not refer to full-time and/or part-time studies, but it refers to "on-site", "distance" and "combined studies". This means that legislation makes a direct reference to flexible studies, but uses a slightly different conceptualisation. Higher education institutions commonly offer distance or combined study programmes.

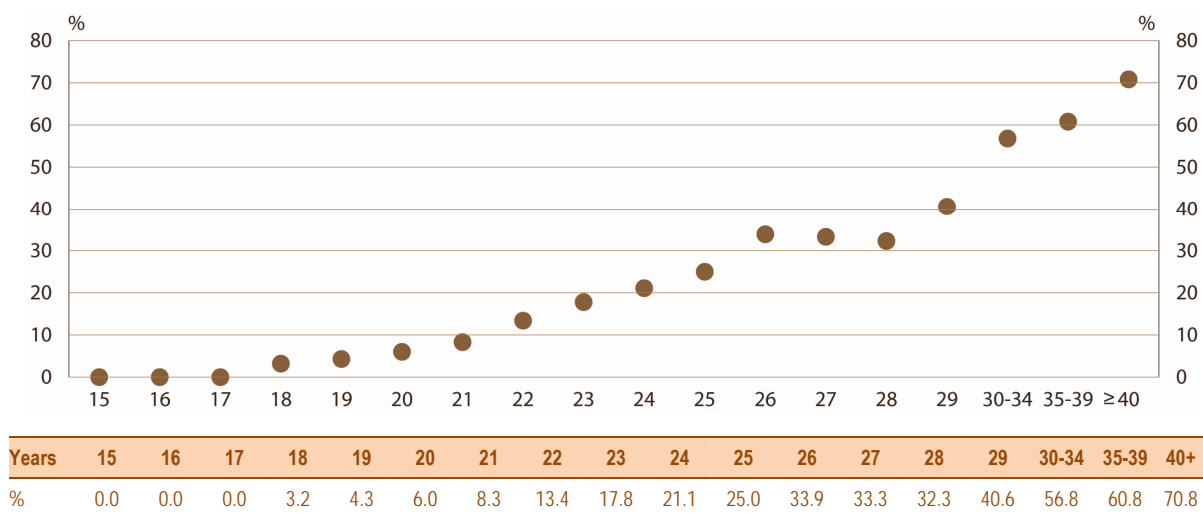
6.4.4. Statistical data on student participation in part-time studies

The information on the extent to which higher education institutions ensure the provision of flexible study options (see section 6.4.3) can be complemented with data on the participation of students in part-time provision. The participation levels are examined through two different data sets, which represent two different approaches to part-time studies. First, they are assessed through administrative data (UOE data collection); second, they are evaluated through students' self-reported assessments of their formal status and study intensity (Eurostudent research).

According to the operational definition used within the UOE data collection, an individual is regarded as a part-time student if he/she is taking an educational programme that requires less than 75 % of a full-time study load. Despite some limitations of this operational definition ⁽⁷⁶⁾, the UOE data collection enables an evaluation of various aspects of participation in part-time studies.

Figure 6.5 clearly indicates that age is a significant factor in students' decision to pursue their studies on a part-time basis, and that older students are much more likely to study part-time than younger ones. Less than 10 % of students at the typical age of entrance into higher education choose studying part-time, whereas the share of part-timers in their late 20's is situated between 30 and 40 %. After students have reached their 30's, it is even more likely that they will study part-time (more than 50 % study part-time) and among those who are older than 40, only one third will choose a full-time study mode.

Figure 6.5: Median of country percentages for students studying part-time in tertiary education, by age, 2008/09



Note: For more details on country coverage see Glossary and Methodological Notes.

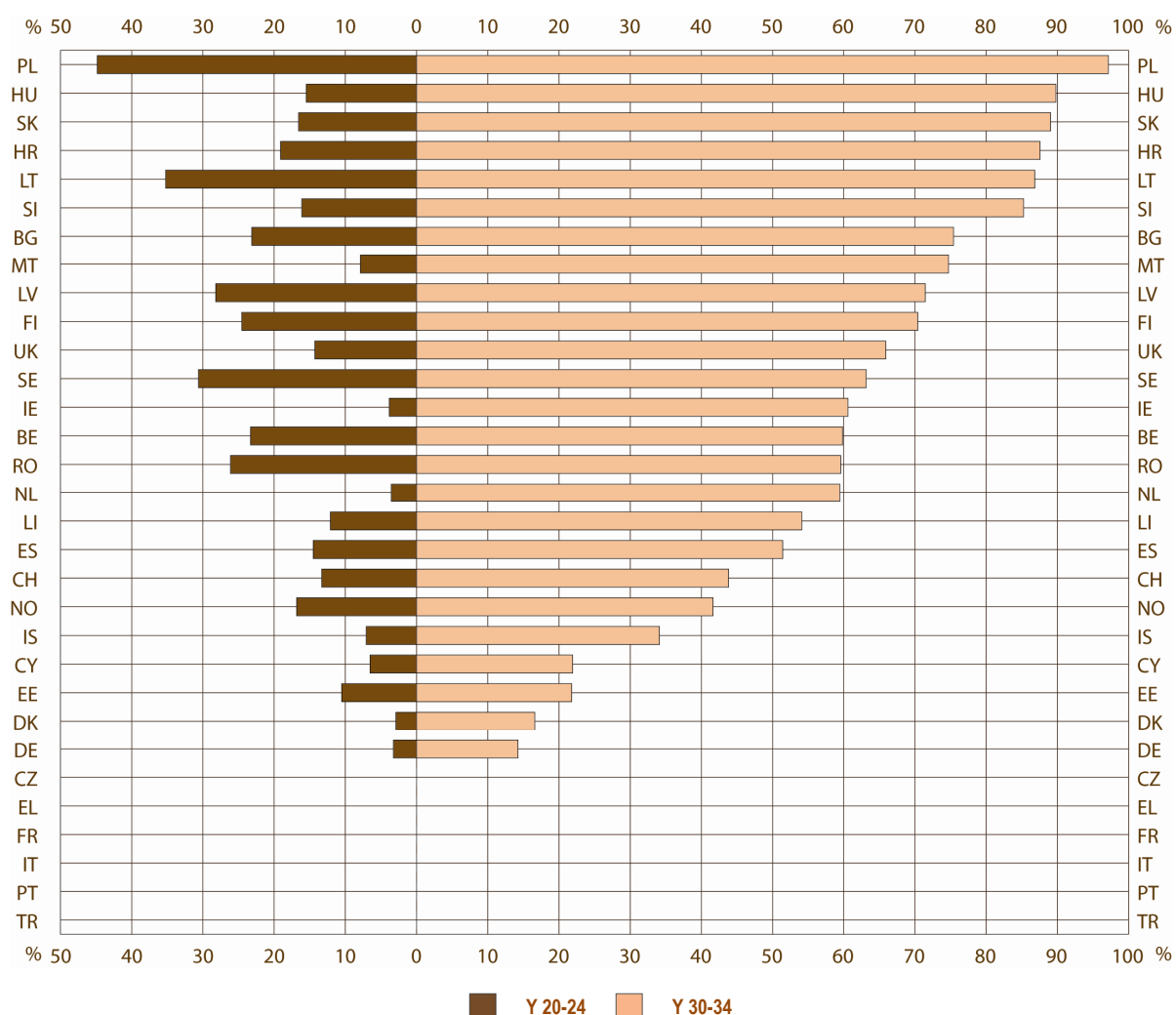
Source: Eurostat, UOE.

⁽⁷⁶⁾ Countries may to some extent differ in the way they measure the study load of students. Ideally, the study load should be measured in terms of the academic value or progress, but it can also be measured in terms of the time/resource commitment or time in classroom. The national data available to countries tends to dictate which of these methods countries use to categorise students as full-time or part-time (UNESCO, OECD & Eurostat, 2010).

Figure 6.6 provides information on the situation in individual countries for which data are available, showing the participation in part-time studies of those aged between 20 and 24 (representing the category of "traditional" higher education students⁽⁷⁷⁾) and those aged 30-34 (representing the category of "mature students"). For all countries, the figure confirms that the older the students are, the more likely they are to study part-time. The figure also shows that in countries such as Belgium, Bulgaria, Finland, Latvia, Lithuania, Poland, Romania and Sweden, even "traditional" higher education students often choose part-time studies (at least 20 % chose this mode of study).

In the majority of countries, participation in part-time studies is at least three times higher for those aged between 30 and 34 than for those aged 20-24. In Belgium, Estonia, Finland, Latvia, Lithuania, Norway, Poland, Romania and Sweden, the participation levels of the two age categories are slightly more balanced, but the participation of older students in part-time studies is always at least two times higher than the participation of those aged 20-24. In six countries – Croatia, Hungary, Lithuania, Poland, Slovakia and Slovenia – more than 80 % of higher education students aged 30-34 are part-timers.

Figure 6.6: Percentage of students studying part-time, by country and by age, 2008/09



(77) Note: In some countries, "traditional" higher education students are slightly older than in the majority of other countries. For example, in Denmark and Sweden, the most common starting age for first-cycle students is above the age of 21 (EACEA/Eurydice, 2010). For more details, see also Eurostat publication *Trends in European education during the last decade* (Mejer, Turchetti & Gere, 2011).

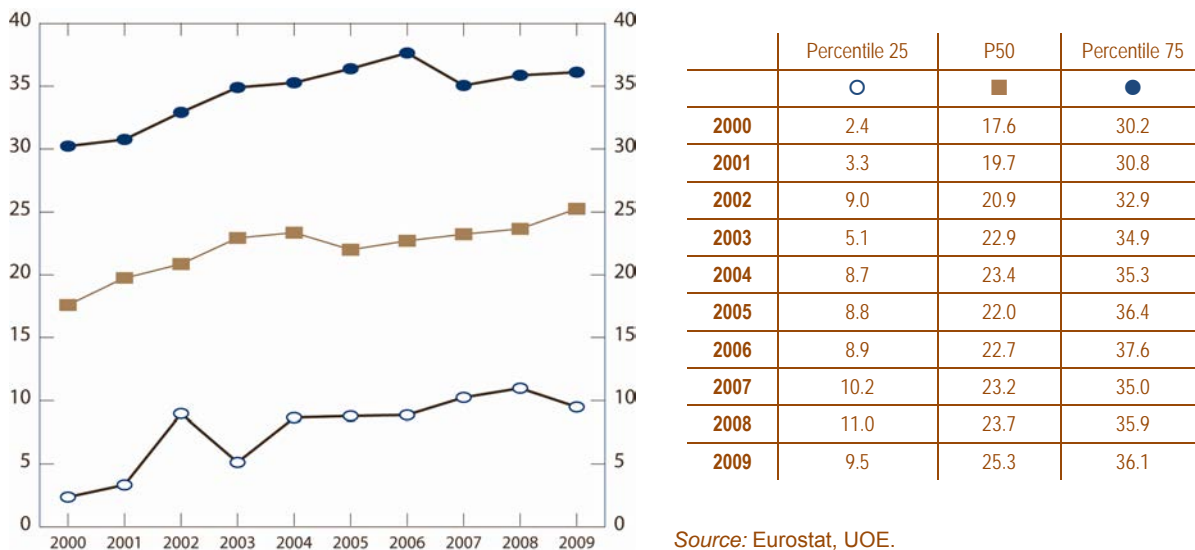
(%)	PL	HU	SK	HR	LT	SI	BG	MT	LV	FI	UK	SE	IE	BE	RO	NL
Y 20-24	44.8	15.5	16.6	19.1	35.2	16.1	23.1	7.9	28.2	24.6	14.3	30.6	3.8	23.3	26.1	3.6
Y 30-34	97.2	89.8	89.1	87.6	86.8	85.2	75.4	74.7	71.4	70.4	65.9	63.1	60.6	59.8	59.6	59.4
	LI	ES	CH	NO	IS	CY	EE	DK	DE	CZ	EL	FR	IT	PT	TR	
Y 20-24	12.1	14.5	13.3	16.8	7.1	6.5	10.5	2.9	3.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Y 30-34	54.1	51.4	43.8	41.6	34.1	21.9	21.8	16.6	14.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Source: Eurostat, UOE.

At the other end of the spectrum, there is a group of six countries (the Czech Republic, France, Greece, Italy, Portugal and Turkey) where, regardless of the age of students, the participation in part-time studies is nil. Figure 6.2 in section 6.4.2 indicates that some of these countries offer a formal student status other than full-time (Greece, Italy and Portugal) ⁽⁷⁸⁾, whereas other countries do not distinguish between full-time students and students with other statuses (the Czech Republic, France and Turkey).

The trend data covering all age categories show that between 2000 and 2009, in median terms, part-time study has increased from 17.6 % to 25.3 % (Figure 6.7; for country coverage see Glossary and Methodological Notes). This increase has been the result of a higher take up of part-time study in the majority of countries considered.

Figure 6.7: Median of the percentage of students studying part-time in tertiary education, by year, 2000-2009



Compared to the UOE data collection, Eurostudent research looks at the participation of students in part-time studies from a different perspective. Instead of using an operational definition of part-time studies/students, it takes into account the self-declaration of students regarding their formal student status (for more details see Glossary and Methodological Notes). Data covering 20 EHEA countries indicate that on average, regardless of age, 18.5 % of students have a formal part-time status.

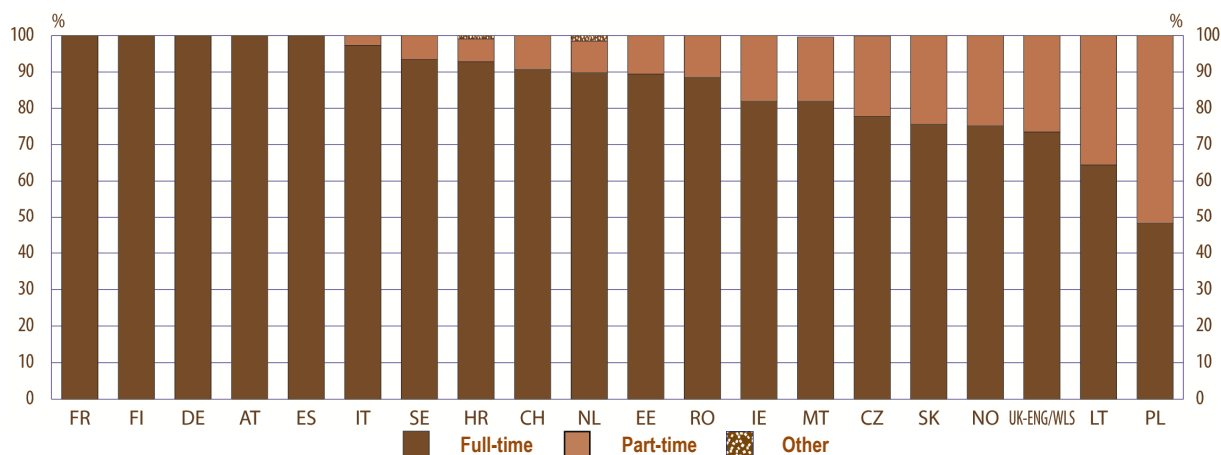
Looking at the situation in individual countries, some significant cross-country differences in the proportion of students who report themselves as studying with a formal part-time status can be observed (Figure 6.8). In Poland, every second student reports a formal part-time status, and in Lithuania, Norway and the United Kingdom (England and Wales), at least one in four students is formally a part-timer. At the other end are five countries – Austria, Finland, France, Germany and

⁽⁷⁸⁾ Note: In Greece and Portugal, part-time student status was introduced only very recently.

Spain – where the proportion of those formally registered as part-timers is nil. Contextual data provided in section 6.4.2 (see Figure 6.2) confirm that in all these countries except Spain, there is no formal distinction between full-time and part-time students. It is also interesting to note that in Croatia and the Netherlands, a small proportion of students (between 1 % and 2 %) are registered with a formal status other than full-time or part-time. In the Netherlands, these students are likely to be those who follow dual higher education studies (for more details see section 6.4.2).

Eurostudent research also enables the evaluation of the relationship between the formal student status and the number of hours students spend during a typical week on study-related activities, i.e. taught courses and personal study.

Figure 6.8: Students by formal status of enrolment (self-reported) in %, 2009/10



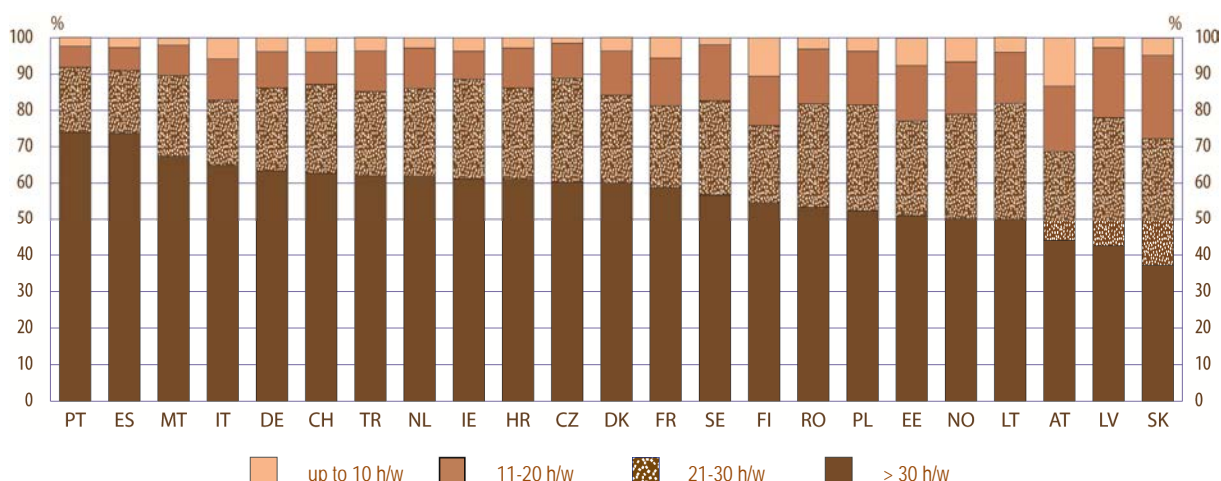
	AT	DE	ES	FI	FR	IT	SE	HR	CH	NL	EE	RO	IE	MT	CZ	SK	NO	UK-ENG/WLS	LT	PL
Full-time	100	100	100	100	100	97.3	93.4	92.8	90.7	89.8	89.4	88.5	81.9	81.9	77.7	75.6	75.2	73.5	64.4	48.1
Part-time	0	0	0	0	0	2.7	6.6	6.3	9.3	8.7	10.6	11.5	18.1	17.7	22.2	24.4	24.8	26.5	35.6	51.9
Other	0	0	0	0	0	0	0	0.9	0	1.5	0	0	0	0	0	0	0	0	0	0

Source: Eurostudent.

Figure 6.9 looks at a typical study week of students who consider themselves as having a full-time status in their respective national system. It shows that in each country under consideration, a majority of full-time students (69 % or more) declare that they dedicate more than 20 hours a week to their study-related activities. More than half of these students even devote over 30 hours a week to their studies. Yet, in some countries, a significant proportion of full-time students indicate that they only dedicate up to 20 hours a week to studies. This applies in particular to Austria, Finland and Slovakia, where at least one out of four full-time students is characterised by relatively low study intensity. Taking into account the situation in all countries, on average, 17 % of students holding an official status of a full-time student declare that they do not spend more than 20 hours a week on study-related activities. Therefore, in terms of their study intensity, these students can be regarded as de facto part-time students.

Besides the study intensity of full-time students, Eurostudent research also looks at the study intensity of those studying part-time. It shows that while the overall study intensity of students having a formal part-time status is lower than that of full-time students, a certain proportion of part-timers are characterised by high study intensity (i.e. these students can be regarded as de facto full-time students). The proportion of these students is particularly high in Croatia, Poland and Switzerland (for more details, see Eurostudent, 2011).

Figure 6.9: Full-time students by hours spent on study-related activities in a typical week in %, 2009/10



	PT	ES	MT	IT	DE	CH	TR	NL	IE	HR	CZ	DK	FR	SE	FI	RO	PL	EE	NO	LT	AT	LV	SK
up to 10 h/w	2.4	2.7	1.9	5.7	3.8	3.9	3.7	2.8	3.7	2.8	1.5	3.7	5.7	1.9	10.6	3.1	3.7	7.5	6.6	4.1	13.3	2.8	4.7
11-20 h/w	5.8	6.2	8.4	11.3	10.0	8.9	11.2	11.2	7.7	11.0	9.6	12.2	13.1	15.4	13.6	15.1	14.8	15.3	14.4	14.1	18.1	19.3	23.0
21-30 h/w	18.0	17.4	22.2	18.1	22.8	24.5	23.2	24.1	27.5	25.2	28.7	24.2	22.5	26.0	21.2	28.5	29.2	26.1	28.8	31.9	24.6	35.5	35.0
> 30 h/w	73.9	73.7	67.4	64.8	63.4	62.7	62.0	61.9	61.1	61.0	60.2	60.0	58.8	56.7	54.6	53.3	52.3	51.0	50.2	50.0	44.0	42.5	37.2

Overall, different indicators presented in this section show that the participation of students in part-time studies can be approached from different angles of perspective. While each individual approach has some limitations and disadvantages, brought together, they allow better understanding of the phenomena of part-time studies. These indicators also illustrate that cross-country comparisons of flexible modes of study in higher education should be carried out with caution, taking into account the complexity of this subject matter.

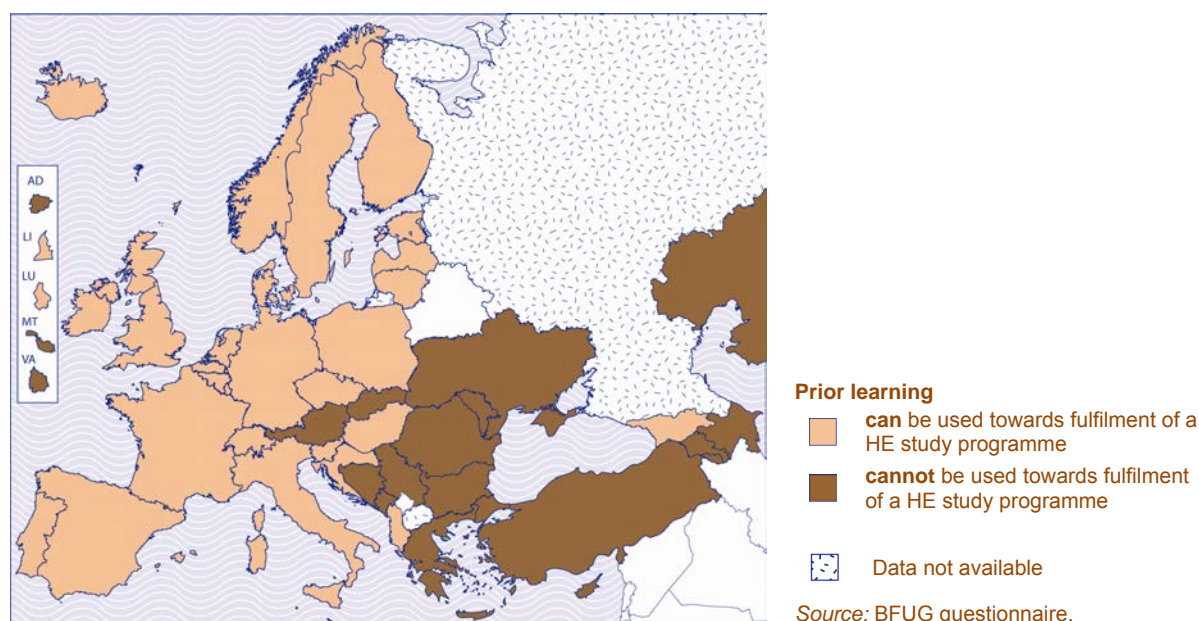
6.5. Recognising prior learning

The establishment of systems for the recognition of all forms of prior learning has become one of the central themes not only in the higher education sector, but also in all other sectors of education and training. Along with the recognition of prior formal learning, which commonly takes place in all countries, particular emphasis is being put on the need to enhance the recognition of the knowledge and skills gained through non-formal and informal learning. This type of the recognition is the main focus of the present section.

From the learner's perspective, the recognition of prior learning is most commonly undertaken with one of the following objectives: to gain admission to a higher education programme or to progress in higher education studies. The chapter on the social dimension of higher education (Chapter 4, Figure 4.10) has examined the extent to which the recognition of prior learning can be used for admission to higher education. It has shown that out of 47 higher education systems for which data is available, 22 systems provide a possibility of an alternative access to higher education, and such access is most often based on the recognition of prior non-formal and informal learning.

The recognition of prior learning for progression in higher education studies implies that learners can be exempt from certain higher education courses if they demonstrate that they already possess the knowledge and skills related to these parts of study. Figure 6.10 provides a mapping of this area. It shows that out of 47 higher education systems for which data is available, in 29 systems prior non-formal and informal learning can be taken into account towards the completion of higher education studies. This suggests that the recognition of prior learning for progression in higher education studies is possible in a slightly higher number of countries than the recognition for admission to higher education. Contextual information provided by countries also indicates that regulations often specify the extent to which the recognition of prior learning can contribute to the fulfilment of higher education programme requirements. This means that the recognition of prior learning most commonly leads only to a limited number of credits and rarely to a complete award of a higher education qualification.

Figure 6.10: Recognition of prior learning for progression in higher education studies, 2010/11

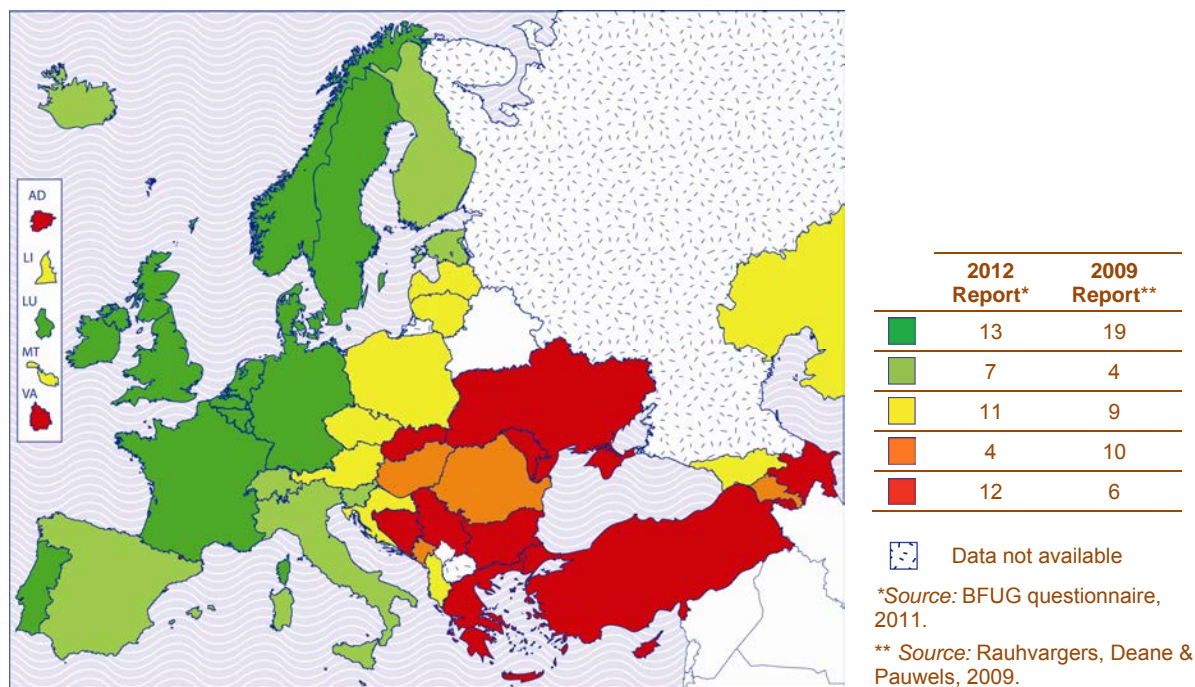


The two above-mentioned dimensions of the recognition of prior learning are brought together under the scorecard indicator covering this theme (see Figure 6.11). The indicator was introduced in 2007 and re-examined in 2009. The current version takes into account the extent to which the two types of recognition are possible within different EHEA systems as well as the extent to which they are used in practice.

Out of 47 higher education systems for which data is available, the indicator identifies a group of 13 higher education systems (dark green), where according to centrally established procedures, guidelines or policies, the recognition of prior learning can be used for access to higher education as well as for progression in higher education studies. In these countries, the recognition of prior learning is a standard practice in the majority of higher education institutions. Seven higher education systems (light green) have also reached a relatively high level of development in this field. Yet, in these higher education systems, the recognition of prior learning is either not yet a common practice in the majority of institutions or, if it is a common practice, it cannot be used both for access to higher education and for progression in higher education studies. In 11 higher education systems (yellow), the recognition of prior learning can be used either only for access to higher education or only for progression in higher education studies. In any case, it is still not very widespread. This group also includes countries, where the recognition of prior learning might be used for access as well as for progression, but it is not underpinned by any centrally established guidelines or policies. The following category (orange) applies to four countries that have not yet developed any systematic approach to the recognition of

prior learning, but report some progression in this field (e.g. preparation of steering documents). Finally, 12 EHEA countries (red) have not yet commenced any systematic activities related to the recognition of prior learning in the higher education sector.

Figure 6.11: Scorecard indicator n°9: Recognition of prior learning, 2010/11*



Scorecard categories

- 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 demonstrably applied in practice.
- 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 demonstrably applied in practice.
OR
There are nationally established procedures, guidelines or policy EITHER for 1) OR for 2) (see above), AND these procedures are demonstrably applied in practice.
- There are nationally established procedures, guidelines or policy EITHER for 1) OR for 2) (see above), BUT these procedures are not demonstrably applied in practice.
OR
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.
- Implementation of recognition of prior learning is in a pilot phase at some higher education institutions
OR
Work at drawing up procedures/national guidelines or policy for recognition of prior learning has started.
- No procedures for recognition of prior learning are in place EITHER at the national OR at the institutional/programme level.

Overall, the most recent BFUG data collection confirms the results of the 2007 and 2009 reporting exercises, which indicated that in the majority of EHEA countries, the recognition of prior learning was at an early stage of development or had not yet started (Rauhvargers, Deane & Pauwels, 2009). Compared to the previous editions, the current scorecard indicator on the recognition of prior learning looks even more pessimistic. This is mainly because the focus of the reporting was on the recognition of prior non-formal and informal learning. The present indicator shows that a large proportion of EHEA countries are situated at the two extremities of the spectrum: either they already have a well-

established system of the recognition of prior learning or they have not yet started their activities in this field. A relatively small number of countries are situated at intermediary stages. This could mean that despite the policy attention accorded to the theme of the recognition of prior learning, only very few actual developments are taking place across the EHEA.

6.6. Participation of mature students and delayed transition students in formal higher education provision

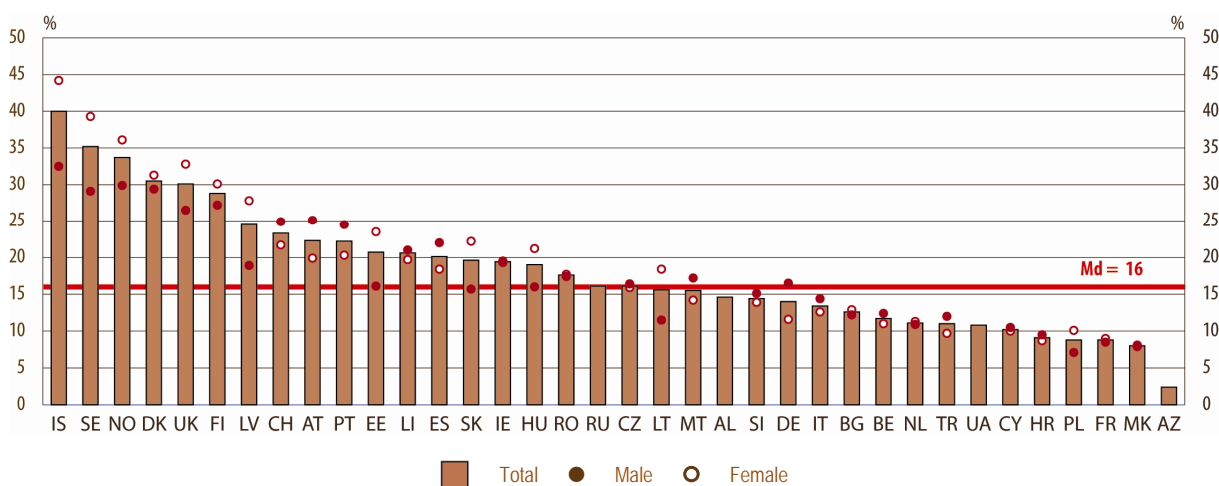
While the preceding sections have been primarily devoted to different policy approaches to lifelong learning across the EHEA, the present section intends to assess how successful the higher education systems are in attracting "lifelong learners". Although there is no perfect measure that would fully cover this area, available data on the participation of mature students (Eurostat) and delayed transition students (Eurostudent) can be used as a proxy to evaluate the degree to which different higher education systems have already established a culture of lifelong learning.

Eurostat data on students aged 30 and over enrolled in higher education show that during the academic year 2008/09, the country median for students in formal higher education programmes was 16 % (see Figure 6.12). However, across 36 countries for which data is available, situations vary significantly. The lowest participation rate is registered in Azerbaijan, where mature students represent only around 2 % of the total student population. It is also relatively low in Croatia, the former Yugoslav Republic of Macedonia, France and Poland, where only up to 10 % of students enrolled in the system are mature students. At the other end of the spectrum are the Nordic countries and the United Kingdom, where mature students represent around one third of the total student population (between 29 % and 40 %). However, it must be noted that in the Nordic countries, the "typical" higher education student is generally slightly older than in the majority of other EHEA countries. For example in Sweden, the most common starting age for 1st cycle tertiary education is 22 and in Finland, it is situated between 20 and 24 years (EACEA/Eurydice, 2010) ⁽⁷⁹⁾.

Data on gender distribution covering 32 countries indicate that in the seven countries with the highest participation levels (i.e. the Nordic countries, the United Kingdom and Latvia), the share of older students is higher among women than among men. The most significant gender gap can be observed in Sweden, Iceland and Latvia, where the share for female mature students is around 10 percentage points higher than for male students. Profiles of other EHEA countries for which data is available are more diverse. In around half of them, the participation rate of men and women is balanced, whereas in other cases there is a gender gap either in favour of men or women. However, where a gender gap exists, it generally does not exceed 5 percentage points.

⁽⁷⁹⁾ For more details, see also Eurostat publication *Trends in European education during the last decade* (Mejer, Turchetti & Gere, 2011).

Figure 6.12: Percentage of students enrolled in tertiary education, total and by gender, 30 or more years old, 2008/09



	IS	SE	NO	DK	UK	FI	LV	CH	AT	PT	EE	LI	ES	SK	IE	HU	RO	RU
Total	40.0	35.2	33.7	30.5	30.1	28.8	24.5	23.3	22.3	22.2	20.7	20.6	20.1	19.6	19.4	19.0	17.6	16.1
Male	32.5	29.1	29.9	29.4	26.5	27.2	18.9	24.9	25.1	24.5	16.1	21.0	22.0	15.7	19.5	16.0	17.4	:
Female	44.2	39.3	36.1	31.3	32.8	30.1	27.8	21.7	19.9	20.3	23.5	19.7	18.4	22.2	19.3	21.2	17.7	:

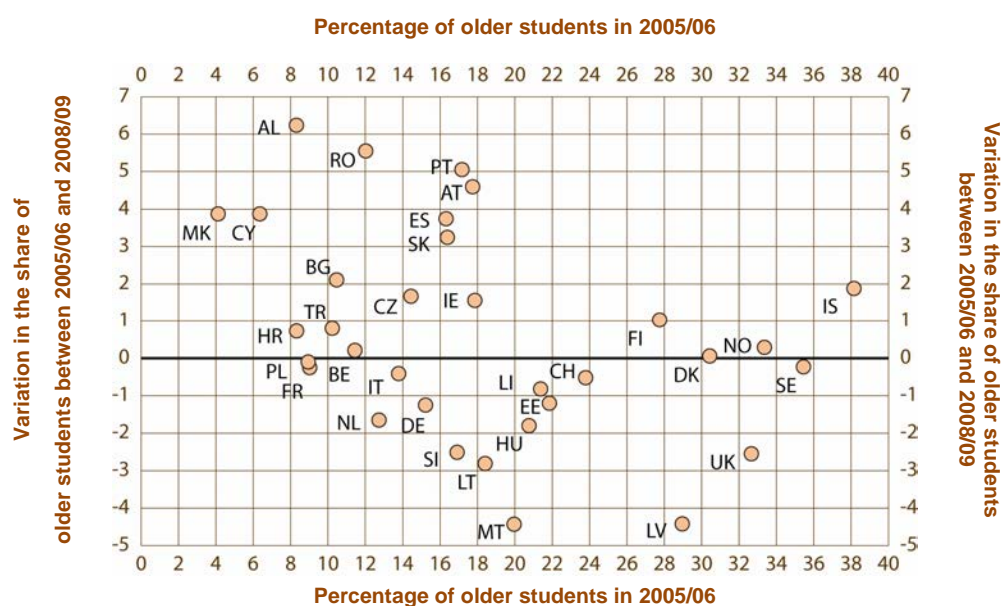
	CZ	LT	MT	AL	SI	DE	IT	BG	BE	NL	TR	UA	CY	HR	PL	FR	MK	AZ
Total	16.1	15.6	15.5	14.6	14.4	14.0	13.4	12.6	11.7	11.1	11.0	10.8	10.2	9.1	8.8	8.8	8.0	2.4
Male	16.4	11.5	17.2	:	15.1	16.5	14.4	12.2	12.4	10.9	12.0	:	10.5	9.5	7.1	8.5	8.1	:
Female	15.9	18.4	14.2	:	13.9	11.6	12.6	12.9	11.0	11.3	9.7	:	10.0	8.7	10.1	9.0	7.9	:

Source: Eurostat, UOE.

Figure 6.13 allows a country-level evaluation of the variation in the participation of mature students between 2005/06 and 2008/09. The figure indicates that out of 33 countries for which data is available, 18 countries registered an increase in the participation of this category of students (see countries above the horizontal line). The most important increase – between 3 and 6 percentage points – was registered in Albania, Austria, Cyprus, the former Yugoslav Republic of Macedonia, Portugal, Romania, Slovakia and Spain. Among these countries, the former Yugoslav Republic of Macedonia, Cyprus and Albania represent the most interesting cases, as their participation rate was in 2005/06 among the lowest (4 %, 6 % and 8 %, respectively) and it significantly improved by 2008/09 (by around 4 percentage points in the first two countries and 6 percentage points in Albania).

On the other hand, there are 15 countries in which the proportion of mature students in higher education decreased. The most significant decrease was recorded in Latvia and Malta (around 4 percentage points), and in Lithuania, Slovenia and the United Kingdom (around 3 percentage points). A few countries characterised by relatively low participation in 2005/06 (e.g. France and Poland, but also Germany, Italy and the Netherlands), registered a further decrease. However, in some of these countries, the decrease was not very significant (only up to 0.5 percentage points).

Figure 6.13: Percentage of students enrolled in tertiary education, 30 or more years old, in 2005/06 and variation from 2005/06 to 2008/09



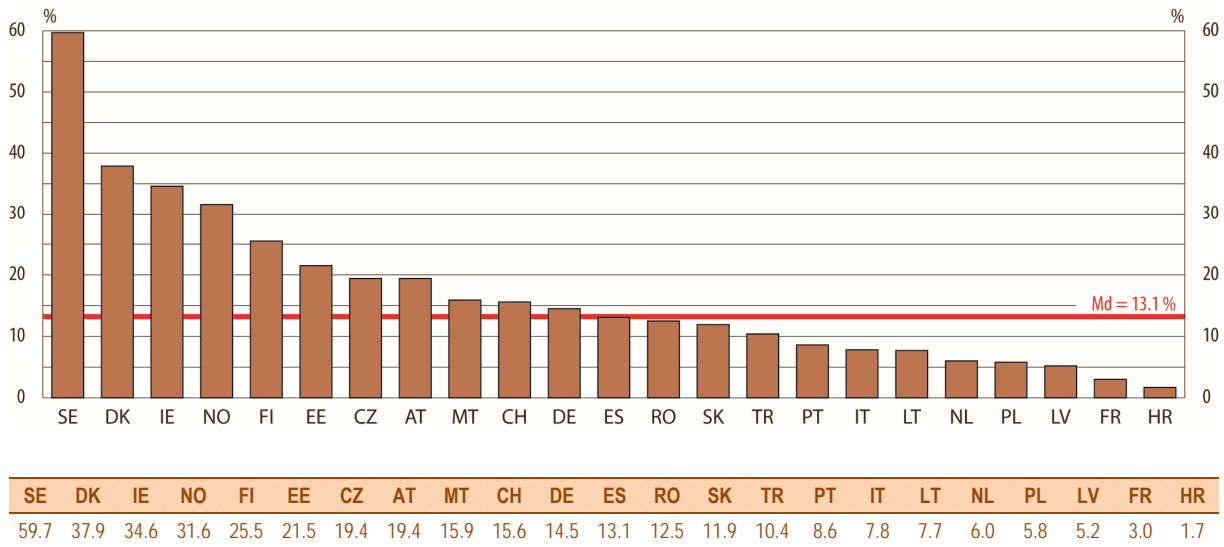
	IS	SE	NO	DK	UK	FI	LV	CH	AT	PT	EE	LI	ES	SK	IE	HU	RO
2005/06	38.2	35.5	33.4	30.4	32.7	27.8	29.0	23.8	17.7	17.2	21.9	21.4	16.3	16.4	17.9	20.8	12.0
2005/06-2008/09	1.9	-0.2	0.3	0.1	-2.6	1.0	-4.4	-0.5	4.6	5.1	-1.2	-0.8	3.8	3.3	1.6	-1.8	5.6
	CZ	LT	MT	AL	SI	DE	IT	BG	BE	NL	TR	CY	HR	PL	FR	MK	
2005/06	14.4	18.4	20.0	8.3	16.9	15.2	13.8	10.5	11.4	12.7	10.2	6.4	8.3	8.9	9.0	4.1	
2005/06-2008/09	1.7	-2.8	-4.4	6.2	-2.5	-1.3	-0.4	2.1	0.2	-1.7	0.8	3.9	0.7	-0.1	-0.3	3.9	

Source: Eurostat, UOE.

The extent to which higher education systems provide lifelong learning opportunities can also be examined through the level of participation of delayed transitions students, i.e. students who have delayed their transition between upper secondary and higher education by at least 2 years (for more details see Glossary and Methodological Notes). Available Eurostudent data covering 23 countries indicate (Figure 6.14) that the highest share of these students can be found in the Nordic countries and Ireland, where they represent at least 25 % of the overall student population. Among these countries, Sweden counts a particularly high proportion of delayed transition students (almost 60 % of the student population). On the other end of the spectrum lie Croatia and France, where delayed transition students represent, respectively, only 1.7 % and 3 % of the total student population.

Overall, these data show that in some EHEA countries, it is relatively common for students to enter higher education after a certain period spent outside the education system, whereas in other countries, there is a small probability that those who did not embark on studies immediately (or almost immediately) after the completion of upper secondary education would enter the system later in life. This could indicate that countries in the first group have already adapted their higher education systems to the needs and expectations of "lifelong learners".

Figure 6.14: Share of delayed transition students in the student population, 2009/10



Source: Eurostudent.

Conclusions

This chapter looked at six interlinked aspects of lifelong learning in higher education. First, it examined how the concept of lifelong learning is understood and interpreted across the EHEA, to what extent lifelong learning has become a recognised mission of higher education institutions and what sources contribute to its financing. The chapter then paid attention to two distinct elements of lifelong learning in higher education, namely flexible delivery of higher education programmes and the recognition of prior learning. The final section looked at how successful different higher education systems are in attracting mature students and delayed transition students to participate in formal higher education programmes.

The analysis has shown that cross-country differences in the understanding of lifelong learning in higher education are difficult to capture. This is partly related to the fact that only in a few countries steering documents covering higher education include a definition of lifelong learning. Where such definition exists, it often has a very broad character, which does not allow a full understanding of how lifelong learning in higher education is viewed and what activities fall under its concept. However, cross-national differences emerge when comparing the main forms of lifelong learning in which higher education institutions are commonly involved. While in some countries lifelong learning in higher education embraces a wide range of activities, in others, the list is still relatively limited. This could indicate that apart from promoting lifelong learning as a concept of its own right, more policy attention could be provided to the promotion of activities which are still rarely seen as a part of lifelong learning provision (e.g. tailor-made provision for industry/companies and other external partners, targeted guidance and counselling services, access provision to attract non-traditional learners, the possibility for the general public to use various higher education resources).

Despite conceptual differences in understanding lifelong learning, in most EHEA countries lifelong learning has already become a recognised mission of all higher education institutions. Yet, activity flows in this field often vary from one institution to another. Besides higher education institutions sometimes specialise in certain lifelong learning activities, whereas other elements of lifelong learning are not included in their offer. This can have various reasons, including specific legal constraints such as the lack of regulations on the recognition of prior learning or the impossibility for higher education institutions to provide formal higher education programmes under flexible arrangements.

From a financial perspective, lifelong learning in higher education commonly involves diverse sources. Higher education institutions rarely dispose of specifically earmarked budgets to cover their lifelong learning provision. Most commonly, institutions finance lifelong learning activities from their general budgets, which are often combined with other financial means. Comparable data on the extent to which lifelong learning is financed from public sources is difficult to obtain. To achieve cross-country comparability in this field it would be necessary to develop a robust methodology that would include an operational definition of lifelong learning in higher education.

With regard to distinct elements of lifelong learning in higher education, the analysis has shown that most EHEA countries recognise the need to enhance flexible delivery of higher education programmes and they address this issue through various policy actions. Around two-thirds of countries have established an official student status other than the status of a full-time student. However, studying with a formal status other than full-time often requires higher private financial investment than studying under traditional arrangements. Therefore, the existence of alternative student statuses needs to be seen in close relation to financial arrangements that apply to each category of students. It can also be noted that the absence of an alternative student status does not necessarily mean the impossibility for students to follow their studies in a flexible way.

Data on the participation of students in part-time studies indicate that mature students are those who are the most likely to study part-time. Flexible delivery of higher education programmes and lifelong learning therefore appear as two interlinked thematic areas. The analysis also shows that cross-country comparisons related to alternative modes of study should be carried out with caution, taking into account conceptual complexity of this field.

Another element of lifelong learning in higher education – the recognition of prior learning – has been followed by a separate scorecard indicator since 2007. The main focus of the present indicator was the recognition of prior non-formal and informal learning. Similarly to previous editions, the analysis looked at two different aspects of the recognition of prior learning: access to higher education and progression in higher education studies. In addition, the indicator examined the extent to which the recognition of prior learning has become a common practice within the higher education sector. The results show that a large proportion of EHEA countries are situated at the two extremities of the spectrum: either they already have a well-established system of recognition of prior learning or they have not yet started their activities in this field. A relatively small number of countries are situated at intermediary stages, which could indicate that despite the policy attention accorded to the theme, only very little developments are taking place across the EHEA. Besides, in countries where the recognition of prior learning has already been implemented, the process is often subject to various limitations and can rarely lead to the award of complete higher education qualifications.

Finally, while policy approaches to lifelong learning in higher education differ from one country to another, the degree of participation of non-traditional learners (in particular mature students and delayed transition students) in formal higher education programmes can be used as a proxy to evaluate how successful different higher education systems are in the implementation of a culture of lifelong learning. The report shows that countries have very different profiles in terms of participation levels of non-traditional students in higher education. While in some of them mature students and/or delayed transition students represent a significant proportion of the total student population, in other instances the proportion of these students is relatively low. Countries also show different evolution patterns between the academic years 2005/06 and 2008/09: In around half of them the proportion of mature students in formal higher education programmes increased, whereas in another half it decreased. This could indicate that the EHEA countries are addressing the establishment of a culture of lifelong learning with very different degrees of intensity.

7. MOBILITY

The Bologna context

Mobility has always been at the heart of the Bologna Process. It has been conceived both as a transversal action to complement the original action lines of the process, and as a key instrument to develop the European Higher Education Area. As explained in the Berlin Communiqué (2003) ⁽⁸⁰⁾, mobility embraces several different dimensions – political, social, economic, as well as academic and cultural. The promotion of student and staff mobility has been reiterated in all ministerial communiqués, and in their 2009 meeting in Leuven/Louvain-la-Neuve, the ministers gave a new boost to mobility in the form of a target to be reached by the EHEA countries: In 2020, at least 20 % of those graduating in the European Higher Education Area should have had a study or training period abroad ⁽⁸¹⁾.

The EHEA mobility target was set before available statistical data was able to express clearly the quantity of mobile students in Europe and in the world. Indeed, the process of gathering the statistics required to measure progress towards the 20 % mobility target has been a topic of major discussion since 2009. The target includes the two major forms of mobility: degree mobility, whereby a student takes a full degree programme in another country, and credit mobility whereby a part of a student's study programme is undertaken in another country. The required revisions to statistical definitions to capture degree mobility of graduates accurately have broadly been agreed, and the first pilot statistical collection was made by Eurostat and OECD in 2010. These data should now start to be available yearly. However, the definitions for the required credit mobility statistics have not yet been finalised, and the sources of data will also need to be developed in many countries beyond available data for EU programmes. Eurostat has initiated this process, and during 2011 and the beginning of 2012 a task-force including experts from national statistical institutes discussed the required methodological developments. Assuming that progress is smooth, the required statistics on credit mobility should start to be available from 2013.

The second half of the first Bologna decade saw a shift in the way the value of mobility was described in the Bologna Process, with increasing attention on the importance of mobility for employability. Not only was mobility being valued for the academic and cultural benefits that it brings, but also for its benefits to the European labour market. This aspect of mobility had previously been in the margins of policy discussion, despite being outlined in the Attali report (Attali, 1998) that prepared the 1998 Sorbonne Declaration. Nevertheless, the two most recent communiqués have each dedicated one paragraph explicitly to employability in the context of an increasingly inter-connected European and global labour market. Thus mobility is perceived as a means of widening knowledge and skills of students and staff, and better preparing them for employment in the twenty-first century.

The Bologna ministerial communiqués have also given attention to the obstacles preventing mobility, naming those which emerge most frequently. Indeed, these have to be eliminated or greatly reduced in order to support and promote mobility on a larger scale.

Mobility is also closely linked to the attractiveness of higher education institutions and is a main tool of internationalisation. Internationalisation of higher education institutions in Europe has been stressed in the Bologna Process, and the decade has seen many higher education institutions taking forward their implementation strategies in this area. It is also worth mentioning that one of the innovative features of

⁽⁸⁰⁾ Realising the European Higher Education Area. Communiqué of the Conference of Ministers responsible for Higher Education, Berlin, 19 September 2003.

internationalisation during the last decade has been the creation of an international environment at home institutions for those who for one reason or another cannot pursue a study period abroad. The institution can provide courses taught in English or other foreign languages for domestic students and facilitate more interaction with students from abroad in an increasingly multi-cultural environment.

BFUG Working Group on Mobility

The BFUG established a working group on mobility at its meeting in Stockholm on 28/29 September 2009. Its main task was to draft a Mobility Strategy for the EHEA which is to be adopted at the Ministerial Conference in Bucharest in April 2012. The Strategy focuses on the importance of mobility and internationalisation in higher education, and outlines key action required by the EHEA countries to pave the way for more high quality mobility exchanges and fewer obstacles across the continent.

BFUG Working Group on International Openness

The BFUG also continued to support a working group on international openness to take forward the recommendations of the 2009 report “The European Higher Education Area (EHEA) in a global context: Report on overall developments at the European, national and institutional levels” (Jansen & Brenn-White, 2011). The working group has set up the Information and Promotion Network (IPN) which aims at enhancing an international promotion of the EHEA as well as the promotion of national higher education systems in a European context. One of the IPN's outcomes is a report based on a survey which focused on international marketing, i.e. activities that are aimed at attracting international students and thus at increasing incoming mobility to the EHEA. In this respect, different channels of providing information about the EHEA as well as the ways of building ties across borders and organisations have been proposed.

This chapter has benefited from close cooperation with both working groups mentioned above. In particular, one of the main sources of information for this chapter – the BFUG mobility questionnaire – was developed by the mobility working group.

Chapter outline

This chapter aims to give an overview of the progress EHEA countries have made so far. The chapter first looks at the main different types of mobility. Statistical data on incoming and outward mobility show the main trends in mobility flows of students from the EHEA and the rest of the world studying in one of the EHEA countries, as well as students who are nationals of one country and graduate in a different country within the EHEA. A substantial part of this chapter is dedicated to obstacles and measures adopted to foster student mobility. The last section encompasses staff mobility, and attempts to identify the main obstacles and measures in place.

⁽⁸¹⁾ The Bologna Process 2020 – The European Higher Education Area in the new decade. Communiqué of the Conference of European Ministers Responsible for Higher Education, Leuven and Louvain-la-Neuve, 28-29 April 2009.

7.1. Types of mobility

Although the Leuven/Louvain-la-Neuve Communiqué sets a concrete target for mobility, it does not provide definitions and refers only to "a study or training period abroad" ⁽⁸²⁾. "Types" of mobility are mentioned only in general terms, as ministers call upon each country to increase mobility and "to diversify its types and scope" ⁽⁸³⁾.

These types of mobility have been taken forward and defined in the context of discussions on statistical indicators at European level. The definitions used in this report have been formulated by Eurostat in the context of its work on the measurement of mobility targets within the Bologna Process.

The most important distinction for student mobility from a statistical point of view, as well as for policy making, is between degree and credit 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. 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. Thus the student typically begins a programme in the home institution, moves to another institution for an agreed part of the programme, and then returns to the home institution in order to finish the programme.

While information on degree mobility has for some years been collected through administrative sources, credit mobility data has not yet been collected in this way. The only credit mobility data systematically collected is through EU sponsored programmes such as Erasmus. However, even if all programme information data are put together, it is clear that the coverage of credit mobile students would be incomplete unless efforts at national level could be increased to cover all students who have had a recognised stay abroad within formal education.

Another important distinction of mobility types is linked to mobility flows commonly addressed as incoming and outward mobility. Incoming mobility refers to the country of destination – the country where the student moves to in order to study – and is usually measured by the ratio between the mobile students studying in the country and the total number of students studying in the country. The incoming mobility rate may be considered as an indicator of the attractiveness of the country as a destination for international students.

Outward mobility refers to the country of origin – the country from where the student moves. While for many students this will be identical to the country of the student's nationality, it is more accurate to consider the country of permanent/prior residence or prior education. It can be measured by the ratio of the number of students from the country of origin to the total student population of the country of origin. The outward mobility rate may be considered as an indicator of a pro-active policy for students to acquire international experience (particularly for credit mobility). However, it may also be an indicator of possible insufficiencies in the education system of the country of origin (particularly for degree mobility).

While degree and credit mobility are the main forms of mobility under consideration in this report, other forms should not be forgotten. Mobility encompasses a wide range of short-term provision such as internships/work placements, research stays, summer schools, language courses and voluntary work. Statistical data on these types of mobility are, however, not collected at European level.

⁽⁸²⁾ The Bologna Process 2020 – The European Higher Education Area in the new decade. Communiqué of the Conference of European Ministers Responsible for Higher Education, Leuven and Louvain-la-Neuve, 28-29 April 2009.

⁽⁸³⁾ Ibid.

7.2. Student mobility flows

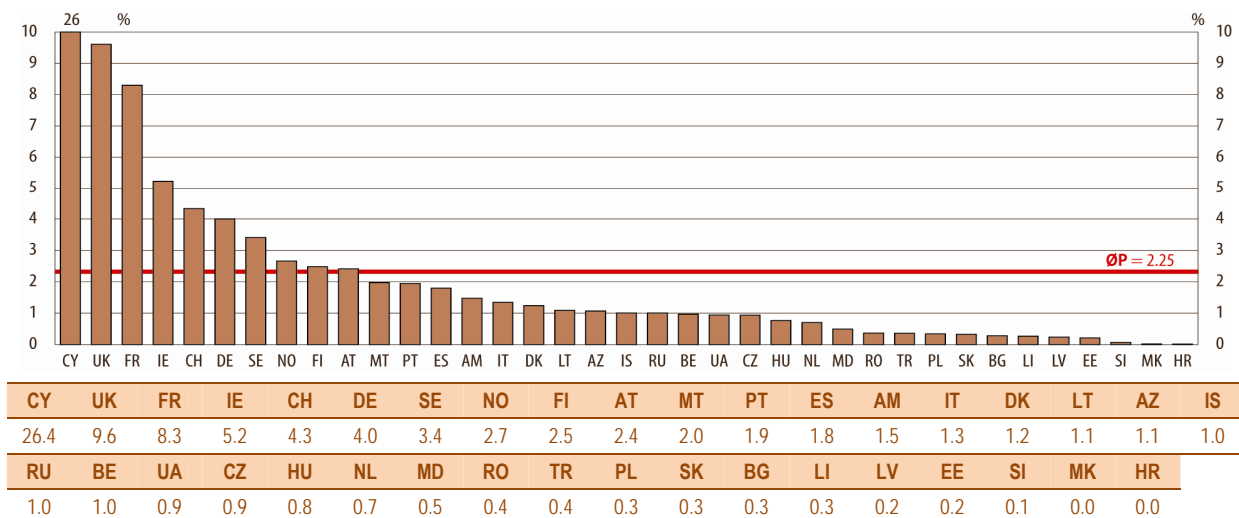
Mobility in Europe should not, and cannot, be separated from trends at global level. Even when the focus is on European countries, mobility flows from other continents to Europe as well as flows of European students worldwide form a significant part of the picture. Overall, three main student mobility flows can be distinguished:

- degree mobility flows from outside the EHEA to the EHEA
- degree mobility flows from inside the EHEA to outside the EHEA
- degree and credit mobility flows within the EHEA

7.2.1. Degree mobility flows from outside the EHEA to the EHEA

Figure 7.1 depicts the incoming degree mobility rate to EHEA countries, showing mobile students from the whole world coming to an EHEA country, but excluding mobile students from other EHEA countries. These students are shown as a percentage of the total number of students enrolled. It should be underlined that for nearly half of the countries in Figures 7.1 and 7.2, the concept used is foreign citizenship/nationality and not mobile students per se. As noted above, this makes the statistics less precise in terms of measuring mobility flows.

Figure 7.1: Incoming degree mobility rate – tertiary education mobile students from outside the EHEA studying in the country as a percentage of the total number of students enrolled, by country of destination, 2008/09



Notes: Data refer to foreign students (student with the citizenship of a foreign country) instead of mobile students (student who moved to the country in order to study) for the following countries: Armenia, Austria, Azerbaijan, Czech Republic, Finland, the former Yugoslav Republic of Macedonia, France, Ireland, Italy, Latvia, Malta, Moldova, Norway, Poland, Russia, Turkey and Ukraine.

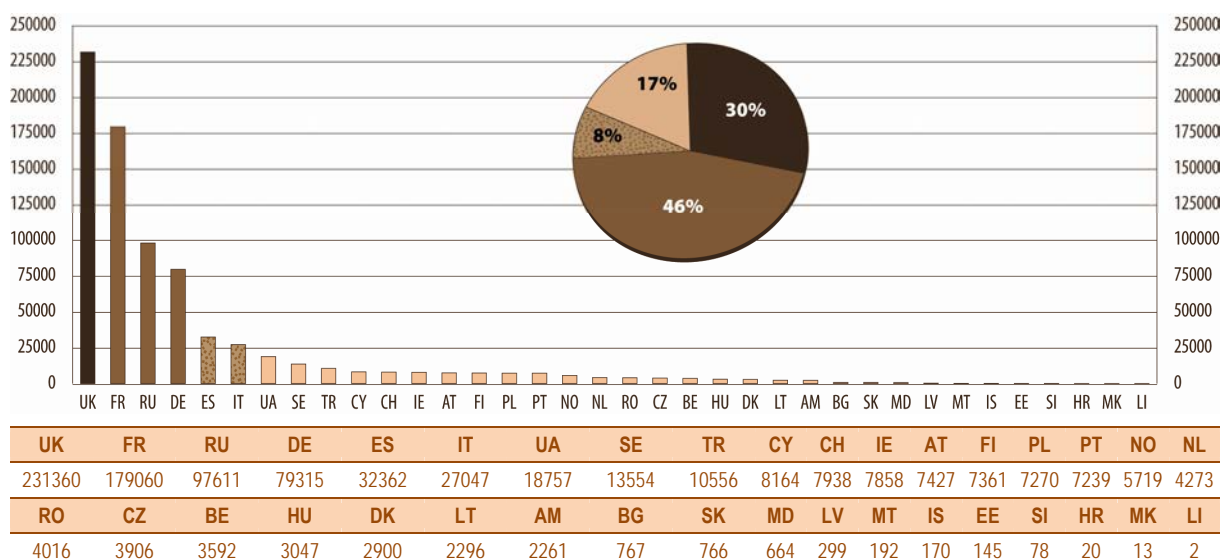
EHEA aggregate excludes the following countries of destination: Albania, Andorra, Azerbaijan, Bosnia and Herzegovina, Georgia, Holy See, Montenegro and Serbia.

Source: Eurostat (UOE data collection).

Only four countries, namely Cyprus, the United Kingdom, France and Ireland, reach more than 5 %. These countries thus seem to be the most attractive countries for students coming from outside the EHEA. At the other end of the spectrum, 16 countries reach less than 1 %. The weighted average of all countries is 2.25 %.

Although from this figure a number of countries appear to have a low rate of incoming mobility from outside the EHEA, the size of the country and the overall volume of incoming students also need to be considered. Indeed a very different picture emerges when looking at the distribution of incoming mobile students by country of destination (see Figure 7.2). Four countries – the United Kingdom, France, Russia and Germany – attract 76 % of all students from outside the EHEA.

Figure 7.2: Distribution of incoming degree tertiary education mobile students from outside the EHEA by country of destination, 2008/09



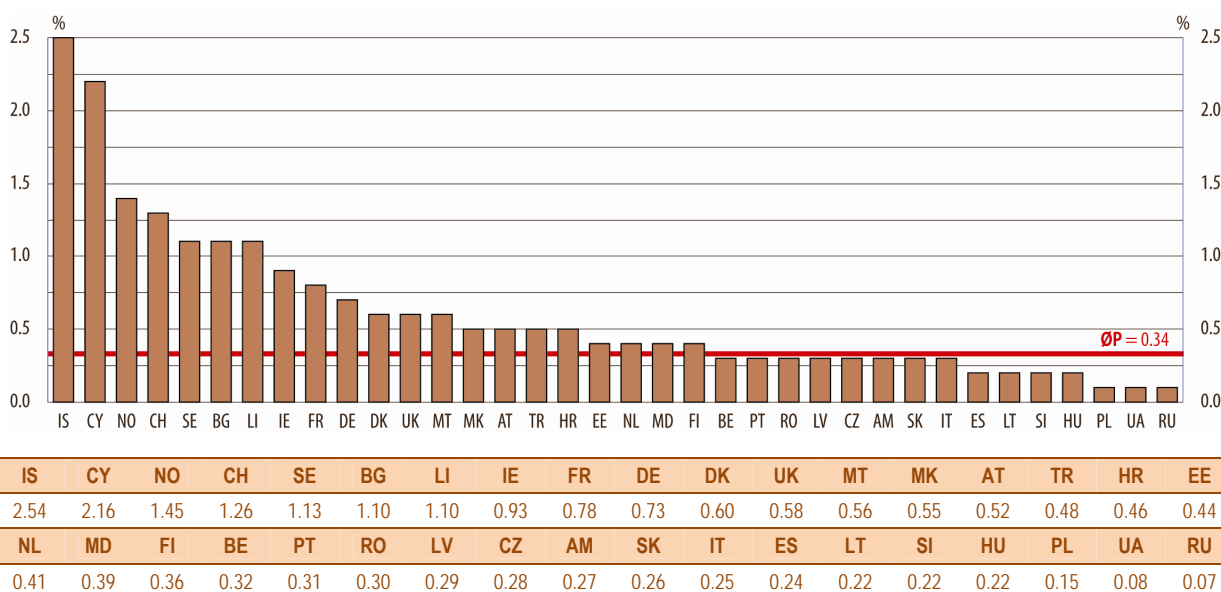
Note: Data refer to foreign students instead of mobile students for the following countries: Armenia, Austria, Azerbaijan, Czech Republic, Finland, the former Yugoslav Republic of Macedonia, France, Ireland, Italy, Latvia, Malta, Moldova, Norway, Poland, Russia, Turkey and Ukraine.

Source: Eurostat (UOE data collection).

7.2.2. Degree mobility flows from inside the EHEA to outside the EHEA

The outward degree mobility rate shows mobile students that graduated abroad as a percentage of the total number of students graduating in the country of origin.

Figure 7.3: Outward degree mobility rate – tertiary education students from a country of the EHEA studying abroad outside the EHEA as a percentage of the total number of students of the same country of origin, 2008/09



Notes: Destinations outside of the EHEA considered are Australia, Canada, Japan, New Zealand and the United States.

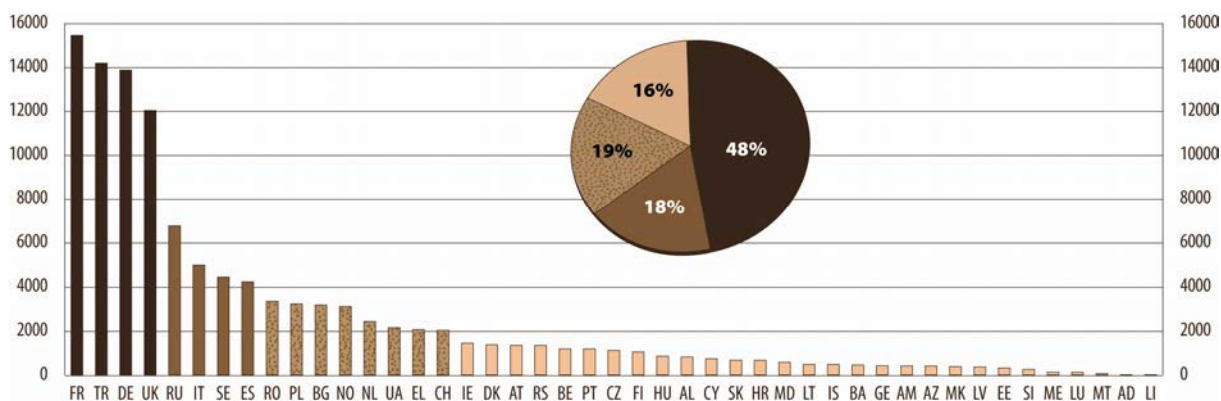
Data refer to foreign students instead of mobile students for the following country of destination: Japan.

Source: Eurostat (UOE data collection).

The rate is highest in the small states of Iceland and Cyprus – reaching slightly more than 2 % (see Figure 7.3). These countries are followed by Norway, Switzerland, Sweden, Bulgaria and Liechtenstein, where the range is from 1 % to 1.5 %. The weighted average of the countries reaches only 0.34 %.

When the information is analysed in relation to the country of origin, four countries can be seen to provide a very significant proportion of the students studying abroad outside the EHEA. These are France, Turkey, Germany, and the United Kingdom (see Figure 7.4). Students from these four countries present almost half of all outward mobile students from the EHEA studying outside the area.

Figure 7.4: Distribution of outward degree tertiary education students from the EHEA to abroad outside the EHEA by country of origin, 2008/09



FR	TR	DE	UK	RU	IT	SE	ES	RO	PL	BG	NO	NL	UA	EL	CH	IE	DK	AT	RS	BE	PT	CZ
15445	14172	13859	12015	6749	4972	4425	4209	3336	3218	3166	3101	2422	2144	2052	2019	1438	1370	1340	1337	1181	1179	1111
FI	HU	AL	CY	SK	HR	MD	LT	IS	BA	GE	AM	AZ	MK	LV	EE	SI	ME	LU	MT	AD	LI	
1036	850	815	735	670	661	569	478	476	445	417	410	406	379	366	312	255	128	120	58	15	12	

Notes: Destinations outside of the EHEA considered are Australia, Canada, Japan, New Zealand and the United States.

Data refer to foreign students instead of mobile students for the following country of destination: Japan.

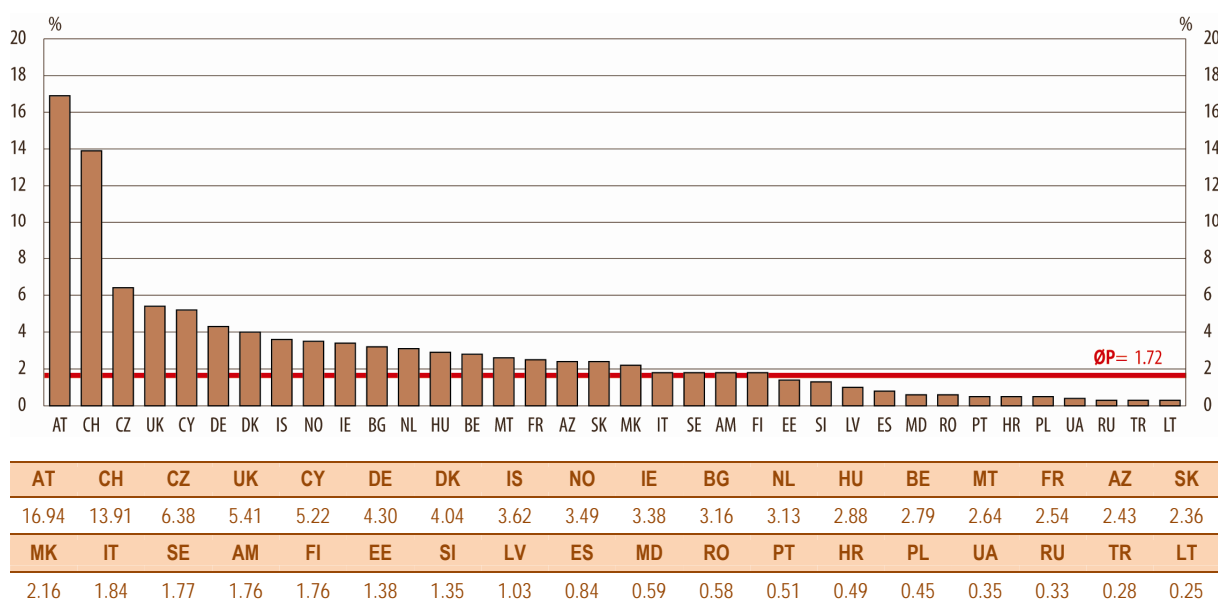
Source: Eurostat (UOE data collection).

7.2.3. Degree and credit mobility flows within the EHEA

It is important to keep in mind that mobility seems currently to be a relatively minor phenomenon and does not reach significant values compared to the total numbers of students enrolled in higher education. Based on Eurostat data, the average number of students studying in the EHEA coming from any country from abroad (i.e. incoming mobility from outside the EHEA plus incoming mobility from inside the EHEA) reaches slightly less than 4 % (see Figures 7.1 and 7.5). Again, it should be kept in mind that many countries only provide data on students with foreign citizenship/nationality.

The majority of countries reporting on total mobility flows record more outward than incoming students. South and East European countries tend to have more outward mobility, while West European countries have more incoming students. Austria with 16.94 % and Switzerland with 13.91 % have the highest incoming mobility rate in the EHEA (see Figure 7.5). All other countries show levels below 10 % out of which all but three (Czech Republic, United Kingdom and Cyprus) are below 5 %. The weighted average is 1.72 %.

Figure 7.5: Incoming degree mobility rate – tertiary education mobile students from abroad from inside the EHEA studying in the country as a percentage of the total number of students enrolled, 2008/09

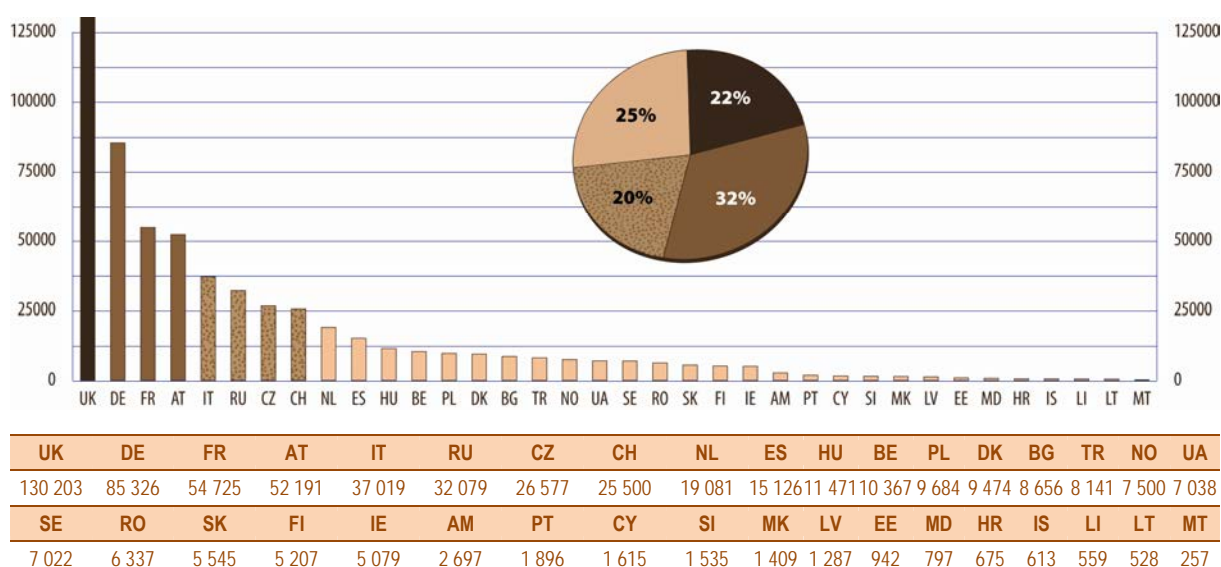


Note: Data refer to foreign students instead of mobile students for the following countries: Armenia, Austria, Azerbaijan, Czech Republic, Finland, the former Yugoslav Republic of Macedonia, France, Ireland, Italy, Latvia, Malta, Moldova, Norway, Poland, Russia, Turkey and Ukraine.

Source: Eurostat (UOE data collection).

Figure 7.6 presents the distribution of incoming degree mobile students from inside the EHEA. It shows that more than half of all incoming students from inside the EHEA choose the United Kingdom, Germany, France and Austria as their study destination.

Figure 7.6: Distribution of incoming degree tertiary education mobile students from abroad from inside the EHEA by country of destination, 2008/09

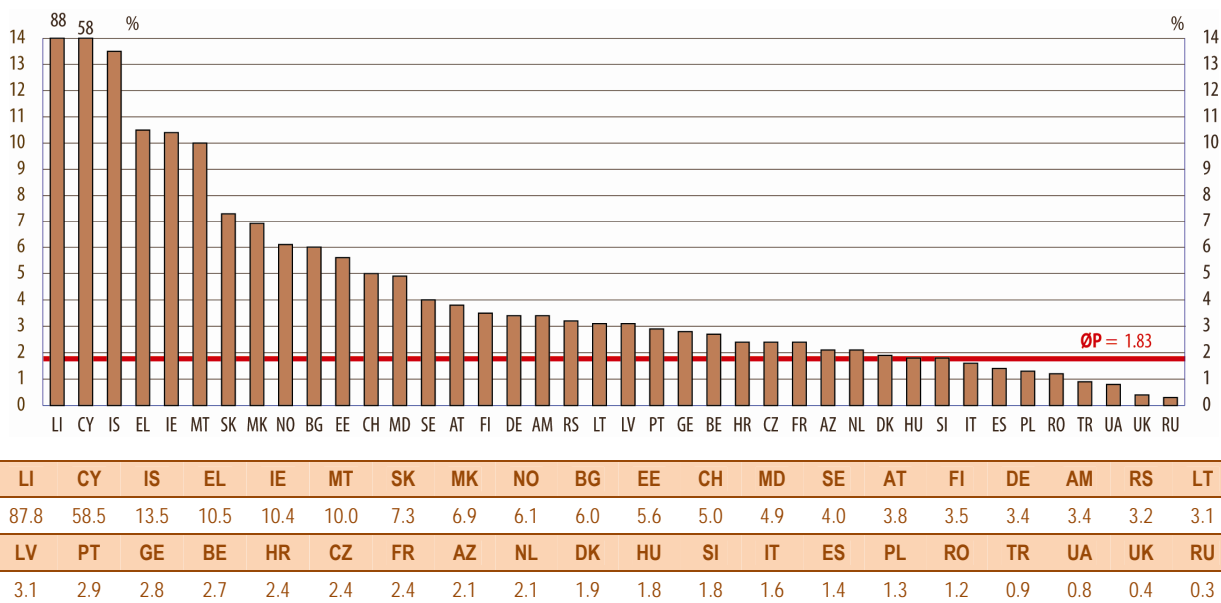


Notes: Data refer to foreign students instead of mobile students for the following countries: Armenia, Austria, Azerbaijan, Czech Republic, Finland, the former Yugoslav Republic of Macedonia, France, Ireland, Italy, Latvia, Malta, Moldova, Norway, Poland, Russia, Turkey and Ukraine.

Source: Eurostat (UOE data collection).

Figure 7.7 depicts graduates from a country of the EHEA who have graduated abroad inside the EHEA as a percentage of the total number of graduates of the same country of origin. The graduation values included in the graph are one of the important elements for evaluation of progress towards the Bologna 20 % benchmark.

Figure 7.7: Outward degree mobility rate – tertiary education graduates from a country of the EHEA graduating inside the EHEA as a percentage of the total number of graduates of the same country of origin, 2008/09



Notes: The following destinations inside the EHEA were not included: Albania, Andorra, Bosnia and Herzegovina, Holy See and Montenegro.

For outward mobility in terms of graduation, data refer to foreign students instead of mobile students for the following countries of destination: Armenia, Azerbaijan, Belgium, Bulgaria, Czech Republic, Finland, France, Georgia, Greece, Iceland, Italy, Latvia, Lichtenstein, Malta, Poland, Portugal, Russia and Turkey.

Source: Eurostat (UOE data collection).

Apart from Cyprus and Liechtenstein with outward degree mobility rates of graduates of more than 50 %, Iceland, Ireland, Slovakia and Malta have the highest values, between 10 % and 14 % (see Figure 7.7). The vast majority of EHEA countries, however, reach values of less than 5 %. Based on these data from academic year 2008/09, the weighted average is 1.83 %.

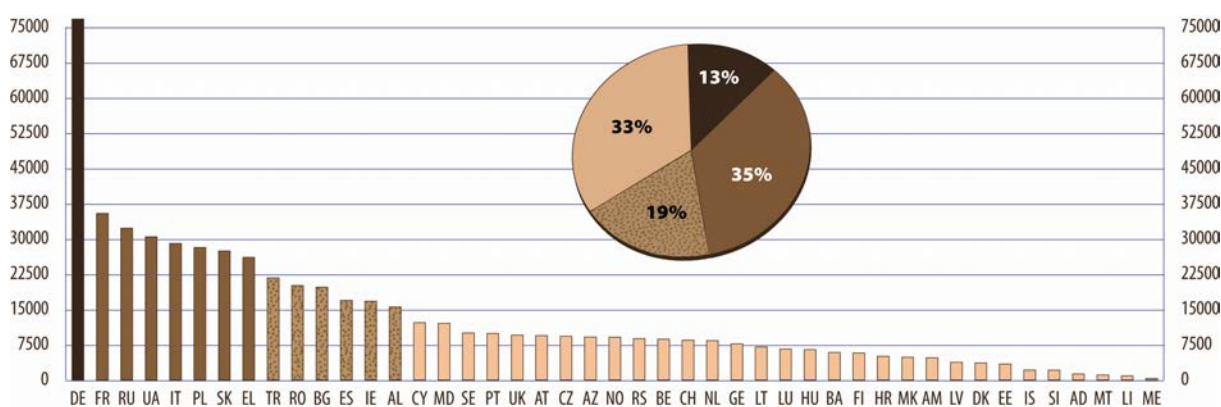
Figure 7.8 presents information on outward degree mobility to another EHEA country from the perspective of the country of origin.

The greatest share of EHEA students enrolled for a degree study in another EHEA country come from Germany, and this is followed by France, Russia, Ukraine, Italy, Poland, Slovakia and Greece (see Figure 7.8).

All the figures so far concern degree mobility, and credit mobility is not covered. Indeed, the only significant source of data concerning credit mobility is currently the European Union's Erasmus programme, which is undoubtedly the most widely used instrument of European credit mobility. Nevertheless not all EHEA countries are able to participate in Erasmus and hence there may be imbalances in credit mobility as a consequence.

The absolute numbers of students abroad under Erasmus have continuously grown since the conception of the programme. Erasmus student exchange in the academic year 2009/10 increased by 7.4 % (European Commission 2011, p. 4). If this trend continues, the Erasmus target of three million students, since the beginning of the programme in 1987/88, will be reached by the end of the academic year 2012/13 (Ibid).

Figure 7.8: Distribution of outward degree tertiary education mobile students from the EHEA to abroad inside the EHEA (enrolment) by country of origin, 2008/09



Notes: The following destinations inside the EHEA were not included: Albania, Andorra, Azerbaijan, Bosnia and Herzegovina, Georgia, Holy See, Montenegro and Serbia.

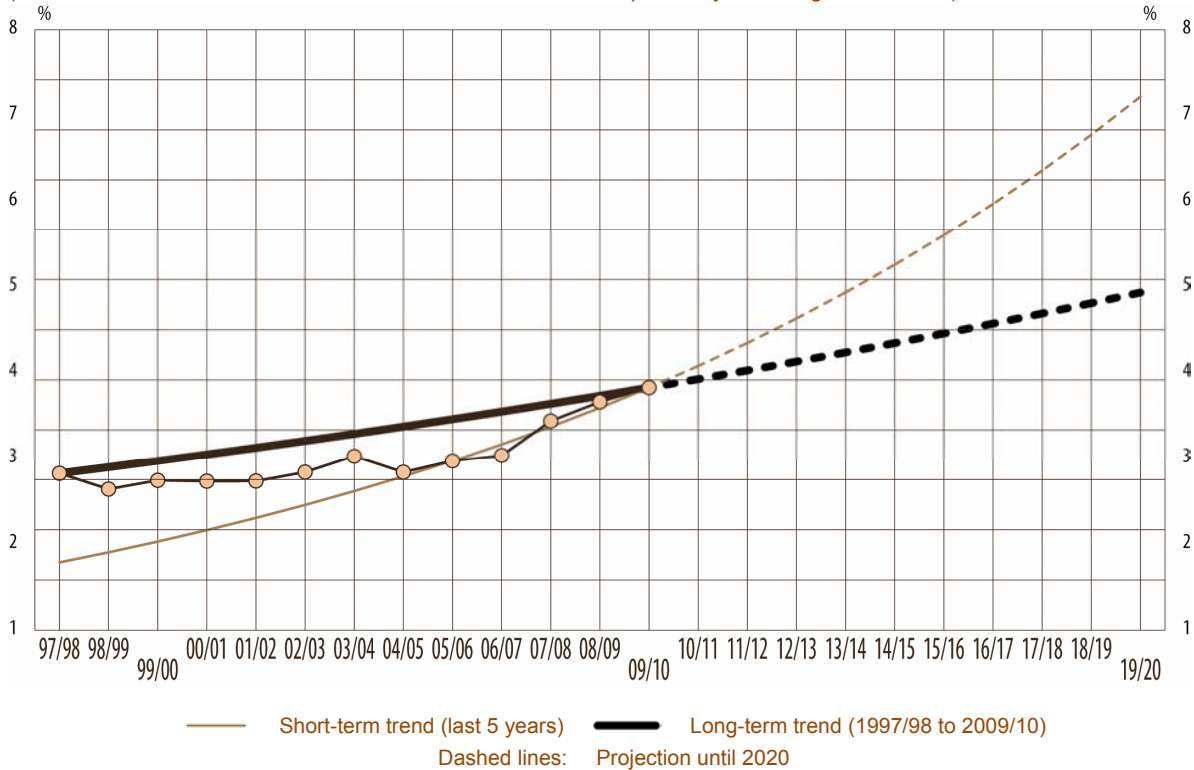
Data refer to foreign students instead of mobile students for the following countries of origin: Armenia, Austria, Azerbaijan, Czech Republic, Finland, the former Yugoslav Republic of Macedonia, France, Ireland, Italy, Latvia, Malta, Moldova, Norway, Poland, Russia, Turkey and Ukraine.

Source: Eurostat (UOE data collection).

Figure 7.9 shows how the Erasmus programme can contribute to the 20 % benchmark by 2020. The chances that a higher education student goes abroad within the framework of the Erasmus programme (in a country participating in Erasmus) have in general increased significantly from 1998 to 2010. If the trend over the period 1997/98 to 2009/10 is kept, it should reach around 5 % of the relevant student population in 2020. This is the most conservative projection. If the trend of the last years (projection based on the period 2005-2006) continues, it may reach 7 % in 2020. However, it is necessary to recognise that some aspects of the fluctuations and progress in the past years are due to structural and organisational changes of the Erasmus programme.

Figure 7.9: Ratio students participating in Erasmus / Enrolment over 4 academic years

(Chances that a student has been abroad under Erasmus if s/he spends 4 years in higher education)



Notes:

- Long-term trend based on development between 1997/98 and 2009/10, projection until 2020
- Short-term trend based on development between 2005/06 and 2009/10, projection until 2020.

Source: European Commission (calculations by Eurostat).

7.2.4. Balanced vs. imbalanced mobility

The London Communiqué⁽⁸⁴⁾ was the first one in the Bologna Process to highlight more equitably balanced mobility within the EHEA, and thus turned attention to mobility flows across the EHEA. The aspiration of more balanced mobility was reinforced by the Leuven/Louvain-la-Neuve Communiqué⁽⁸⁵⁾ which states that mobility should lead to a more balanced flow of incoming and outward students across the EHEA.

Statistical background

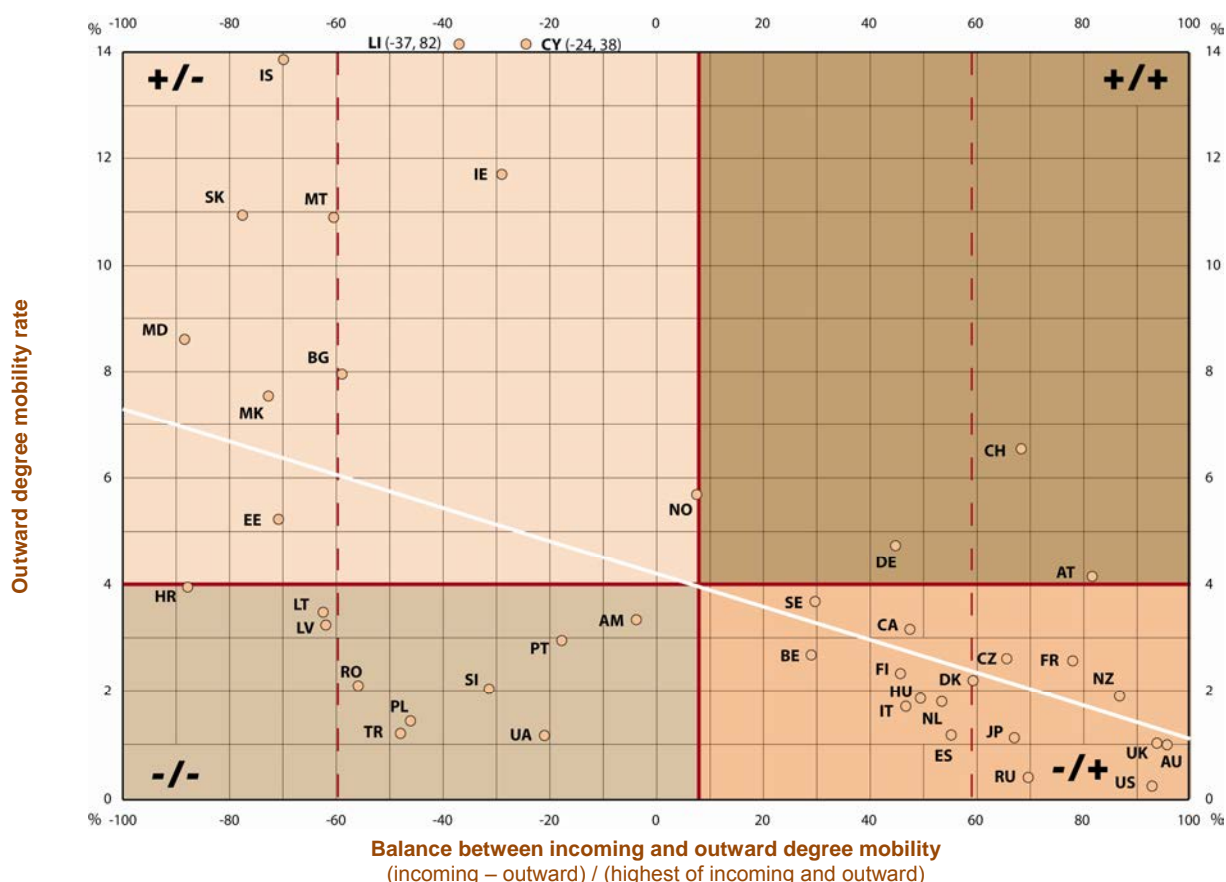
While the notion of balanced mobility may appear intuitively to be desirable, reality in this area is complex. For example, low incoming and low outward mobility rates would be balanced – but the reality would not be positive – assuming that mobility is considered to be positive. High incoming and high outward mobility rates would also be balanced, but without knowing more about the populations involved in the mobility flows and in the reasons for these flows, it is impossible to assess their desirability. This section demonstrates the balance between outward and incoming mobility flows and identifies four types of mobility systems.

An interesting comparison can be made between incoming and outward degree mobility in the EHEA (see Figures 7.5 and 7.7). Overall, the differences are highest in Cyprus and Austria (30.59 % and 13.30 %) followed by Iceland, Ireland, Liechtenstein, Malta, Moldova, Slovakia and Switzerland (ranging from 6 to 9 %). In all these countries, with the exception of Austria and Switzerland, the difference is in favour of outward mobility. At the other end of the scale are countries with very balanced rates of European incoming and outward mobility flows. Belgium, Finland, France, Germany, Italy, Norway, Poland, Romania, Slovenia, Spain, Sweden, Turkey and Ukraine have a difference of less than 1 %. The mobility flows in these countries can therefore be considered to be balanced – but only if mobility within the EHEA is the only form of mobility taken into account. Indeed the flows are not necessarily balanced between specific countries or regions. The general tendency is towards East-West imbalances, with incoming students coming predominantly from Eastern or Southern Europe and outward students heading towards Western or Northern Europe.

⁽⁸⁴⁾ London Communiqué: Towards the European Higher Education Area: responding to challenges in a globalised world, 18 May 2007.

⁽⁸⁵⁾ The Bologna Process 2020 – The European Higher Education Area in the new decade. Communiqué of the Conference of European Ministers Responsible for Higher Education, Leuven and Louvain-la-Neuve, 28-29 April 2009.

Figure 7.10: Balance as a measure of the attractiveness of the education system of the country at tertiary education level (mobility flows including EHEA and outside EHEA), 2008/09



"Limited" systems (high outward and negative balance)	+ / -	+ / +	"Open" systems (high outward but positive balance)
"Closed" systems (low outward and negative balance)	- / -	- / +	"Attractive" systems (low outward and positive balance)

Notes: Data refer to foreign students instead of mobile students for the following countries: Armenia, Austria, Azerbaijan, Czech Republic, Finland, the former Yugoslav Republic of Macedonia, France, Ireland, Italy, Latvia, Malta, Moldova, Norway, Poland, Russia, Turkey and Ukraine.

Destinations of mobility considered are the EHEA (except Albania, Andorra, Australia, Azerbaijan, Bosnia and Herzegovina, Georgia, Holy See, Japan, Montenegro, New Zealand, Serbia and the United States).

Source: Eurostat (UOE data collection).

Guide to the chart

Chart plots balance against outward mobility.

Dots represent countries.

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

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

Negative balance means that outbound mobility is higher than inbound mobility.

Positive balance means that inbound mobility is higher than outbound mobility.

The most balanced countries (defined as the more balanced 50 % among the countries where data is available) are between the two vertical dashed lines.

The vertical red line represents the average of the balance and the horizontal red line represents the average of outward mobility rate (countries un-weighted). The crossing point of the two black lines marks the centre of the cloud of country dots.

The white line: countries above the line show a level of outward mobility higher than what one would expect given their balance; countries below the line show a level of outward mobility lower than what one would expect given their balance.

The chart in Figure 7.10 is split into four quadrants with the following characteristics:

The bottom right quadrant includes countries with relatively low outward mobility and an excess of incoming over outward mobility. These countries can be characterised as highly "attractive".

The upper right quadrant includes countries with an excess of incoming over outward mobility, indicating that they are attractive, but at the same time they indicate a relatively high outward mobility. These countries can therefore be characterised as "open" with a relatively high number of students going abroad to study but even more students coming from abroad.

The upper left quadrant includes countries with relatively high outward mobility and an excess of outward over incoming mobility; for whatever reasons, these education systems appear to lack the capacity to attract students while significant numbers of students leave to study in other systems. They can therefore be characterised as "limited" systems.

The lower left quadrant includes countries with relatively low levels of outward mobility and rates of incoming mobility that are even lower; the education systems in this quadrant are not attractive compared to other European countries, and students do not seem to have the same opportunities to go abroad as in other countries. Thus the systems here can be characterised as "closed".

On the basis of this data, currently only four countries have higher education systems that can be considered as open – Austria, Germany, Norway and Switzerland. Two of these countries, Germany and Norway, manage to have both an open and a balanced system.

When considering the most balanced countries (between -60 and 60 %), 14 have an outward degree mobility rate that is below the EHEA average.

National perceptions of balanced mobility

As there is no definition of balanced mobility at European level, countries were asked whether they have such a definition in their national steering documents. Around half of the countries have a definition or a common understanding of balanced mobility, defining it as a number of incoming and outward mobile students "approximately the same" or even more strictly as "the same". Turkey has even given a numerical expression to the concept, and considers mobility as balanced if the difference between incoming and outward students is within 15 %.

It is also true that a country might be aware of some imbalances and may consider this positively. High rates of incoming mobility may be perceived favourably for a national education system and economy. The reasons range from additional income to higher education institutions to declining numbers in the working age population and hence desirable influx of highly skilled people. Outward mobility may also be considered positively – strengthening links to other countries and preparing graduates for the European and global market place.

While mobility between two particular countries might be balanced, overall mobility is usually imbalanced. Indeed 34 higher educational systems report that they consider their mobility flows as not balanced. Yet only 11 countries address this issue consciously through a mobility strategy or higher education action plan. In these cases, they acknowledge the need of more balanced mobility and they primarily declare the necessity for additional funding, strengthening language skills and increasing the motivation of students to be mobile.

The EHEA countries also reported more specifically whether there are significant imbalances with particular countries, regions or continents. As many as 35 educational systems indicate this phenomenon. Some countries report significant imbalances with a neighbouring country, often linked to a specific study field. This is the case, for example, of the French Community of Belgium that reports imbalanced flows of French students enrolling in paramedical or veterinary medicine, and Austria that reports a similar phenomenon in relation to German students enrolling in medicine and psychology.

Other countries report imbalances in both incoming and outward students, but with different countries and regions. Armenia identifies the EHEA and the USA as the main regions for outward mobility while the Middle East and India are the sources of incoming students; Norway sees the USA, Australia and the United Kingdom as the main destinations for outward students while Russia, Germany and France are the main countries providing incoming mobility. Similarly, Cypriot students head towards Greece and the United Kingdom, while incoming students come from Bangladesh, Pakistan, Sri Lanka, India and China. Overall, significant imbalances with countries of other continents are observed with outward mobility flows predominantly heading towards the USA, and incoming mobility flows coming from Asia, and in particular China and India, as well as the Middle East. Thus the East-West flows that can be identified within the EHEA are echoed by East to West global mobility flows.

7.3. Measures to promote and support student mobility

Countries across the EHEA take various measures in order to enable and foster student mobility. These include the adoption of programmes at European, national and institutional level. Financial support measures, including ensuring the portability of student support, are a significant challenge for many countries. There is also a strong focus on identifying and removing obstacles to mobility.

7.3.1. Programmes at European level

Firstly, it is important to point out that European policy on mobility is pursued through a number of different programmes and measures – rather than through a single instrument or programme. While Erasmus is the most significant instrument for the countries participating in the Lifelong Learning Programme, the Tempus and Erasmus Mundus programmes create conditions for mobility in non-EU EHEA countries – although the scope of eligible countries for these programmes extends beyond the EHEA. The sub-regional exchange programme CEEPUS also supports student mobility and cooperation between universities in Central, Eastern and South-Eastern Europe. Similarly, the Nordic-Baltic programme NordPlus, with a higher education sub-programme supports cooperation and networking in that region, and provides mobility grants for students.

European programmes are a valuable source of information and usually the only form of cross-national monitoring and reporting on mobility. As mentioned in the *Focus on Higher Education* (Eurydice, 2010), these programmes give a great boost to national action to promote mobility, which is very often built around European programmes.

7.3.2. Programmes and strategies at national level

Mobility is usually a part of internationalisation strategies and initiatives for higher education. When it comes to conceptual documents at national level, half of the countries in the EHEA report that they have a national strategy or action plan to foster mobility. Moreover, a number of countries adopt steering documents highlighting an issue of quality in the field of mobility and some launch separate programmes implementing financial support measures to stimulate mobility.

An interactive bottom-up approach of drafting a national strategy can be found in Finland. Over 1 200 respondents shared their views on internationalisation of higher education institutions via web-based open consultation. In addition, six thematic workshops have been organised where a total of 130 experts participated.

The majority of countries that have a national strategy or action plan prioritise particular geographical regions for student mobility. Most often it is the EHEA, and this is followed by USA, Canada and Asia.

While the majority specifies a geographical region, a few countries stipulate particular countries or sub-geographical areas for privileged cooperation on student mobility. For instance Denmark focuses on China and the USA, Austria on the EHEA, but highlighting the countries of Central and Eastern Europe in particular. Similarly, Slovenia focuses on the Western Balkan countries and the Mediterranean area. It is also interesting to note that some countries may have a different focus for ingoing and outward mobility. Thus one geographical region may be privileged for students who want to study abroad while students from a different region may be targeted for incoming mobility.

A vast majority of countries with national strategies or action plans monitor their impact or at least certain aspects of their strategies. Monitoring is mainly undertaken by ministries and other central authorities on an annual basis and is often based on reports of higher education institutions. At the same time, even if student mobility is monitored, it is difficult to ascertain whether the changes in mobility flows are due to specific measures or external factors such as the financial crisis.

While around half of the countries claim to have a national level strategy, almost all countries report that their higher education institutions have mobility strategies. Thus institutional strategies may or may not relate to the national level. Some countries suggest that a national strategy can serve as an impetus and support to institutional strategies.

7.3.3. Target setting

On the whole, less than half of the countries in the EHEA stipulate specific mobility targets. On the other hand, when looking only at countries with national strategies or actions plans, around three quarters set a target for at least one type of mobility.

The agreed target of at least 20 % of those graduating in the EHEA having a study or training period abroad as formulated in the Leuven/Louvain-la-Neuve Communiqué ⁽⁸⁶⁾ is often mentioned by those countries that state their targets for different forms of outward mobility. Only Austria, Germany and the Netherlands set more ambitious targets. Germany sets a target for all forms of mobility, namely credit and degree mobility. The target should reach 50 % of higher education institution graduates staying abroad of which at least 20 % shall study at least one semester at a foreign institution. Austria and the Netherlands set the targets in credit mobility. In the case of Austria, it is 50 % of graduates by 2020. The Netherlands stipulates the range of 17 to 25 % by 2013.

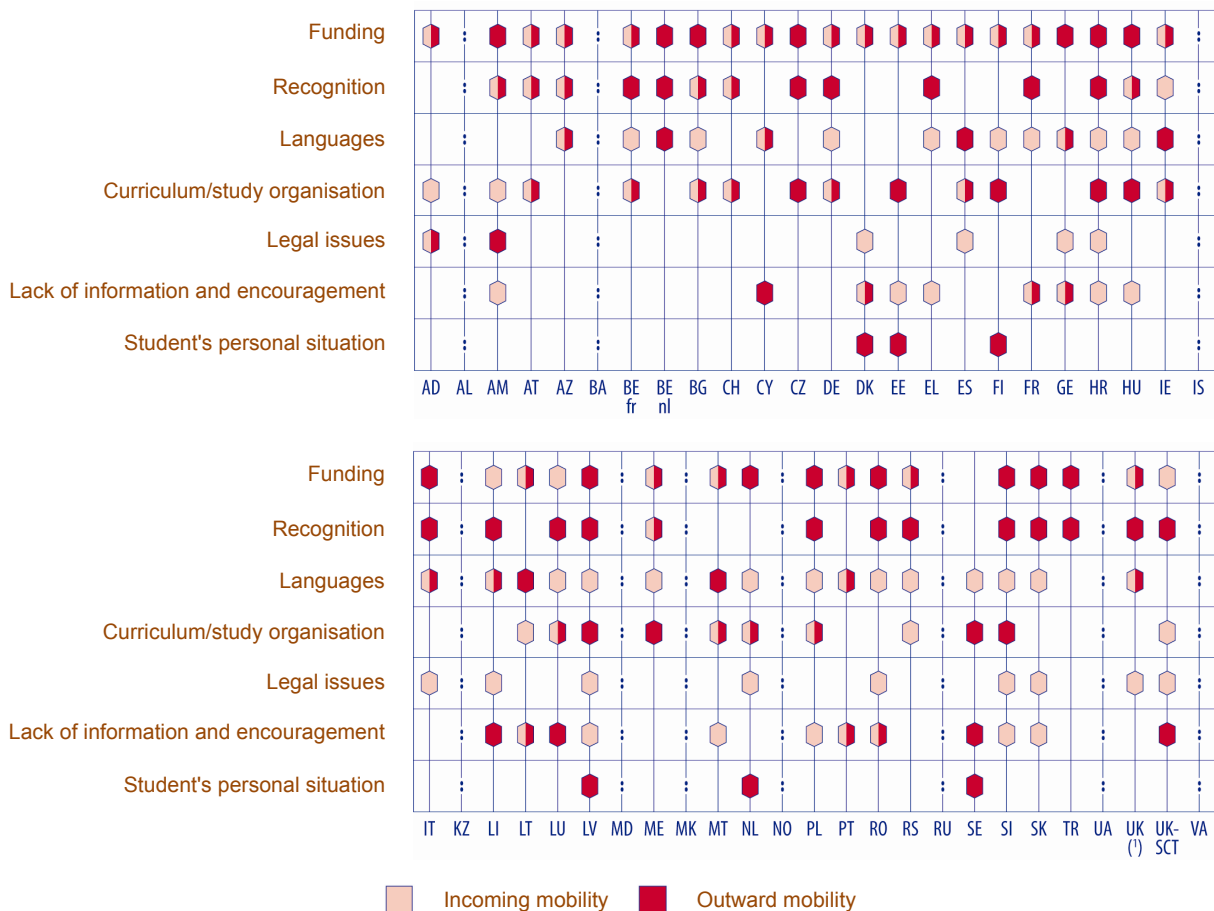
The majority of targets are linked to a mid-term horizon of 2015, although the range is between 2011 and 2020. Target differences in cycles appear mainly with respect to third-cycle students.

7.3.4. Obstacles to student mobility

In order to assist in their efforts to reach the targets and foster mobility, countries, based on BFUG reporting, have identified the most important obstacles that they perceive towards mobility. Funding dominates for outward mobility, and is the second most commonly cited obstacle to incoming mobility. This concern is equally spread across EHEA countries. A lack of support services and accommodation for international students is also commonly expressed, as well as immigration and visa difficulties. The issues for outward mobility differ slightly. Apart from bureaucratic and organisational difficulties, students' personal situations such as leaving family, friends and work place, are commonly mentioned.

⁽⁸⁶⁾ The Bologna Process 2020 – The European Higher Education Area in the new decade. Communiqué of the Conference of European Ministers Responsible for Higher Education, Leuven and Louvain-la-Neuve, 28-29 April 2009.

Figure 7.11: Obstacles to student mobility, 2010/11



Source: BFUG questionnaire.

UK (!) = UK-ENG/WLS/NIR

For both incoming and outward mobility approximately the same number of countries mention curriculum/study organisation and a lack of information and encouragement as obstacles to student mobility. However, significant differences can be observed when looking at issues such as recognition and languages. Difficulties with recognition of mobility periods are mentioned by only eight countries for incoming mobility, but by 24 countries in connection with outward mobility. 25 higher education systems identify insufficient knowledge of language by incoming students whereas only 12 higher education systems do so for outward mobility.

These findings suggest that there is a tendency for countries to see their own systems and students more positively than those elsewhere. Thus these perceptions on mobility obstacles might not reflect reality objectively (recognition may well be a problem for students wishing to enter the system, as well as for those wishing to go abroad, for example), but rather provide a picture of how attitudes to "nationals" and "foreigners" are also critical in addressing mobility obstacles.

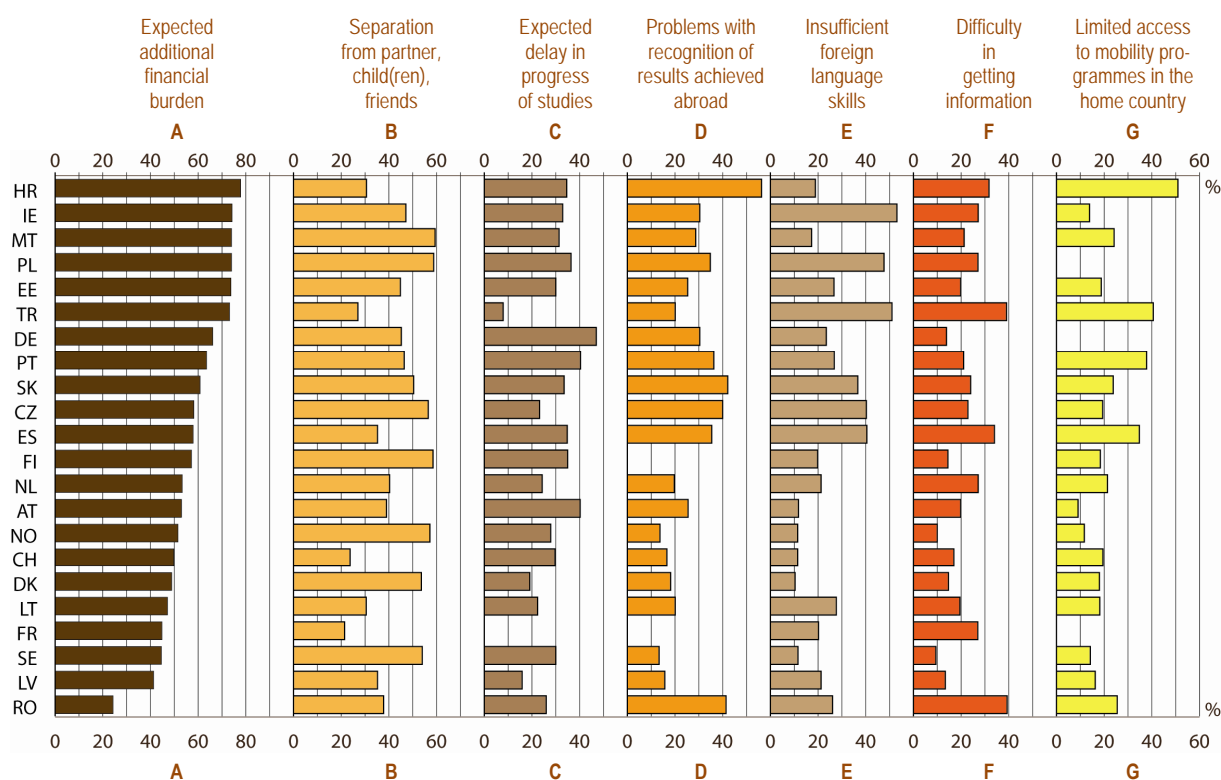
Countries have also reported whether some obstacles as identified above are particularly relevant for a specific study cycle, field of study and type of mobility. The majority of countries highlight persisting difficulties with recognition and overloaded study programmes which often prevent students from being able to take advantage of opportunities to study abroad. This phenomenon is most commonly reported within bachelor programmes, where re-designed curricula often do not provide space for mobility windows. Regarding various fields of studies, medical and natural sciences, law, architecture and engineering appear in many countries to be more challenged in promoting mobility. When comparing credit and degree mobility, the most common concern for credit mobility lies in recognition,

while the most relevant obstacle to degree mobility is funding. The second most significant challenge for both is often language.

Countries in the EHEA implement a range of measures in order to foster mobility and tackle these obstacles. Some obstacles such as the re-organisation of programmes and strengthening of information provision can be perhaps addressed more easily – provided that there is the will to do so. On the other hand, funding, improving language skills, recognition and legal issues might be more difficult to tackle as they require either increased financial means or further dialogue and coordination among various stakeholders at national or European level.

Obstacles as reported by the countries above present only a part of the picture. The Eurostudent survey (Eurostudent, 2011) shows obstacles (see Figure 7.12) as perceived by students when considering enrolment abroad (outward mobility), and these findings complement country reporting in a very interesting way.

Figure 7.12: Share of students who have not been enrolled abroad considering certain issues as (big) obstacles to enrolment abroad (in %, 2009/10)



Source: Eurostudent.

	HR	IE	MT	PL	EE	TR	DE	PT	SK	CZ	ES	FI	NL	AT	NO	CH	DK	LT	FR	SE	LV	RO
A	77.8	74.2	74.0	74.0	73.7	73.2	66.1	63.5	60.8	58.2	57.9	57.2	53.3	53.0	51.5	49.8	48.9	47.1	44.8	44.6	41.3	24.3
B	30.6	47.1	59.4	58.8	44.8	27.0	45.2	46.4	50.4	56.5	35.2	58.5	40.3	39.0	57.2	23.7	53.6	30.5	21.4	54.0	35.2	37.8
C	34.6	32.9	31.4	36.4	30.0	7.9	47.0	40.4	33.5	23.2	34.8	35.0	24.3	40.2	27.9	29.7	19.1	22.4	0.0	30.0	15.9	26.0
D	56.3	30.4	28.7	34.8	25.3	20.1	30.4	36.3	42.1	40.0	35.4	0.0	19.7	25.5	13.7	16.6	18.2	20.1	0.0	13.3	15.7	41.4
E	18.9	53.1	17.3	47.7	26.7	51.0	23.5	26.8	36.7	40.3	40.5	19.8	21.3	11.8	11.5	11.5	10.4	27.7	20.2	11.6	21.3	26.1
F	31.7	27.2	21.3	27.1	19.8	39.1	13.9	21.1	24.0	22.9	34.0	14.5	27.2	19.8	10.0	17.0	14.7	19.5	27.0	9.4	13.4	39.3
G	51.0	13.9	24.2	0.0	18.8	40.6	0.0	37.8	23.8	19.4	34.8	18.4	21.4	9.1	11.7	19.5	18.0	18.2	0.0	14.2	16.3	25.5

Note: Too few cases for expected delay in progress of studies: France. Too few cases for problems with recognition of results achieved abroad: Finland and France. Too few cases for limited access to mobility programmes in the home country: France.

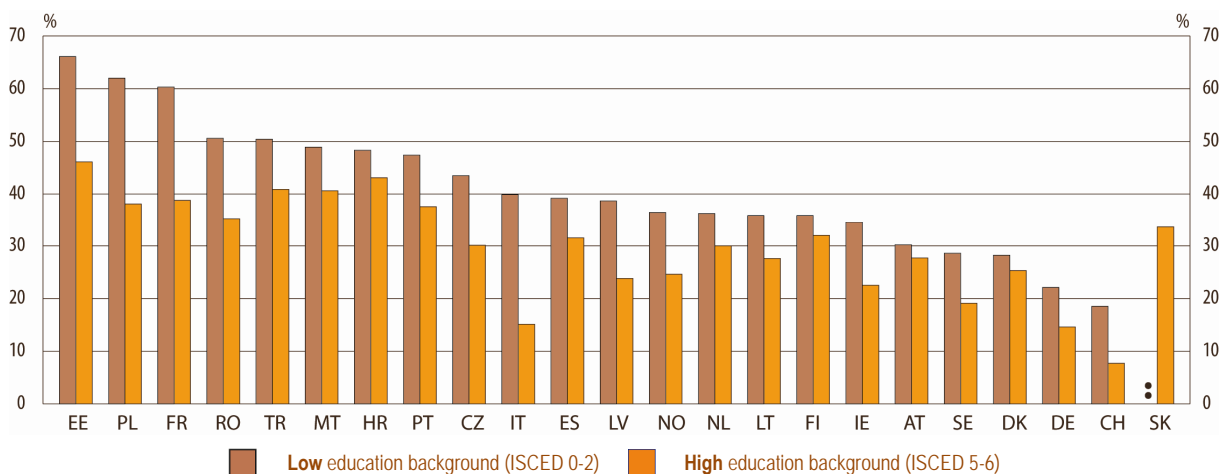
Source: Eurostudent.

The obstacle ranked in both cases in first place is funding. However, the second most common obstacle identified by the Eurostudent survey is a separation from family and friends, an obstacle ranked among the least significant by the reporting countries. Moreover, while countries highlight recognition as the second most significant obstacle, this was ranked "only" in fourth place by students. Curricula, study organisation and delay of studies is ranked identically in third place by countries and students. Insufficient skills in foreign languages also scored fifth in both cases. The difficulty in getting information is considered in sixth place by students, but is ranked higher – in fourth place – by country experts.

Thus both countries and students give a similar priority to funding, study organisation and languages. On the other hand, country experts highlight formal obstacles such as recognition and information provision more significantly than students, who instead point to factors related to their personal situation.

While funding is commonly highlighted as the most significant obstacle to mobility, Eurostudent findings also show that the financial burden plays a different role according to the social background of students. Figure 7.13 shows that in all surveyed countries, the share of students from a low parental education background who consider financial insecurities as an obstacle is higher compared to those from a high parental education background. The differences in perception of this obstacle among the two groups of students are particularly visible in the cases of Italy and Poland while Austria, Denmark and Finland show the smallest differences.

Figure 7.13: Students who have not been enrolled abroad considering financial insecurities as (big) obstacle to an enrolment abroad by social background, 2009/10



	EE	PL	FR	RO	TR	MT	HR	PT	CZ	IT	ES	LV	NO	NL	LT	FI	IE	AT	SE	DK	DE	CH	SK
ISCED 0-2	66.1	62.0	60.3	50.6	50.4	48.9	48.3	47.4	43.5	39.9	39.2	38.7	36.5	36.3	35.9	35.9	34.5	30.2	28.6	28.2	22.1	18.5	:
ISCED 5-6	46.1	38.1	38.8	35.3	40.9	40.6	43.1	37.6	30.1	15.1	31.5	23.8	24.6	30.0	27.6	32.0	22.5	27.7	19.1	25.3	14.6	7.7	33.6

Notes: The category "financial insecurities" is an aggregate of the following items: expected additional financial burden, loss of opportunities to earn money, loss of social benefits, problems with accommodation in the home country.

Source: Eurostudent.

Although almost all countries identified obstacles to incoming and outward mobility, only around half of the EHEA countries have prepared specific reports and surveys analysing obstacles to student mobility. Thus there is still considerable room for action at national level to support research to understand these phenomena in greater detail.

7.3.5. Financial measures to support student mobility

As the most common obstacle identified was funding, financial measures encompassing grants and scholarships as well as loans are analysed in more detail. Less than half of the countries implement financial support measures in the form of loans for outward students in credit and degree mobility and only a few do so for incoming students. More financial support measures to foster mobility can be observed in the form of grants and scholarships. However, the situation differs slightly between credit and degree mobility. Around two thirds of countries provide grants and scholarships for both outward and incoming students for degree mobility.

In contrast, the difference between grants and scholarships for incoming students (21 higher education systems) and outward students (30 higher education systems) in credit mobility arrangements is higher. Some scholarships are targeted only to certain programmes prioritising a number of countries or study fields. Indeed, a few countries or, more specifically, higher education institutions conclude bilateral agreements with their counterparts abroad, and provide funding to foster student mobility. It is also important to stress that no financial instrument at European or national level, be it a loan or a grant, has yet been designed specifically to foster mobility across the EHEA.

An important issue linked to grants and scholarships is their portability. This is a particularly important measure for promotion of mobility and is mentioned throughout the Bologna Process. The concept of portability shows whether students who study in a higher education institution in another country can use their grant or loan under the same conditions as at a home institution. Based on information from reporting countries, almost half of them enable students to do so, while other countries allow such a practice for either credit or degree mobility. Only four countries – Bosnia and Herzegovina, Georgia, Hungary, and Lithuania – admit that it is not the case for either of the two main types of mobility.

Portability is, however, often subject to restrictions. These are related to specific countries or their groupings (for instance EU, EEA, EHEA) and programmes. Countries with grants and scholarships restricted to specific programmes often mention European and national mobility programmes. Other restrictions concern accreditation of programmes and/or whether the study programme is offered in the home country, or whether it falls under a priority area. Only Croatia, Cyprus, Finland, Liechtenstein, Luxembourg, Norway and Switzerland report that they impose no restrictions on students who receive a grant or scholarship abroad.

The last measure mentioned by countries for supporting mobility is additional funding to higher education institutions to create conditions for promoting mobility, or to reward institutions that support mobility. In some cases, this may be done by including a mobility element in funding formulas. Several countries also include subsidies for transportation, accommodation and canteens among their supporting measures.

7.3.6. Other measures to support student mobility

Other measures are linked to other obstacles to student mobility as presented in Figure 7.11. Recognition continues to be perceived as a significant barrier halting student mobility, and thus an issue in need of improved practice. However no specific measures have been mentioned by reporting countries.

Language competency is an ultimate pre-condition for studying abroad and thus often one of the main obstacles. Consequently, around one third of countries outline provision of language courses for outward and incoming students, and developing curricula/programmes in English or other foreign languages, including joint programmes degrees. Despite an increasing offer, the situation for credit and degree mobility differs to some extent. Teaching in a widely spoken foreign language might be sufficient for a period of credit mobility, but often knowledge of the language of instruction for the whole period of study may be required for degree mobility. This poses the question of language of instruction for the degree programme and whether the student has a sound knowledge of this language. To this end, the Norwegian example shows that a country might support learning languages by providing financial measures in the form of a state loan to spend an extra semester to learn the language and culture of the country prior to the studies abroad.

In spite of introducing and enlarging programmes in foreign languages, studies at higher education institutions in a language different to the official language of the country might fall under restrictions. This can be the case when, based on national legislation, higher education institutions are allowed to organise only a certain percentage of learning activities in a foreign language. Joint programmes might however be exceptions to this rule.

Support services, including the provision of better information on mobility programmes, need to be continuously strengthened. Several countries have launched campaigns with the aim of motivating students to study abroad. Additionally, former Erasmus students as well as incoming students may be engaged to help in promotion activities.

Finally, a number of countries mention persisting legal issues including visa arrangements. Dialogue with the authorities concerned aims to improve conditions of mainly incoming non-EU students.

7.3.7. Monitoring

Not all the countries that adopt programmes or measures to tackle obstacles to student mobility monitor their effects. Even those that undertake monitoring do so often in the framework of general statistical monitoring or they focus only on certain vertical or horizontal student mobility issues. For instance, they monitor recognition, update statistics on financial measures or prepare overarching Erasmus reports summarising various mobility indicators together. Hence, monitoring tends to be focused on reporting on European mobility programmes and often does not extend into a comprehensive national framework.

7.4. Staff mobility

All Bologna communiqués mention mobility of staff together with student mobility. The Leuven/Louvain-La-Neuve Communiqué⁽⁸⁷⁾ dedicates a paragraph to staff mobility when setting out goals for the decade 2010-2020. It mentions teachers, researchers and other staff, outlining the value of staff mobility and the necessity to attract highly qualified staff to higher education institutions. In addition, it highlights the obstacles related to access and portability of social security rights.

7.4.1. Concept

Discussions on staff mobility at European level are ongoing but difficult. The concept of staff mobility is not defined at European level, and can cover many forms and purposes. It is therefore important to be precise in defining and formulating policy objectives, as well as in defining the information required for different purposes. Currently European statistical data is limited to information collected within some European programmes (e.g. Erasmus staff exchanges) and more widespread operational definitions have yet to be developed. Statistical data are therefore extremely limited.

At national level, all but three systems – Flemish Community of Belgium, France and Slovakia – include staff mobility in higher education in a national strategy or action plan. Nonetheless, only six countries include quantitative targets for staff mobility. The quantitative expression can have a form of a percentage of incoming and outward lecturers/teachers and research staff either per year, or with respect to a certain target year (2015), as in the case of Lithuania and Finland. Slovenia sets a goal of at least 10 % by 2020 and Estonia 3 % of foreign academic staff with a further target of at least 10 % of doctoral graduates of other than Estonian origin by 2015. Romania targets an increase of 5 % of outward staff under Erasmus per year and Spain 50 % more mobile staff than in 2008 by 2015.

Overall, however, it seems that staff mobility appears rather as a general declaration without specific targets to be reached. Hence countries identify priority areas, set a goal and follow developments in a particular sphere. At European level, Eurostat monitors mobility of teachers and academic staff only in the framework of the Erasmus programme.

7.4.2. Obstacles and measures to staff mobility

As almost all countries mention support to staff mobility in their conceptual documents, but only a small percentage of staff is actually mobile, more attention needs to be focused on identifying and removing obstacles. Based on information provided by reporting countries, one third of educational systems are informed by surveys or research about obstacles to staff mobility. Three large categories of obstacles can be identified, namely language knowledge, legal issues and personal situation.

The most common obstacle identified is a language barrier for both incoming and outward staff mobility. The other most reported reasons halting mobility are linked to a range of legal difficulties stemming often from a lack of cooperation at European level or persisting problems in real-life situations in spite of a legal basis on the matter concerned. This mostly concerns differences between social security systems. Furthermore, legal issues include double taxation in certain countries along with immigration restrictions and the difficulty to obtain visas – as reported by some non-EU countries. The third group of obstacles concerns personal and family situations, such as a lack of support services for a spouse and children or a separation from them in case they do not follow the

⁽⁸⁷⁾ The Bologna Process 2020 – The European Higher Education Area in the new decade. Communiqué of the Conference of European Ministers Responsible for Higher Education, Leuven and Louvain-la-Neuve, 28-29 April 2009.

partner/parent for a period of mobility. Additionally, a lack of motivation and clear paths for career development as well as heavy workloads at home institutions were also referred to. Last but not least, insufficient funding opportunities and lack of information are also among the reasons reported as a hindrance to staff mobility.

Less than a half of the EHEA countries report any measures to tackle obstacles to staff mobility – indicating that this is still an issue to be taken forward in the future. The measures mentioned encompass the following issues: funding, information provision, working conditions, immigration policy and language courses.

Countries such as the Czech Republic and Finland stress the autonomy of higher education institutions in adopting appropriate measures to foster staff mobility, and thus shift a large part of responsibility to institutional level. Nonetheless, they highlight funding mechanisms adopted at central level to support mobility of researchers. A starting point for mobility is comprehensive information provision for employees interested to make use of opportunities to work abroad. The provision of information is, according to the reporting countries, generally insufficient. Yet, some countries have taken some initiatives in this area, designing online platforms and networks for the academic world (e.g. Euraxess, Imwas and Kisswin in Germany).

After the initial stage of obtaining appropriate information on mobility and individual exchange programmes, the next stage is to check concrete working conditions, including social security provision in the chosen country. Knowledge on the portability of social security rights is insufficient, and several countries try to provide more detailed information and advice on these topics for both incoming and outgoing staff.

While social security issues are faced by both EU and non-EU staff, immigration and visa policy often acts as a barrier, specifically to non-EU staff. Higher education institutions continue their dialogue with public authorities regarding immigration policy, and some countries have already adopted measures lessening immigration restrictions for non-EU researchers and/or have regular reviews of such matters. Thorough implementation of the EU Scientific Visa Directive and its two accompanying recommendations (the so-called Scientific Visa Package)⁽⁸⁸⁾ is an important step forward. It facilitates short and long stays (less than or more than three months) of researchers from third countries in the EU Member States for the purpose of scientific research.

Once obtaining all necessary information on mobility opportunities and related legal conditions, the issue of language remains. There are higher education institutions that provide foreign language courses for their outward staff and others that offer language courses for incoming staff. Nevertheless, while some countries highlight provision and financing of language courses as a challenge, others, such as Hungary, consider that language learning is a personal responsibility. Another aspect concerning languages is national legislation that may impose rules on the use of the official language. Poland points to the problem of a lack of courses taught in a foreign language at higher education institutions – thus limiting incoming staff mobility to countries with a knowledge of the official language of the country.

While a relatively low number of countries implement measures to tackle and remove obstacles to staff mobility, even fewer countries monitor the effects of these measures. Those that do tend to undertake such monitoring in the framework of annual statistical data collection or publish reports on national and European mobility programmes such as Erasmus.

⁽⁸⁸⁾ See: <http://ec.europa.eu/euraxess/index.cfm/services/scientificVisa>

Conclusions

In order to step up action to promote mobility, a benchmark of 20 % of graduated students has been set and the first steps have been taken to monitor progress. The collection of statistical data is an ongoing process and this report reveals the first findings for degree mobility. However, more work on statistical definitions and more comprehensive collection of information is still required – particularly on credit mobility.

Currently, all but two countries show an incoming degree mobility rate of less than 10 % in the European Higher Education Area. The vast majority of countries have values below 5 %. This is also true concerning outward degree mobility rates of graduates inside the EHEA. The weighted average for this mobility flow is currently slightly below 2 %. For outward mobility of students going outside the EHEA for study, the rate for the majority of countries is less than 1 %. However, as these figures are related only to degree mobility, statistical information on credit mobility has to be added and taken into consideration when assessing progress towards the 20 % benchmark. The current projection of short-term trends in the framework of the Erasmus programme anticipates 7 % by 2020, while other sources of reliable credit mobility data still need to be identified.

When looking at mobility flows worldwide, the students studying in the EHEA coming from any country abroad reach less than 4 % of the total number of students in the EHEA. Meanwhile the percentage of EHEA students studying for a degree outside the EHEA is, in relative terms, very small indeed. Currently, the weighted average of incoming mobile students from outside the EHEA is 2.25 %.

The reporting also reveals that flows typically follow East-West patterns both in European and global terms. In the EHEA, South and Eastern Europe tend to have more outward students and North and Western European countries more incoming students. Hardly any country can claim to have genuinely balanced mobility and even when flows reach similar numbers, the countries sending and receiving students differ significantly.

The main reasons that prevent students from benefitting from mobility periods abroad have been identified by reporting countries and Eurostudent information. However, many countries lack a clear strategy and measures to change the situation. Similarly, monitoring mechanisms are also absent in many parts of Europe.

Although staff mobility is mentioned in all Bologna communiqués, the situation – comparing to student mobility – is less clear. It is thus firstly important to agree on the scope and definition(s) of staff mobility. Currently, only a few countries set quantitative targets towards staff mobility. Based on data available from the Erasmus programme, incoming staff mobility affects relatively low numbers of staff. Better monitoring and tackling of identified obstacles is also essential if countries are to foster staff mobility across Europe.

REFERENCES

Adam, S. 2006. An introduction to learning outcomes. In: E. Froment, J. Kohler, L. Purser & L. Wilson, eds. *EUA Bologna Handbook: Making Bologna Work*. Berlin: Raabe Verlag.

Allen, J. & de Weert, E., 2007. What Do Educational Mismatches Tell Us About Skill Mismatches? A Cross-country Analysis. *European Journal of Education*, 42(1), pp. 59-73.

Allen, J. & van der Velden, R. eds., 2011. *The Flexible Professional in the Knowledge Society: New Challenges for Higher Education*, Higher Education Dynamics, 35. Dordrecht: Springer.

Allen, J., Pavlin, S. & van der Velden, R. eds., 2011. *Competencies and Early Labour Market Careers of Higher Education Graduates in Europe*. Ljubljana: University of Ljubljana, Faculty of Social Sciences.

Andersson, R. & Olsson, A-K., 1999. *Fields of Education and Training. Manual*. [pdf] Available at: http://www.gpeari.mctes.pt/archive/doc/Fields_of_Education_and_Training_eurostat1999.pdf [Accessed: 26 September 2011].

Attali, J. 1998. *Pour un Modèle Européen d'enseignement supérieur*. Paris: Ministère de l'Education nationale, de la Recherche et de la Technologie.

Bologna Process Working Group on Social Dimension and Data on Mobility of Staff and Students in Participating Countries, 2007. *Key issues for the European Higher Education Area – Social Dimension and Mobility*. Stockholm: Government Offices of Sweden. [pdf] Available at: <http://www.ond.vlaanderen.be/hogeronderwijs/bologna/documents/WGR2007/Socialdimensionandmobilityreport.pdf> [Accessed 3 October 2011].

Cedefop (European Centre for the Development of Vocational Training), 2008. *Terminology of European education and training policy. A selection of 100 key terms*. Luxembourg: Office for Official Publications of the European Communities.

Cedefop, 2010. *The skill matching challenge. Analysing skill mismatch and policy implications*. Luxembourg: Publications Office of the European Union.

CHEPS & INCHER-Kassel & ECOTEC (Center for Higher Education Policy Studies & International Centre for Higher Education Research Kassel & ECOTEC Research and Consulting), 2010. *The Bologna Process Independent Assessment. The first decade of working on the European Higher Education Area*. [pdf] Available at: http://ec.europa.eu/education/higher-education/doc1290_en.htm [Accessed: 22 March 2012].

EACEA/Eurydice, 2009. *Gender Differences in Educational Outcomes: Study on the Measures Taken and the Current Situation in Europe*. Brussels: EACEA P9 Eurydice.

EACEA/Eurydice, 2010. *Focus on Higher Education in Europe. The Impact of the Bologna Process*. Brussels: EACEA P9 Eurydice.

EACEA/Eurydice, 2011a. *Adults in Formal Education: Policies and Practice in Europe*. Brussels: EACEA P9 Eurydice.

EACEA/Eurydice, 2011b. *Modernisation of Higher Education in Europe: Funding and the Social Dimension*. Brussels: EACEA P9 Eurydice.

EACEA/Eurydice, 2012. *Key Data on Education in Europe 2012*. Brussels: EACEA P9 Eurydice.

EHEA Working Group on Recognition, 2012. *Report by the EHEA Working Group on Recognition*. To be submitted to the BFUG in time for the 2012 ministerial conference. [pdf] Available at: http://www.aic.lv/bologna/Bologna/Bucharest_conf/Final_report_WG_Recognition.pdf [Accessed 23 March 2012].

ENQA (European Association for Quality Assurance in Higher Education), 2005. *Standards and Guidelines for Quality Assurance in the European Higher Education Area*. ENQA: Helsinki.

EUA (European University Association), 1999. *Project Report: Trends in Learning Structures in Higher Education*, 7 June 1999. [pdf] Available at: http://www.eua.be/eua/jsp/en/upload/OFFDOC_BP_trend_I.1068715136182.pdf [Accessed 22 March 2012].

EUA, 2008. *European Universities' Charter on Lifelong Learning*. Brussels: EUA.

EUA, 2011a. *Impact of the economic crisis on European universities. Update: First semester 2011*. [pdf] Available at: http://www.eua.be/Libraries/Governance_Autonomy_Funding/Economic_monitoring_June2011.sflb.asx [Accessed 16 November 2011].

EUA, 2011b. *EUA's monitoring of the impact of the economic crisis on public funding for universities in Europe*. [Online] Available at: <http://www.eua.be/eua-work-and-policy-area/governance-autonomy-and-funding/public-funding-observatory.aspx> [Accessed 16 November 2011].

European Commission, 2009. *ECTS Users' Guide*. Luxembourg: Office for Official Publications of the European Communities.

European Commission, 2010. *Lifelong Learning Programme. The Erasmus Programme 2008/2009. A Statistical Overview*. [pdf] Available at: <http://ec.europa.eu/education/erasmus/doc/stat/report0809.pdf> [Accessed 29 August 2011].

European Commission, 2011. *Erasmus – Facts, Figures & Trends. The European Union support for student and staff exchanges and university cooperation in 2009/2010*. [pdf] Available at: http://ec.europa.eu/education/pub/pdf/higher/erasmus0910_en.pdf [Accessed 29 August 2011].

European Commission, n.d. *ECTS Key Features*. [pdf] Available at: http://ec.europa.eu/education/lifelong-learning-policy/doc48_en.htm [Accessed: 23 March 2012].

Eurostat, 2011a. *EU Labour Force Survey database. User Guide*. [pdf] Available at: http://circa.europa.eu/irc/dsis/employment/info/data/eu_efs/lfs_main/LFS_MAIN/LFSUserguide/EULFS_Database_UserGuide_2011.pdf [Accessed 28 March 2012].

Eurostat, 2011b. *Indicators of Immigrant Integration. A Pilot Study*. Eurostat Methodologies and Working Papers. Luxembourg: Publications Office of the European Union.

Eurostat, 2012a. *Educational attainment, outcomes and returns of education*. [Online] Available at: http://epp.eurostat.ec.europa.eu/cache/ITY_SDDS/EN/edat_esms.htm [Accessed: 28 March 2012].

Eurostat, 2012b. *Glossary: Full-time equivalent (FTE)* [Online] Available at: http://epp.eurostat.ec.europa.eu/statistics_explained/index.php/Glossary:Full-time_equivalent [Accessed: 6 January 2012].

Eurostat, 2012c. *Glossary: Unemployment* [Online] Available at: http://epp.eurostat.ec.europa.eu/statistics_explained/index.php/Glossary:Unemployment_rate [Accessed: 16 February 2012].

Eurostat & Eurostudent, 2009. *The Bologna Process in Higher Education in Europe. Key indicators on the social dimension and mobility*. Luxembourg: Office for Official Publications of the European Communities.

Eurostudent, 2008. *Social and Economic Conditions of Student Life in Europe*. Bielefeld: W. Bertelsmann. [pdf] Available at: http://www.eurostudent.eu/download_files/documents/Synopsis_of_Indicators_EIII.pdf [Accessed: 6 January 2012].

Eurostudent, 2011. *Social and Economic Conditions of Student Life in Europe*. [pdf] Available at: <http://www.eurostudent.eu/results/reports> [Accessed 13 September 2011].

Eurydice, 2007. *Key Data on Higher Education in Europe*. Brussels: Eurydice.

Free Dictionary, 2012a. *Tax credit*. [Online] Available at: <http://www.thefreedictionary.com/tax+credit> [Accessed: 6 January 2012].

Free Dictionary, 2012b. *Psychological counselling*. [Online] Available at: <http://www.thefreedictionary.com/Psychological+counselling> [Accessed: 6 January 2012].

Harvey, L., 2001. Defining and Measuring Employability. *Quality in Higher Education*, 7(2), pp. 97-109.

Jansen I. & Brenn-White M., 2011. *Overview of Current Marketing Initiatives by Higher Education Institutions and National Agencies Within the European Higher Education Area, Focusing on*

"Marketing the EHEA". [Online] Available at:
<http://www.ehea.info/Uploads/presentations/IPN%20Survey%20Report%2025%20March%202011.pdf>
[Accessed: 7 December 2011].

Koucký J., Bartušek, A. and Kovařovic, J., 2009. *Who is more equal? Access to tertiary education in Europe*. Prague: Education Policy Centre, Faculty of Education, Charles University.

Koucký, J., Bartušek, A. & Kovařovic, J., 2010. *Who gets a degree? Access to tertiary education in Europe 1950-2009*. Prague: Education Policy Centre, Faculty of Education, Charles University.

Koucký, J. & Zelenka, M., 2011. *Employability and the Position of Higher Education Graduates in the Labour Market*. Prague: Education Policy Centre, Faculty of Education, Charles University.

Langworthy, M., Shear, L., Means, B., Gallagher, L. & House, A., 2009. *ITL Research Design*. [pdf] Available at: http://www.itlresearch.com/images/stories/reports/ITL_Research_design_29_Sept_09.pdf [Accessed: 6 January 2012].

Little, B., 2001. Reading between the lines of graduate employment. *Quality in Higher Education*, 7(2), pp. 121-129.

Mejer, L., Turchetti P. & Gere, E., 2011. *Trends in European education during the last decade*. Eurostat: Statistics in Focus 54/2011. [pdf] Available at:
<http://epp.eurostat.ec.europa.eu/cache/ITY_OFFPUB/KS-SF-11-054/EN/KS-SF-11-054-EN.PDF>
[Accessed 28 March 2012].

Morley, L., 2001. Producing New Workers: quality, equality and employability in higher education. *Quality in Higher Education*, 7(2), pp. 131-138.

OECD (Organisation for Economic Co-operation and Development), 2004. *Career guidance. A handbook for policy-makers*. OECD: Paris

Rauhvargers, A., Deane, C. & Pauwels, W., 2009. *Bologna Progress Stocktaking Report*. Report from working groups appointed by the Bologna Follow-up Group to the Ministerial Conference in Leuven/Louvain-la-Neuve 28-29 April 2009. [pdf] Available at:
http://www.ond.vlaanderen.be/hogeronderwijs/bologna/conference/documents/Stocktaking_report_2009_FINAL.pdf [Accessed 13 September 2011].

Rauhvargers, A. & Rusakova, A., 2008. *Report to the Bologna Follow-up Group on the Analysis of the 2007 National Action Plans for Recognition*. [pdf] Available at:
http://www.ehea.info/Uploads/qualification/Analysis_of_2007_RecognitionNAPs.pdf [Accessed: 23 March 2012].

Salmi, J. & Hauptman, A.M., 2006. *Innovations in Tertiary Education Financing: A Comparative Evaluation of Allocation Mechanisms*. Education Working Paper Series, Number 4. Washington: Human Development Network, Education Sector World Bank Group. [pdf] Available at:

http://siteresources.worldbank.org/EDUCATION/Resources/278200-1099079877269/547664-1099079956815/Innovations_TertiaryEd_Financing.pdf [Accessed: 6 January 2012].

Schomburg, H. & Teichler, U. eds., 2006. *Higher Education and Graduate Employment in Europe: Results from Graduates Surveys from Twelve Countries*, Higher Education Dynamics, 15. Dordrecht: Springer.

Stocktaking Working Group, 2005. *Bologna Process Stocktaking*. Report from a working group appointed by the Bologna Follow-up Group to the Conference of European Ministers Responsible for Higher Education, Bergen, 19-20 May 2005. [pdf] Available at: <http://www.ond.vlaanderen.be/hogeronderwijs/bologna/documents/BPStocktaking9May2005.pdf> [Accessed: 22 March 2012].

Stocktaking Working Group, 2007. *Bologna Process Stocktaking Report 2007*. Report from a working group appointed by the Bologna Follow-up Group to the Ministerial Conference in London, May 2007. [pdf] Available at: http://www.ond.vlaanderen.be/hogeronderwijs/bologna/documents/WGR2007/Stocktaking_report2007.pdf [Accessed: 22 March 2012].

Støren, L.A. & Arnesen, C.Å., 2011. Winners and Losers. In: J. Allen & R. van der Velden, eds. *The Flexible Professional in the Knowledge Society: New Challenges for Higher Education*, Higher Education Dynamics, 35. Dordrecht: Springer, pp. 199-240.

Tauch, C. & Rauhvargers, A., 2002. *Survey on Master Degrees and Joint Degrees in Europe*. Brussels: EUA. [pdf] Available at: http://www.eua.be/eua/jsp/en/upload/Survey_Master_Joint_degrees_en.1068806054837.pdf [Accessed: 6 January 2012].

Teichler, U. ed., 2007. *Careers of University Graduates: Views and Experiences in Comparative Perspectives*, Higher Education Dynamics, 17. Dordrecht: Springer.

UNESCO (United Nations Educational, Scientific and Cultural Organization), OECD & Eurostat, 2010. *UOE data collection on education systems. Volume 1: concepts, definitions and classifications*. Montreal, Paris, Luxembourg: UNESCO, OECD, Eurostat.

van der Velden, R.K.W. & van Smoorenburg, M.S.M., 1997. *The Measurement of Overeducation and Undereducation: Self-Report vs. Job-Analyst Method*. ROA Working Paper ROA-RM-1997/2E. Maastricht: Research Centre for Education and the Labour Market, Faculty of Economics and Business Administration, Maastricht University.

Wikipedia, 2012a. *Socioeconomic status*. [Online] Available at: http://en.wikipedia.org/wiki/Socioeconomic_status [Accessed: 6 January 2012].

Wikipedia, 2012b. *Median*. [Online] Available at: <http://en.wikipedia.org/wiki/Median> [Accessed: 6 January 2012].

Wikipedia, 2012c. *Odds ratio*. [Online] Available at: http://en.wikipedia.org/wiki/Odds_ratio [Accessed: 6 January 2012].

Wikipedia, 2012d. *Fiscal policy*. [Online] Available at: http://en.wikipedia.org/wiki/Fiscal_policy [Accessed: 6 January 2012].

Working Group on Employability, 2009. *Report to Ministers, Bologna Conference, Leuven/Louvain-la Neuve 28-29 April 2009*. [pdf] Available at: http://www.ond.vlaanderen.be/hogeronderwijs/bologna/conference/documents/2009_employability_WG_report.pdf [Accessed: 6 October 2011].

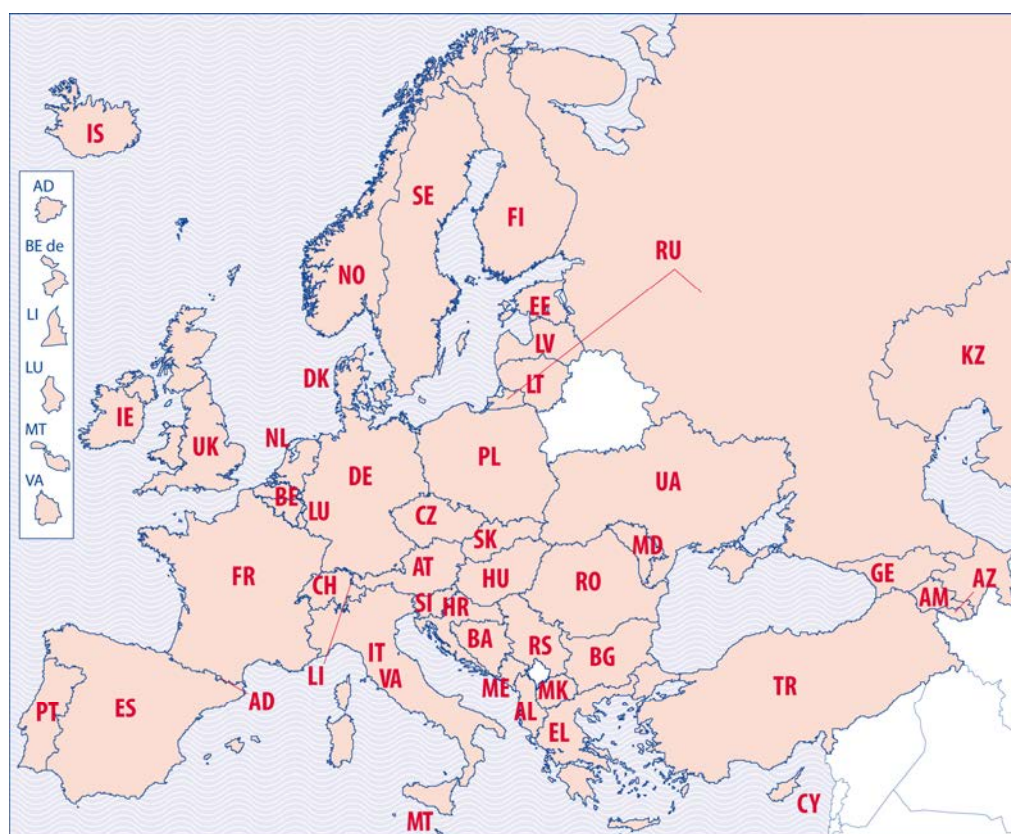
Yorke, M. & Longden, B., 2004. *Retention and Student Success in Higher Education*. Maidenhead, UK: Society for Research into Higher Education and Open University.

Yorke, M. & Longden, B., 2008. *The First Year Experience of Higher Education in the UK*. York: Higher Education Academy. Available at: <http://www.heacademy.ac.uk/assets/documents/resources/publications/FYEFinalReport.pdf> [Accessed: 7 October 2011].

GLOSSARY AND METHODOLOGICAL NOTES

I. Codes, abbreviations and acronyms

I.1. Country Codes



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

* ISO code 3166. Provisional code which does not prejudice in any way the definitive nomenclature for this country, which will be agreed following the conclusion of negotiations currently taking place under the auspices of the United Nations ([http://www.iso.org/iso_3166_code_lists.htm](http://www.iso.org/iso/country_codes/iso_3166_code_lists.htm))

I.2. Abbreviations

:	Data not available	FTE	Full-time equivalent
ØP	Weighted average	GDP	Gross Domestic Product
BFUG	Bologna Follow-Up Group	ISCED	International Standard Classification of Education
CEEPUS	Central European Exchange Program for University Studies	ISCO	International Standard Classification of Occupations
COFOG	Classification of the Functions of Government	LFS	Labour Force Survey
EEA	European Economic Area	OECD	Organisation for Economic Co-operation and Development
EHEA	European Higher Education Area	PPS	Purchasing Power Standard
EU	European Union	R&D	Research and Development
EUA	European University Association	UNESCO-UIS	United Nations Educational, Scientific and Cultural Organization, Institute for Statistics
EU-SILC	European Union Statistics on Income and Living conditions	UOE	UNESCO-UIS/OECD/Eurostat

II. General terms

Academic guidance services

Services aimed at students with the goal to raise academic achievement and to support students with challenges related to study organisation.

Bologna Follow-up Group (BFUG)

The Bologna Follow-Up Group consists of ministerial representatives of all 47 countries belonging to the European Higher Education Area and the European Commission as full members. Consultative members are the Council of Europe, the European University Association (EUA), the European Students' Union (ESU), the European Association of Quality Assurance in Higher Education (ENQA), the European Association of Institutions in Higher Education (EURASHE), the UNESCO European Centre for Higher Education (UNESCO-CEPES), BUSINESS EUROPE (formerly known as UNICE) and Education International. The BFUG is convened at least twice a year and is co-chaired by the EU Presidency and a non-EU country (in alphabetical order), with the host country of the next (biennial) conference of education ministers as vice-chair. The role of the BFUG is to follow up on the recommendations made at the ministerial conferences and on the general implementation of all issues covered in the Ministerial Communiqués. In addition, the BFUG produces a work programme which includes a series of conferences and other activities related to the Bologna process. A Board, also co-chaired by the EU Presidency and a non-EU country, with the next host country as vice-chair, prepares the agendas for the BFUG and monitors progress between BFUG meetings. Overall follow-up is supported by a Secretariat which is provided by the country/countries hosting the following ministerial conference. For further information, visit <http://www.ehea.info/>

Career guidance services

Career guidance refers to services and activities intended to assist individuals, of any age and at any point throughout their lives, to make educational, training and occupational choices and to manage their careers (OECD 2004, p. 10).

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.

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.

Diploma Supplement (DS)

A document attached to a higher education diploma that aims to improve international transparency and facilitate academic and professional recognition of qualifications. Developed by the European Commission, the Council of Europe and UNESCO-CEPES, the DS consists of eight sections⁽⁸⁹⁾ describing in a widely spoken European language the nature, level, context, content and status of the studies that were pursued and successfully completed. The DS provides additional information on the national higher education system concerned, so that the qualification is considered in relation to its own educational context (EACEA/Eurydice 2010, p. 150).

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. Full membership of ENQA represents recognition that an agency complies with the European Standards and Guidelines for quality assurance in higher education. Compliance with these standards is checked every five years through an independent review. For more information, visit <http://www.enqa.eu/about.lasso>

European Credit Transfer and Accumulation System (ECTS)

A student-centred credit system based on the student workload required to achieve specified learning outcomes. ECTS was originally set up in 1989 in order to facilitate the recognition of periods of study abroad. More recently, it has been developing into an accumulation system to be implemented in all programmes at institutional, regional, national and European levels (EACEA/Eurydice 2010, p. 150). Further information can be obtained from the ECTS Users Guide published by the European Commission (2009).

European Higher Education Area (EHEA)

The European Higher Education Area (EHEA) was launched along with the Bologna Process' decade anniversary, in March 2010, during the Budapest-Vienna Ministerial Conference. As the main objective of the Bologna Process since its inception in 1999, the EHEA was meant to ensure more comparable, compatible and coherent systems of higher education in Europe. It currently covers 47 states. For more information, visit <http://www.ehea.info/>

⁽⁸⁹⁾ Specifically, these sections cover information on the holder of the qualification, the identity of the qualification, its level, its function, the contents and results gained, additional information, the national higher education system concerned and the certification of the DS.

European Qualifications Framework for lifelong learning (EQF)

The European Qualifications Framework for lifelong learning is a common European reference framework which enables European countries to link their qualifications systems to one another. This EU-initiative was adopted by the European Parliament and Council on 23 April 2008. The EQF uses eight reference levels based on learning outcomes that are defined in terms of knowledge, skills and competences. It shifts the focus from input (lengths of a learning experience, type of institution) to what a person holding a particular qualification actually knows and is able to do. For further information, see http://ec.europa.eu/education/lifelong-learning-policy/eqf_en.htm

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. For more information, visit <http://www.eqar.eu/>

European 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 ESIB) and adopted by the ministers in Bergen in 2005. They are available at: http://www.enqa.eu/pubs_esg.lasso

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.

Grant (public) / Scholarship (public)

Non-repayable public aid given to students (Salmi and Hauptman 2006, p. 30).

Fees/contributions

Any sum of money paid by students with which they formally and compulsorily contribute to the costs of their higher education. This may include, but is not restricted to e.g. a registration fee, tuition fees, graduation fees, etc.

Formal learning

Formal learning is "learning that occurs in an organised and structured environment (i.e. in an education or training institution or on the job) and is explicitly designated as learning (in terms of objectives, time and resources). Formal learning is intentional from the learner's point of view. It typically leads to validation and certification" (Cedefop 2008, p. 85).

Flexibility

Flexibility in higher education refers to different ways of enabling individuals to follow educational paths adapted to their needs. The idea behind this concept is to open up higher education to more people and to increase adaptability to the multiple life worlds in modern societies.

Higher education institution

Any institution providing services in the field of higher education, as defined by national law. This includes private and public higher education institutions, irrespective of the composition of funding and management bodies.

Incoming mobility

Incoming mobility refers to students that moved to a specified country in order to study.

Informal learning

Informal learning is "learning resulting from daily activities related to work, family or leisure. It is not organised or structured in terms of objectives, time or learning's support. Informal learning is in most cases unintentional from the learner's perspective" (Cedefop 2008, p. 133).

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

Joint degrees are normally awarded after study programmes that correspond to all or at least some of the following characteristics:

- the programmes are developed and/or approved jointly by several institutions;
- students from each participating institution study parts of the programme at other institutions;
- the students' stays at the participating institutions are of comparable length;
- periods of study and exams passed at the partner institution(s) are recognised fully and automatically;
- professors of each participating institution also teach at the other institutions, work out the curriculum jointly and form joint commissions for admission and examinations;
- after completion of the full programme, the student either obtains the national degrees of each participating institution or a degree (in fact usually an unofficial "certificate" or "diploma") awarded jointly by them (Tauch & Rauhvargers 2002, p. 29).

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.

Lisbon Recognition Convention (LRC)

The Convention on the Recognition of Qualifications concerning Higher Education in the European Region 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. For more information, visit:

http://www.coe.int/t/dg4/highereducation/Recognition/LRC_en.asp

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 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 against the risk of default and loss by the government (Salmi and Hauptman 2006, p. 43).

National Qualifications Framework (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 is defined as "learning which is embedded in planned activities not explicitly designed as learning (in terms of learning objectives, learning time or learning support). Non-formal learning is intentional from the learner's point of view" (Cedefop 2008, p. 93).

Outward mobility

Outward mobility refers to students that moved out of a country in order to study elsewhere.

Psychological counselling services

The treatment of mental and emotional problems through the use of psychological techniques (The Free Dictionary, 2012b).

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 as defined by the UOE data collection manual: "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 (UNESCO, OECD & Eurostat 2010, pp. 34-35).

Routes into higher education

Formal routes to enter into higher education, i.e. the formal steps necessary to acquire the necessary formal access requirements for higher education. Questions of selection or acceptance into a programme are not part of the definition.

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.

Short cycle

Higher education degree programmes of less than 180 ECTS leading to a degree that is recognised at a lower level than a qualification at the end of the first cycle.

Socio-economic status

A combined economic and sociological measure of an individual's or a family's economic and social position relative to others, based on income, education, and occupation. When analyzing a family's socio-economic status, the household income earners' education and occupation are examined, as well as combined income, versus with an individual, when their own attributes are assessed (Wikipedia, 2012a). Parents' educational attainment is often taken as a proxy measure for socio-economic status (Koucký, Bartušek and Kovařovic 2009, pp. 14-16; Eurostudent 2008, pp. 56-59).

Stimulus package

Government spending package on a wide variety of things, from the military and police to services like education and healthcare, as well as transfer payments such as welfare benefits with the goal to cushion the impact of economic recession and to stimulate economic recovery (Wikipedia, 2012d).

Student-centred learning

Student-centred pedagogy provides learning opportunities that are shaped by the needs and interests of the students. Using this approach, students are active learners, and instructors work to facilitate student learning (Langworthy et al. 2009, p. 30).

Tax benefits

Tax relief of any kind, not limited to income tax. → Tax credit and → Tax deduction

Tax credit

Tax relief given through the reduction of taxes to be paid. This is usually a direct reduction in tax liability, not dependent on the taxpayer's tax bracket (The Free Dictionary 2012a).

Tax deduction / Lump sum tax deduction / Expenses based tax deduction

Tax relief given through the reduction of taxable income. One form of tax deduction is lump sum tax deduction or tax allowance, when a defined proportion of a person's income is not subject to tax. This can potentially alter the taxpayer's tax bracket, since it allows the person to receive a certain income free of tax, which means that only the income above this sum counts as taxable. Another form of tax deduction is when certain expenses (e.g. interest paid on loans, education expenses, etc.) can be deducted from the taxable income.

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.

III. Statistical terms

Average length of transition from education to work (Figure 5.8)

The duration of the transition from education to work is calculated as the difference between the date when leaving formal education for the last time and the date when starting the first job of at least 3 months. Results refer to people who had a first significant job. The indicator is calculated by dividing the number of employed people within age group 25-64 years having attained a specific level of education, by the total population of the same age group (Eurydice 2012, p. 179).

Most results are based on responses of people who left formal education within the last 5 years to avoid recall problems on dates of transition events. This is particularly the case for the United Kingdom where the rate of no answers to the 'date of first job' was significantly high beyond that threshold. The 5-year period also appears to be the most appropriate threshold value given the sample size per country. In some countries, compulsory military or community service contributes to a longer average duration of transition. This is the specially the case for Bulgaria (1.2 months), Greece (4.3 months), Cyprus (2.6 months) and Austria (1.5 months). Other countries have either few or no people in these cases (Ibid.).

Completion rate (Figure 5.2)

The completion rate shows the percentage of students who enter and complete their studies (graduate) in tertiary type A programmes (ISCED 5A). For some countries this includes those who enter a tertiary type A programme but who graduate at another level (tertiary type B programmes, ISCED 5B).

Two methods are used to calculate these percentages. The cross section method refers to the number of graduates in the calendar year 2008 who have entered in the programme a number of years before (this estimation takes into account different lengths of programmes when possible.) The true cohort method is based on panel data (survey or registers) which follow the individual student from entrance to graduation in the programme.

Delayed transition students (Figures 4.12 and 6.14)

Delayed transition is a characteristic used to define a type of student, who entered the higher education sector for the first time at a later stage in his/her life. This new focus group has been developed in order to capture a group of students on which a lot of policy focus is being laid. All students, whose delay between receiving HE entrance qualification at school and entering HE for the first time amounts to more than 2 years are considered delayed transition students. All students, whose delay was less than 2 years, but whose entry qualification was obtained outside the normal school system are also considered delayed transition students (Eurostudent 2011, p. 220).

Early leavers from education and training (early school leavers) (Figure 4.5)

From 20 November 2009, this indicator is based on annual averages of quarterly data instead of one unique reference quarter in spring. Early leavers from education and training refers to persons aged 18 to 24 fulfilling the following two conditions: first, the highest level of education or training attained is ISCED 0, 1, 2 or 3c short, second, respondents declared not having received any education or training in the four weeks preceding the survey (numerator). The denominator consists of the total population of the same age group, excluding no answers to the questions "highest level of education or training

attained" and "participation to education and training". Both the numerators and the denominators come from the EU Labour Force Survey (Eurostat, 2012a).

Educational attainment (Figures 4.3, 4.6, 4.7, 5.6, 5.7, 5.8 and 5.11)

Educational attainment refers to the highest level of education successfully completed. Indicators using the International Standard Classification of Education (ISCED), version 1997, 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 5.11 and 5.12, 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 5.11 and 5.12, medium educational attainment refers to completed upper secondary education (ISCED 3).
- High educational attainment corresponds to tertiary education (ISCED levels 5 and 6).

Expenditure on tertiary education (Figures 1.6, 1.7, 1.8 and 1.9)

The coverage of the UOE data collection can be summarised as follows:

- Direct public, private and international expenditure on educational institutions;
- Private expenditure on educational goods and services purchased outside educational institutions;
- Subsidies to students from government and other private entities;
- Transfers and payments to other private entities.

All (public and private) educational expenditure is covered, regardless of whether it is spent on institutions or on transfers to private entities, either for living costs or for educational services.

- "Educational core goods and services", includes all expenditure that is directly related to instruction and education. It covers all expenditure on teachers, school buildings, teaching materials, books, tuition outside schools, and administration of schools.
- Expenditure on "R&D" (Research and Development) covers all expenditure related to R&D in higher educations.
- Expenditure on "non-instruction" covers all expenditure broadly related to student living costs or services provided by institutions for the general public (e.g. ancillary services) (UNESCO, OECD & Eurostat 2010, p. 53).

Public expenditure on education refers to spending of public authorities at all levels. Expenditure that is not directly related to education (e.g. culture, sports, youth activities, etc.) is not included unless provided as ancillary services. 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) (Ibid, p. 62).

On differences between the UOE data collection and data based on COFOG (Figure 1.10), see section IV.

Formal student status (Eurostudent) (Figure 6.8)

In the framework of Eurostudent research, formal status of enrolment is any student modus which is officially registered and recognized as such by the state's order and/or higher education institution in the respective country. It may contain 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 studies + personal study time). Any deviations from the two categories should be placed in the response category 'other', but only if the rule of mutual exclusiveness of response categories is observed (Eurostudent, 2011).

Full-time equivalent student (Figures 1.8 and 1.9)

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, 2012b).

Gross income (Figures 5.11 and 5.12)

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 (Figure 7.1, 7.5 and 7.10)

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 1997)

The International Standard Classification of Education (ISCED) was designed by UNESCO in the 1970s and aims to offer a set of criteria suitable for compiling statistics on education internationally. The current version is from 1997 and a new version was agreed upon in 2011.

ISCED 97 levels are as follows:

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

Pre-primary education is defined as the initial stage of organised instruction. It is school- or centre-based and is designed for children aged at least 3 years.

- **ISCED 1: Primary education**

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**

It continues the basic programmes of the primary level, although teaching is typically more subject-focused. Usually, the end of this level coincides with the end of compulsory education.

- **ISCED 3: Upper secondary education**

This level generally begins at the end of compulsory education. The entrance age is typically 15 or 16 years. Entrance qualifications (end of compulsory education) and other minimum entry requirements are usually needed. Instruction is often more subject-oriented than at ISCED level 2. The typical duration of ISCED level 3 varies from two to five years.

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

These programmes straddle the boundary between upper secondary and tertiary education. They serve to broaden the knowledge of ISCED level 3 graduates. Typical examples are programmes designed to prepare pupils for studies at level 5 or programmes designed to prepare pupils for direct labour market entry.

- **ISCED 5: Tertiary education (first stage)**

Entry to these programmes normally requires the successful completion of ISCED levels 3 or 4. ISCED level 5 includes tertiary programmes with an academic orientation which are largely theoretically based (ISCED 5A) and tertiary programmes with an occupational orientation which are typically shorter than the academic programmes and designed for entry to the employment market (ISCED 5B). Only ISCED 5A programmes give access to doctoral programmes at ISCED level 6.

- **ISCED 6: Tertiary education (second stage)**

This level is reserved for tertiary programmes that lead directly to the award of an advanced research qualification (e.g. a doctorate).

International Standard Classification of Occupations (ISCO) (Figures 5.13, 5.14 and 5.15)

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

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

For more details, visit: <http://www.ilo.org/public/english/bureau/stat/isco/>

Low education/social background (Eurostudent) (Figure 4.12)

Socio-economic background of a student due to his/her parents' social standing. The parents' social standing is approximated by their highest educational qualification according to ISCED-97-code. The highest educational attainment of either the father or the mother is taken into account. The ISCED levels 0, 1 and 2 are considered as low qualification background (Eurostudent 2011, p. 219).

Median

In statistics, median is described as the numerical value separating the higher half of a sample from the lower half. The median of a finite list of numbers can be found by arranging all the observations from lowest value to highest value and picking the middle one (Wikipedia, 2012b). In this report, the EHEA median refers to the median of values among the EHEA countries where data is available.

Migrant (Figures 4.4, 4.5 and 4.6)

The variable analysed for Figures 4.4, 4.5 and 4.6 is the "country of birth" of the respondent to the EU Labour Force Survey (source). The purpose of this variable is to analyse the general characteristics of migrants in the labour market by country of origin. For Figures 4.4, 4.5 and 4.6 the focus is on educational characteristics as compared to the non-migrant and total population.

Country of birth is defined as the country of residence of the mother at the time of birth (of the respondent). In case of doubt, the country of birth should be defined as the country of residence of the mother at the time of birth. The migrants as analysed in Figures 4.4, 4.5 and 4.6 are therefore foreign born (born abroad ⁽⁹⁰⁾) (for more details, see Eurostat, 2011a).

⁽⁹⁰⁾ For the categorization of the country of birth, see:

http://circa.europa.eu/irc/dsis/employment/info/data/eu_lfs/lfsuserguide_htmlversion/01_Demographic_background/COUNTRYB.htm

Net entry rate (Figures 5.3, 5.4 and 5.5)

The entry rate for a particular year of age, or an age range, is the ratio between the number of new entrants (first degree in the education level) of that age and the population size of the same age. Net entry rates are computed as the sum of the entry rates, by single year of age, through every single age. The indicators here were computed as the sum of net entry rates for single ages from 14 to 29 years and for the age groups 30-34 years, 35-39 years and 40 years and over. For new entrants where data are only available by age group (e.g. 30-34, 35-39), the entry rates are multiplied by the number of years covered by the age group before being added to the other single-age entry rates. As regards the age group "40 and over", the denominator is the 35-39 age group, and the result is also multiplied by 5 before adding up.

Net graduation rate (Figures 5.3, 5.4 and 5.5)

The graduation rate for a particular year of age, or an age range, is the ratio between the number of new graduates (first degree in the education level) of that age and the population size of the same age. Net graduation rates are computed as the sum of the graduation rates by single year of age, through every single age. The indicators here were computed as the sum of net graduation rates for single ages from 14 to 29 years and for the age groups 30-34 years, 35-39 years and 40 years and over. For graduates where data are only available by age group (e.g. 30-34, 35-39), the graduation rates are multiplied by the number of years covered by the age group before being added to the other single-age graduation rates. As regards the age group "40 and over", the denominator is the 35-39 age group, and the result is also multiplied by 5 before adding up.

New entrants (Figures 4.1 and 4.2)

Definition of new entrants 2009:

New entrants into a level of education are students who, during the course of the current reporting period, enter any programme leading to a recognised qualification at this level of education for the first time, 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 work experience or courses taken at another level) (UNESCO, OECD & Eurostat, 2010).

Definition of new entrants 1999:

New entrants to a level of education are students who are entering any programme leading to a recognised qualification at this level of education for the first time, irrespective of whether the students enter the programme at the beginning or at an advanced stage of the programme.

Odds ratio (Figures 4.3, 4.6 and 4.7)

The odds ratio is the ratio of the odds of an event occurring in one group to the odds of it occurring 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. The odds ratio is calculated the following way (probabilities of the event in each of the groups are p_1 (first group) and p_2 (second group)): $(p_1/(1-p_1))/(p_2/(1-p_2))$ (Wikipedia, 2012c).

Outward mobility rate (Figure 7.3, 7.7 and 7.10)

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

Percentile

The percentile X (with $X \geq 0$ and ≤ 100) of a sampled variable is the value of the variable under which are X percent 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 & Eurostudent 2009, p. 129).

Public expenditure on tertiary education (Figures 1.6, 1.7, 1.8 and 1.9)

Public expenditure refers to the spending of public authorities at all levels. Expenditure that is not directly related to education (e.g., culture, sports, youth activities, etc.) is not included unless provided as ancillary services. 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) (UNESCO, OECD & Eurostat 2010, p. 62).

Regarding the type of goods and services that are included in education expenditure, the UOE data collection defines the following categories:

- Educational core goods and services include all expenditure that is directly related to instruction and education. It covers all expenditure on teachers, buildings, teaching materials, books, tuition outside educational institutions, and administration of educational institutions.
- R&D (Research and Development) covers all expenditure related to R&D carried out in higher education institutions.
- Non-instructional goods and services (ancillary services) cover all expenditure broadly related to student living costs or services provided by institutions for the general public (UNESCO, OECD & Eurostat 2010, p. 53).

On differences between the UOE data collection and data based on COFOG (Figure 1.10), see section IV.

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 1.8, 1.9 and 5.11)

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.

Unemployment rate and unemployment ratio (Figures 5.6, 5.7, 5.9 and 5.10)

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, 2012c).

The *unemployment ratio* – used in this report – is the number of people unemployed as a percentage of the total population.

Vertical mismatch (Figure 5.15)

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).

IV. Databases

BFUG data collection

This direct data collection based on an on-line questionnaire was aimed at collecting information for the present report. The reference year for the questionnaire was the academic year 2010/11. Through this data collection, Eurydice, Eurostat and Eurostudent collected primarily qualitative information. The questionnaire consisted of seven parts:

- the first part dealing with structural and contextual data of the higher education system;
- the second questionnaire focussing on student-centred learning, including learning outcomes, ECTS and the Diploma Supplement. In this context, countries were also invited to submit an example of their national Diploma Supplement;
- the third questionnaire focussing on quality assurance;
- the fourth questionnaire focussing on lifelong learning;
- the fifth questionnaire dealing with policies to widen participation and to increase flexibility;
- the sixth questionnaire on students' contributions and student support;
- and the seventh questionnaire on mobility.

When filling in the questionnaire, 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 for the answers.

The information covered by the first six questionnaires was submitted by all signatory countries except the former Yugoslav Republic of Macedonia and Russia. The questionnaire on mobility was submitted by all signatory countries except Albania, Kazakhstan, the former Yugoslav Republic of Macedonia, Russia and Ukraine. The Holy See also did not submit the mobility questionnaire due to the specific situation of its higher education institutions which are established in many countries across Europe. The information submitted can be consulted on the EHEA website (see <http://www.ehea.info/>).

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 ISCED 1997), 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).

Data for more than 60 participating countries are provided to the international organisations via an electronic questionnaire. They use a common methodology, definitions, classifications, coverage as well as criteria for quality-controlling the data. UIS-UNESCO collects comparable data from the rest of the world (at a less detailed level). Data cover the totality of the specified populations and are mainly derived from administrative sources used at national level.

UOE indicators and data available at (including metadata):

<http://epp.eurostat.ec.europa.eu/portal/page/portal/education/introduction>;
<http://epp.eurostat.ec.europa.eu/portal/page/portal/education/data/database>.

Methodology:

http://circa.europa.eu/Public/irc/dsis/edtcsl/library?l=/public/unesco_collection&vm=detailed&sb=Title.

EU Labour Force Survey (EU-LFS)

The Labour Force Survey (LFS) is a quarterly household sample survey carried out in the Member States of the European Union, Candidate Countries and EFTA countries (except Lichtenstein). It is the main source of information about the situation and trends on the labour market in the European Union. The definitions of employment and unemployment, as well as other survey characteristics follow the definitions and recommendations of the International Labour Organisation (ILO). In addition, harmonisation is achieved through adherence to common principles of questionnaire construction, unemployment definition and common definitions of main variables and reply categories.

The data can be broken down along many dimensions including age, sex, educational attainment, and distinctions between permanent/temporary and full-time/part-time employment.

The LFS sample size is about 1.5 million people every quarter. The sampling rates in each country vary between 0.2 % and 3.3 %. The LFS has become a continuous quarterly survey. Initially, from 1983, its results covered one quarter per year only (usually in spring), but from 1998 to 2005 it underwent a transition to a continuous survey – interviews are distributed across all weeks of the year – designed to give reliable quarterly results.

EU LFS education indicators and data are available at (including metadata):

<http://epp.eurostat.ec.europa.eu/portal/page/portal/education/introduction>;
<http://epp.eurostat.ec.europa.eu/portal/page/portal/education/data/database>.

Methodology:

http://epp.eurostat.ec.europa.eu/portal/page/portal/employment_unemployment_lfs/methodology/definitions.

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

EU-SILC (Community Statistics on Income and Living Conditions) is a data collection which has become the reference source for statistics on income and poverty at EU-level. Both cross-sectional (data pertaining to a given year) and longitudinal (pertaining to changes over a four-year period) data are collected in a harmonised way across all EU Member States plus Croatia, Iceland, Norway, Switzerland and Turkey.

EU-SILC does not rely on a common questionnaire or a survey but on a harmonised “framework”. The latter defines the 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 minimum size of the sample of the overall population which is surveyed every year is for the cross-sectional data operation: about 130 000 households and 270 000 persons.

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.

All household members are surveyed, but only those aged 16 and more are interviewed.

EU-SILC indicators and data available at (including metadata):

http://epp.eurostat.ec.europa.eu/portal/page/portal/income_social_inclusion_living_conditions/introduction.

Methodology:

http://circa.europa.eu/Public/irc/dsis/eusilc/library?l=/guidelines_questionnaire/operation_guidelines_4/silc065_version/_EN_1.0_&a=d.

General government expenditure data by function (COFOG)

COFOG was developed by the Organization for Economic Cooperation and Development (OECD) and is published by the United Nations Statistical Division (UNSD). It can be applied to government expense and the net acquisition of non-financial assets. The methodological framework is the European system of accounts, 1995 edition (ESA 95).

EU Member States have to compile annual data in accordance with the classification on COFOG (Classification of the Functions of Government), by ESA economic category, and report them to the European Commission (Eurostat). Most countries also now provide, on a voluntary basis, COFOG statistics at a more detailed (group) level, for some or all groups, as well as the simpler breakdown by division.

Regarding the comparability of the COFOG classification and the UOE data collection, there are strong links between the two, as expenditure from COFOG (at the 2nd digit level) and in the UOE data collection are compiled according to the ISCED classification.

As written in the 2011 COFOG Manual, some concepts and definitions are common to the UOE and COFOG analysis. Additionally, UOE Finance tables are being revised in order to make them more compatible with national accounts concepts. Major differences at the current stage can be detailed as follows:

- Both are based on ISCED-97. However, COFOG covers under function Education in category Education not definable by level (at the COFOG II level breakdown: 09.5) non-formal education, whereas UOE is interested only in formal education (educational programmes designated as "adult education" or "continuing education" which are not similar to regular education programmes, e.g. literacy programmes for adults, are excluded).
- Scope of general government sector: in UOE government dependent educational institutions (e.g. universities) are not part of the government. They are treated separately and the part of their expenditure that is financed by private sources is not taken into account when calculating public expenditure on education. In national accounts these units can be classified within or outside the general government sector. Whenever they are classified outside general government sector no differences between COFOG and UOE in this respect should be observed. However, if these units are part of general government in national accounts their expenditure on education financed from "private" sources (private donations, own resources) will also be included in COFOG government expenditure on education.
- Both statistics rely on actual outlays, rather than budgets; however UOE also includes under public expenditure loans for students that are treated as financial transactions in national accounts and thus not taken into account for COFOG data.
- Time of recording: Accrual (government exp.) vs. Cash accounting (UOE data collection), however in practice for some countries UOE data can be also on accrual or mixed accrual/cash basis.
- Data sources and compilation: In some Member States different data sources are used for compilation of UOE and COFOG data. Even when the same data sources are used they are treated independently, with independent compilation methods applied. Also, data are sometimes changed due to reconciliation processes between different accounts.

- Further breakdown of education expenditure: Detailed breakdown of COFOG function Education does not fully correspond to UOE breakdown, in particular for grouping of subsidiary services on education and R&D (allocated in UOE dataset directly to the corresponding ISCED heading but presented as separate groups in COFOG).
- Treatment of R&D expenditure: UOE includes in education expenditure any research conducted in tertiary educational institutions. On the other hand, COFOG classifies R&D expenditure conducted in tertiary educational institutions to the respective functions (e.g. 01.4 Basic Research, 07.5 R&D Health), and in function Education only R&D on education.
- Definition of government expenditure: Government final consumption expenditure corresponds in the UOE to government direct expenditure on educational institutions. UOE educational expenditure classified as "transfers or other payments from governments to households and other private entities" is part of social benefits, subsidies or other miscellaneous transfers in national accounts (Extract from 2011 COFOG Manual, section 4.4.3).

Data and methodological notes available at:

http://epp.eurostat.ec.europa.eu/portal/page/portal/government_finance_statistics/data/database.

Manual on sources and methods for the compilation of COFOG Statistics (2011 edition):

http://epp.eurostat.ec.europa.eu/cache/ITY_OFFPUB/KS-RA-11-013/EN/KS-RA-11-013-EN.PDF;

Eurostudent IV survey

Reference year: the most recent available data from 2009 and 2010 (with exception of England and Wales, where data from academic year 2007/08 were used).

Sample unit: National or resident students at an ISCED 5A level of education.

Coverage: 22 EU members (for UK only England/Wales), plus Norway, Turkey and Switzerland.

Description:

The purpose of Eurostudent is to provide comparative data on the so-called "social dimension" of higher education in Europe. It is the product of a network of academics and representatives of ministries responsible for higher education in 25 countries.

The set of tools intended to ensure the comparability and quality of the data collected is commonly referred to as the EUROSTUDENT Conventions. These Conventions have evolved over the EUROSTUDENT project cycles and are the result of many discussions during a variety of project meetings, intensive seminars, workshops and conferences organised by the EUROSTUDENT Network. They are recorded in a number of handbooks that are at the disposition of all national contributors as well as the interested public. To begin with, the Conventions comprise definitions of the most important constructs used in the national surveys (Data Delivery Handbook). Secondly, they include a core questionnaire with 47 questions that should be embedded into all national surveys (Data Delivery Handbook). This, thirdly, allows the national distributors to deliver data on 81 precisely described subtopics (Data Delivery Handbook). The large majority of country teams used online surveys (19 of 25), for this reason methodological guidelines for the execution of the national surveys focused on challenges and considerations related to online surveys (Handbook on the Planning and Execution of Online Surveys).

Next to the core questionnaire, the most important methodological specification concerns the standard target group to be surveyed by the national contributors. In defining the standard target group, the agreements of previous rounds of EUROSTUDENT as well as the UOE Data Conventions were taken into account. The following is the standard target group of EUROSTUDENT IV.

- Students who currently have a permanent residency in the respective country and who have finished their prior education in the respective country, independent of their citizenship
- Both full-time and part-time students, differentiated by their formal status
- Students in ISCED 5A programmes (Bachelor, Master and all other types of national programmes at ISCED level 5A)
- Students at all higher education institutions offering programmes at ISCED level 5A (specialist higher education institutions such as military academies are excluded)
- Distance students, provided that they are not enrolled at an institution providing distance education only (such as the Open University in the United Kingdom or the FernUniversität Hagen in Germany)

V. Notes on Eurostat figures

Chapter 1

Figure 1.6: Annual public expenditure on tertiary education as a % of GDP, 2008

Belgium: Expenditure excludes independent private institutions and the German-speaking Community.

Denmark: Expenditure of post secondary non-tertiary level of education is partially included in upper secondary and tertiary level of education. R&D expenditure is not available. Expenditure excludes independent private institutions.

Ireland: Expenditure for ancillary services is not available.

Greece: Expenditure at local level of government is not available.

Spain: Expenditure for ancillary services is not available.

Cyprus: Including financial aid to students studying abroad.

Hungary: Student loans from public sources are not available.

Malta: Public transfers to private entities are not available.

Portugal: Expenditure of post secondary non-tertiary level of education is partially included in upper secondary and tertiary level of education. Student loans from public sources are not available. Expenditure for ancillary services is not available.

Slovakia: Expenditure of ISCED 5B is included under upper secondary level of education.

United Kingdom: Adjustment of GDP to the financial year that is running from 1st of April to 31st of March.

Iceland: Expenditure for ancillary services is not available. R&D expenditure is not available.

Croatia: Public transfers to other private entities are not available. Direct expenditure for independent private institutions is not available.

Figure 1.7: Annual public expenditure on tertiary education as a % of total public expenditure, 2008

Belgium: Expenditure excludes independent private institutions and the German-speaking Community.

Denmark: Expenditure of post secondary non-tertiary level of education is partially included in upper secondary and tertiary level of education. R&D expenditure is not available. Expenditure excludes independent private institutions.

Ireland: Expenditure for ancillary services is not available.

Greece: Expenditure at local level of government is not available.

Spain: Expenditure for ancillary services is not available.

Cyprus: Including financial aid to students studying abroad.

Malta: Public transfers to private entities are not available.

Portugal: Expenditure of post secondary non-tertiary level of education is partially included in upper secondary and tertiary level of education. Student loans from public sources are not available. Public transfers to private entities other than households are not available.

Slovakia: Expenditure of ISCED 5B is included under upper secondary level of education.

United Kingdom: Adjustment of GDP to the financial year that is running from 1st of April to 31st of March.

Iceland: Expenditure for ancillary services is not available. R&D expenditure is not available.

Croatia: Public transfers to other private entities are not available. Direct expenditure for independent private institutions is not available.

Figure 1.8: Annual public expenditure on tertiary educational institutions per full-time equivalent student in Euros PPS, 2008

Denmark: Expenditure of post secondary non-tertiary level of education is partially included in upper secondary and tertiary level of education. R&D expenditure is not available. Expenditure for independent private educational institutions is not available.

Ireland: Expenditure for ancillary services is not available.

Spain: Expenditure for ancillary services is not available.

Austria: Payments from international agencies and other foreign sources to educational institutions are not available.

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

Portugal: Expenditure of post secondary non-tertiary level of education is partially included in upper secondary and tertiary level of education. Expenditure at local level of government for private institutions is not available. Expenditure for ancillary services is not available.

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

Slovakia: Expenditure of ISCED 5B is included under upper secondary level of education. Expenditure for independent private educational institutions is not available. Payments from international agencies and other foreign sources to private educational institutions are not available.

United Kingdom: Adjustment of educational expenditure of financial year, which is running from 1st of April to 31st of March, to the calendar year.

Iceland: Expenditure for ancillary services is not available. Capital expenditure from private educational institutions is not available. Payments from international agencies and other foreign sources to educational institutions are not available. R&D expenditure is not available.

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

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

Figure 1.9: Annual public expenditure on tertiary educational institutions per full-time equivalent student in Euros PPS relative to the GDP per inhabitant in Euros PPS, 2008

Denmark: Expenditure of post secondary non-tertiary level of education is partially included in upper secondary and tertiary level of education. R&D expenditure is not available. Expenditure for independent private educational institutions is not available.

Ireland: Expenditure for ancillary services is not available.

Greece: Calculation based on provisional GDP per capita values.

Spain: Expenditure for ancillary services is not available.

Austria: Payments from international agencies and other foreign sources to educational institutions are not available.

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

Portugal: Expenditure of post secondary non-tertiary level of education is partially included in upper secondary and tertiary level of education. Expenditure at local level of government for private institutions is not available. Expenditure for ancillary services is not available.

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

Slovakia: Expenditure of ISCED 5B is included under upper secondary level of education. Expenditure for independent private educational institutions is not available. Payments from international agencies and other foreign sources to private educational institutions are not available.

United Kingdom: Adjustment of educational expenditure of financial year, which is running from 1st of April to 31st of March, to the calendar year.

Iceland: Expenditure for ancillary services is not available. Capital expenditure from private educational institutions is not available. Payments from international agencies and other foreign sources to educational institutions are not available. R&D expenditure is not available.

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

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

Figure 1.10: Yearly changes in the public expenditure on tertiary education between 2006 and 2010

Calculation based on provisional values for Bulgaria (2006-2009), Greece (2006-2010), Spain (2007), Hungary (2006-2009) and Sweden (2006).

Chapter 4

Figure 4.2: Percentage of women in new entrants in tertiary education by field (median and 10/90 percentile), 2008/09

Country coverage:

All field of education: Bulgaria, the Czech Republic, Denmark, Estonia, Cyprus, Latvia, Lithuania, Hungary, Malta, Poland, Romania, Slovakia, Sweden, the United Kingdom, the former Yugoslav Republic of Macedonia, Turkey, Iceland, Norway, Switzerland, Belgium, Germany, Ireland, Spain, Italy, the Netherlands, Austria, Portugal, Slovenia, Finland.

Teacher training: Bulgaria, the Czech Republic, Denmark, Estonia, Cyprus, Latvia, Lithuania, Hungary, Malta, Poland, Romania, Slovakia, Sweden, the United Kingdom, Turkey, Iceland, Norway, Switzerland, Belgium, Germany, Spain, the Netherlands, Austria, Portugal, Slovenia, Finland.

Education science: Bulgaria, the Czech Republic, Denmark, Estonia, Cyprus, Latvia, Lithuania, Hungary, Malta, Romania, Slovakia, Sweden, the United Kingdom, Turkey, Iceland, Norway, Switzerland, Belgium, Germany, Spain, Italy, the Netherlands, Austria, Portugal, Finland.

Arts: Bulgaria, the Czech Republic, Denmark, Estonia, Cyprus, Latvia, Lithuania, Hungary, Malta, Poland, Romania, Slovakia, Sweden, the United Kingdom, Turkey, Iceland, Norway, Switzerland, Belgium, Germany, Ireland, Spain, Italy, the Netherlands, Austria, Portugal, Slovenia, Finland.

Humanities: Bulgaria, the Czech Republic, Denmark, Estonia, Cyprus, Latvia, Lithuania, Hungary, Malta, Poland, Romania, Slovakia, Sweden, the United Kingdom, Turkey, Iceland, Norway, Switzerland, Belgium, Germany, Ireland, Spain, Italy, the Netherlands, Austria, Portugal, Slovenia, Finland.

Social and behavioural science: Bulgaria, the Czech Republic, Denmark, Estonia, Cyprus, Latvia, Lithuania, Hungary, Malta, Poland, Romania, Slovakia, Sweden, the United Kingdom, Turkey, Iceland, Norway, Switzerland, Belgium, Germany, Ireland, Spain, Italy, the Netherlands, Austria, Portugal, Slovenia, Finland.

Journalism and information: Bulgaria, the Czech Republic, Denmark, Estonia, Cyprus, Latvia, Lithuania, Hungary, Poland, Romania, Slovakia, Sweden, the United Kingdom, Turkey, Iceland, Norway, Switzerland, Belgium, Germany, Ireland, Spain, Italy, the Netherlands, Austria, Portugal, Slovenia, Finland.

Business and administration: Bulgaria, the Czech Republic, Denmark, Estonia, Cyprus, Latvia, Lithuania, Hungary, Malta, Poland, Romania, Slovakia, Sweden, the United Kingdom, Turkey, Iceland, Norway, Switzerland, Belgium, Germany, Ireland, Spain, Italy, the Netherlands, Austria, Portugal, Slovenia, Finland.

Law: Bulgaria, the Czech Republic, Denmark, Estonia, Cyprus, Latvia, Lithuania, Hungary, Malta, Poland, Romania, Slovakia, Sweden, the United Kingdom, the former Yugoslav Republic of Macedonia, Turkey, Iceland, Norway, Switzerland, Belgium, Germany, Ireland, Spain, Italy, the Netherlands, Austria, Portugal, Slovenia, Finland.

Life science: Bulgaria, the Czech Republic, Denmark, Estonia, Cyprus, Latvia, Lithuania, Hungary, Malta, Poland, Romania, Slovakia, Sweden, the United Kingdom, Turkey, Iceland, Norway, Switzerland, Belgium, Germany, Ireland, Spain, Italy, the Netherlands, Austria, Portugal, Slovenia, Finland.

Physical science: Bulgaria, the Czech Republic, Denmark, Estonia, Cyprus, Latvia, Lithuania, Hungary, Malta, Poland, Romania, Slovakia, Sweden, the United Kingdom, Turkey, Iceland, Norway, Switzerland, Belgium, Germany, Ireland, Spain, Italy, the Netherlands, Austria, Portugal, Slovenia, Finland.

Mathematics and statistics: Bulgaria, the Czech Republic, Denmark, Estonia, Cyprus, Latvia, Lithuania, Hungary, Malta, Poland, Romania, Slovakia, Sweden, the United Kingdom, Turkey, Iceland, Norway, Switzerland, Belgium, Germany, Ireland, Spain, Italy, the Netherlands, Austria, Portugal, Slovenia, Finland.

Computing: Bulgaria, the Czech Republic, Denmark, Estonia, Cyprus, Latvia, Lithuania, Hungary, Malta, Poland, Romania, Slovakia, Sweden, the United Kingdom, Turkey, Iceland, Norway, Switzerland, Belgium, Germany, Ireland, Spain, Italy, the Netherlands, Austria, Portugal, Slovenia, Finland.

Engineering and engineering trades: Bulgaria, the Czech Republic, Denmark, Estonia, Cyprus, Latvia, Lithuania, Hungary, Malta, Poland, Romania, Slovakia, Sweden, the United Kingdom, the former Yugoslav Republic of Macedonia, Turkey, Iceland, Norway, Switzerland, Belgium, Germany, Ireland, Spain, Italy, the Netherlands, Austria, Portugal, Slovenia, Finland.

Manufacturing and processing: Bulgaria, the Czech Republic, Denmark, Estonia, Latvia, Lithuania, Hungary, Poland, Romania, Slovakia, Sweden, the United Kingdom, Turkey, Iceland, Norway, Switzerland, Belgium, Germany, Ireland, Spain, Italy, the Netherlands, Austria, Portugal, Slovenia, Finland.

Architecture and building: Bulgaria, the Czech Republic, Denmark, Estonia, Cyprus, Latvia, Lithuania, Hungary, Malta, Poland, Romania, Slovakia, Sweden, the United Kingdom, Turkey, Iceland, Norway, Switzerland, Belgium, Germany, Ireland, Spain, Italy, the Netherlands, Austria, Portugal, Slovenia, Finland.

Agriculture, forestry and fishery: Bulgaria, the Czech Republic, Denmark, Estonia, Cyprus, Latvia, Lithuania, Hungary, Malta, Poland, Romania, Slovakia, Sweden, the United Kingdom, Turkey, Iceland, Norway, Switzerland, Belgium, Germany, Ireland, Spain, Italy, the Netherlands, Austria, Portugal, Slovenia, Finland.

Veterinary: Bulgaria, the Czech Republic, Denmark, Estonia, Latvia, Lithuania, Hungary, Poland, Romania, Slovakia, Sweden, the United Kingdom, Turkey, Norway, Switzerland, Belgium, Germany, Ireland, Spain, Italy, the Netherlands, Austria, Portugal, Slovenia, Finland.

Health: Bulgaria, the Czech Republic, Denmark, Estonia, Cyprus, Latvia, Lithuania, Hungary, Malta, Poland, Romania, Slovakia, Sweden, the United Kingdom, Turkey, Iceland, Norway, Switzerland, Belgium, Germany, Ireland, Spain, Italy, the Netherlands, Austria, Portugal, Slovenia, Finland.

Social services: Bulgaria, the Czech Republic, Denmark, Estonia, Cyprus, Latvia, Lithuania, Hungary, Malta, Poland, Romania, Slovakia, Sweden, the United Kingdom, Turkey, Iceland, Norway, Switzerland, Belgium, Germany, Ireland, Spain, Italy, the Netherlands, Austria, Portugal, Slovenia, Finland.

Personal services: Bulgaria, the Czech Republic, Denmark, Estonia, Cyprus, Latvia, Lithuania, Hungary, Malta, Poland, Romania, Slovakia, Sweden, the United Kingdom, Turkey, Iceland, Norway, Switzerland, Belgium, Germany, Ireland, Spain, Italy, the Netherlands, Austria, Portugal, Slovenia, Finland.

Transport services: Bulgaria, the Czech Republic, Denmark, Estonia, Latvia, Lithuania, Poland, Slovakia, Sweden, Turkey, Norway, Switzerland, Belgium, Germany, Ireland, Spain, Italy, the Netherlands, Portugal, Slovenia, Finland.

Environmental protection: Bulgaria, the Czech Republic, Denmark, Estonia, Cyprus, Latvia, Lithuania, Hungary, Malta, Poland, Romania, Slovakia, Sweden, the United Kingdom, Turkey, Iceland, Norway, Switzerland, Belgium, Germany, Ireland, Spain, Italy, the Netherlands, Austria, Portugal, Slovenia, Finland.

Security services: Bulgaria, the Czech Republic, Denmark, Estonia, Cyprus, Latvia, Lithuania, Hungary, Poland, Romania, Slovakia, Sweden, Turkey, Norway, Switzerland, Belgium, Germany, Ireland, Spain, Italy, the Netherlands, Austria, Portugal, Slovenia, Finland.

Not know or unspecified: Bulgaria, Latvia, Sweden, the United Kingdom, the former Yugoslav Republic of Macedonia, Norway, Switzerland, Belgium, Germany, Ireland, Spain, Italy, the Netherlands, Austria.

Figure 4.3: Attainment by gender: odds ratios of men over women to attain higher education, 2000-2010

Country coverage for most reference years (see also exceptions below):

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

Exceptions:

2000: no data for Austria, Croatia, the former Yugoslav Republic of Macedonia and Turkey.

2001: no data for Austria, Croatia, the former Yugoslav Republic of Macedonia and Turkey.

2002: no data for Austria, the former Yugoslav Republic of Macedonia and Turkey.

2003: no data for Austria, the former Yugoslav Republic of Macedonia and Turkey.

2004: no data for the former Yugoslav Republic of Macedonia and Turkey.

2005: no data for the former Yugoslav Republic of Macedonia and Turkey.

Figure 4.15: Share of household funding in total expenditure of higher education institutions (2000, 2008)

Belgium: 2008, 2000: Expenditure excludes independent private institutions and the German-speaking Community.

Czech Republic: 2000: 2001 data.

Denmark: 2008, 2000: Expenditure excludes independent private institutions; 2008, 2004: Expenditure of post secondary non-tertiary level of education is partially included in tertiary level of education.

Estonia: 2000: 2005 data; 2008, 2000: Payments from households and other private entities to public educational institutions are not available.

Ireland: 2008: Expenditure for ancillary services is not available; 2008, 2000: Payments from private entities other than households to independent private institutions are not available; 2008, 2000: Payments from private entities other than households to independent private institutions are not available.

Greece: 2000: 2001 data; 2000: Payments from private entities other than households to independent private institutions are not available. 2008: 2005 data.

Spain: 2008: Expenditure for ancillary services is not available; 2000: Payments from private entities other than households to independent private institutions are not available.

Lithuania: 2000: 2003 data.

Hungary: 2008: 2005 data; 2008: Payments from private entities to government-dependent private institutions is not available; 2000: 2001 data.

Austria: 2008, 2004: Payments from private entities other than households to public educational institutions are not available.

Poland: 2000: 2002 data; 2008: Private expenditure at ISCED 5B is not available.

Portugal: 2000: 2001 data; 2008: Expenditure for ancillary services is not available; 2008: Expenditure of post-secondary non-tertiary level of education is partially included in tertiary level of education; 2000: Private expenditure to private educational institutions is not available; 2000: Payments from private entities other than households to public institutions are not available.

Romania: 2008: Payments from private entities other than households to public educational institutions are not available; 2000: 2005 data.

Slovenia: 2000: 2001 data.

Slovakia: 2008, 2000: Expenditure at ISCED 5B is included under upper secondary level of education; 2008, 2000: Payments from households and other private entities to private educational institutions is not available.

Sweden: 2000: 2003 data.

The United Kingdom: 2000: Expenditure for ancillary services is not available.

Iceland: 2000: Expenditure at post secondary non-tertiary level of education is partly included under tertiary level of education; 2008: Expenditure for ancillary services is not available.

Norway: 2008: Payments from other private entities to educational institutions are not available;

Croatia: 2000: 2005 data; 2008, 2000: Payments from private entities other than households to educational institutions are not available; 2008, 2004, 2000: Payments from households to private institutions are not available.

Turkey: 2008: 2004 data; 2000: Payments from households to private institutions are not available; 2000: Payments from private entities other than households to educational institutions are not available.

Figure 4.20: Support to students enrolled at tertiary education level as a percentage of public expenditure on tertiary education (2000, 2008)

Belgium: 2008, 2000: Expenditure exclude independent private institutions and the German speaking Community; 2000: Imputed retirement expenditure is not available.

Bulgaria: 2008, 2000: Student loans from public sources are not applicable.

Czech Republic: 2008, 2000: Student loans from public sources are not applicable.

Denmark: 2000: Financial aid to students from other private entities is not available; 2008: Expenditure of post secondary non-tertiary level of education is partially included in tertiary level of education.

Germany: 2008: Financial aid to students from private entities other than households is not available.

Estonia: 2008, 2000: Student loans from public sources are not applicable.

Ireland: 2008: Expenditure for ancillary services is not available; 2000: Student loans from public sources are not applicable.

Greece: 2000: Student loans from public sources are not applicable; 2000: Imputed retirement expenditure is not available.

Spain: 2008: Expenditure for ancillary services is not available; 2000: Student loans from public sources are not applicable.

France: 2000: Student loans from public sources are not applicable.

Cyprus: 2008, 2000: Including financial aid to students studying abroad.

Hungary: 2008: Student loans from public sources are not applicable.

Malta: 2000: Student loans from public sources are not applicable.

Austria: 2000: Student loans from public sources are not applicable.

Poland: 2000: Student loans from public sources are not applicable.

Portugal: 2008: Student loans from public sources are not available; 2008: Expenditure for ancillary services is not available; 2008: Expenditure of post-secondary non-tertiary level of education is partially included in tertiary level of education; 2008,

2000: Imputed retirement expenditure is not available; 2000: Financial aid to students from regional level of government is not available.

Romania: 2000: Student loans from public sources are not applicable.

Slovakia: 2008, 2000: Expenditure at ISCED 5B is included under upper secondary level of education.

Finland: 2000: Student loans from public sources are not applicable.

United Kingdom: 2000: Student loans from public sources are not available.

Iceland: 2008: Expenditure for ancillary services is not available; 2000: Expenditure at post secondary non-tertiary level of education is partly included under tertiary level of education; 2000: Scholarships are not applicable.

Croatia: 2008: Public transfers to other private entities are not available; 2008: Scholarships and other grants are not available.

Turkey: 2000: Expenditure at regional and local levels of government is not available.

Chapter 5

Figure 5.2: Completion rates in tertiary type A programmes (%), 2008

Belgium (Flemish Community): Year used for new entrants: 2005/06

Data on entrants only concern data for students who have entered higher education for the first time in the Flemish Community (either in a professional bachelor or an academic bachelor) and who are still registered on 1 February 2006. The graduate data refers to bachelor degrees only. In the earlier data collections on survival rate / drop out another methodology was used. This change is mainly based on the implementation of the BA/MA structure. Due to this the bachelor degrees are considered as first degree and the master degrees are considered as second or further degrees. Any comparison between this year's data and that of previous years should be avoided. No data for social advancement education, royal military school, open university, etc. were included.

Czech Republic: Year used for new entrants: 2001

Denmark: Year used for new entrants: 1997/98

Germany: Year used for new entrants: 1999/2000

Spain: Year used for new entrants: 2003/04 and 2005/06

France: Year used for new entrants: 1996-2003

Hungary: Year used for new entrants: 2003/04 for university students and 2005/06 for college students.

Number of foreign students is estimated. It contains the number of foreign students from total of graduated.

Austria: Year used for new entrants: 2002/03; 2004/05

Italy: Year used for new entrants: 1998/99

Due to relevant changes that occurred in the structure of the tertiary system in the last years this indicator is not suitable for Italy.

Lithuania: Year used for new entrants: 2000, 2002

Netherlands: Year used for new entrants: 1998/99

Refers to first time ISCED 5A graduation - 1st and 2nd degree (unduplicated).

Norway: Year used for new entrants: 1997/98

Poland: Year used for new entrants: 2003/04, 2004/05, 2005/06

Portugal: Year used for new entrants: 2003-2008

Slovenia: Year used for new entrants: 2001/02

Slovakia: Year used for new entrants: 2002-2005

Sweden: Year used for new entrants: 1999/2000

Data includes students entering single courses who may never intend to finalise a whole degree.

Finland: Year used for new entrants: 1995

The number of entrants and graduates are based on individual-based register data of Statistics Finland which covers almost 100 % of the entrants and graduates in Finland. Only negligible amount of persons (those who do not have a personal identity number) are excluded from the coverage of the true cohort data. The graduate number represents the number of graduated persons of those who started their studies in 1995 by the end of the year 2005. This represents the graduation of

those who started their studies in 1995 during 10 years of studies. Polytechnic programmes for adults are excluded from entrant and graduate data for completion rates.

The United Kingdom: Year used for new entrants: various.

Iceland: Year used for new entrants: 1998/99

Graduates 1999-2008.

Armenia: Year used for new entrants: unknown

Russia: Year used for new entrants: 2003/04

Figure 5.3: Net entry rate and net graduation rate (%), tertiary type A programmes, 2008/09

Russia: Number of entrants and graduates are indicated for the period from 1 October 2008 to 31 September 2009. It excludes the number of foreign citizens studying under international agreements and includes the number of foreign citizens studying on general entrance terms.

Azerbaijan, Ukraine and Armenia: No data for new entrants broken down by age.

Albania, Azerbaijan, Ukraine and Armenia: No detailed data for graduates broken down by age.

Figure 5.4: Net entry rate and net graduation rate (%), tertiary type B programmes, 2008/09

Russia: Number of entrants and graduates are indicated for the period from 1 October 2008 to 31 September 2009. It excludes the number of foreign citizens studying under international agreements and includes the number of foreign citizens studying on general entrance terms.

Azerbaijan, Ukraine and Armenia: No data for new entrants broken down by age.

Albania, Azerbaijan, Ukraine and Armenia: No detailed data for graduates broken down by age.

Figure 5.5: Median net entry rate and median net graduation rate (%), tertiary type A programmes, by academic year

Net entry rate median excludes Albania, Andorra, Armenia, Azerbaijan, Bosnia and Herzegovina, Croatia, the former Yugoslav Republic of Macedonia, Georgia, the Holy See, Kazakhstan, Lithuania, Luxembourg, Montenegro, Moldova, Russia and Ukraine.

Net graduation rate median excludes Albania, Andorra, Armenia, Azerbaijan, Bosnia and Herzegovina, France, Georgia, the Holy See, Ireland, Kazakhstan, Luxembourg, Montenegro, Moldova, Russia and Ukraine.

Figure 5.8: Average length of transition from education to work by educational attainment level, 2009

Germany and Switzerland: Information on the first job was not collected in a comparable way in Germany and Switzerland.

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Excludes Albania, Andorra, Armenia, Azerbaijan, Bosnia-Herzegovina, Croatia, Georgia, Kazakhstan, Liechtenstein, Moldova, Montenegro, Russian Federation, Serbia, the former Yugoslav Republic of Macedonia, Turkey and Ukraine.

Figure 5.15: Percentage of people aged 25-34 with tertiary education (ISCED 5-6) who are vertically mismatched (not in ISCO 1, 2 or 3) by field of study, average 2006-2010

Country coverage:

Teacher training and education science: Belgium, Bulgaria, the Czech Republic, Spain, Italy, Hungary, the Netherlands, Poland, Sweden, the United Kingdom, Norway, Switzerland, the former Yugoslav Republic of Macedonia and Turkey.

Humanities, (foreign) languages and arts: Belgium, the Czech Republic, Denmark, Ireland, Greece, Spain, France, Italy, Cyprus, the Netherlands, Poland, Finland, Sweden, the United Kingdom, Norway, Switzerland and Turkey.

Social sciences, business and law: Belgium, Bulgaria, the Czech Republic, Denmark, Germany, Ireland, Greece, Spain, France, Italy, Cyprus, Lithuania, Hungary, the Netherlands, Austria, Poland, Portugal, Romania, Slovenia, Slovakia, Finland, Sweden, the United Kingdom, Norway, Switzerland, the former Yugoslav Republic of Macedonia and Turkey.

Sciences, mathematics and computing: Belgium, the Czech Republic, Ireland, Greece, Spain, France, Italy, Cyprus, Poland, Romania, Sweden, the United Kingdom and Turkey.

Engineering, manufacturing and construction: Belgium, Bulgaria, the Czech Republic, Denmark, Germany, Ireland, Greece, Spain, France, Italy, Cyprus, Lithuania, Hungary, the Netherlands, Austria, Poland, Romania, Slovenia, Finland, Sweden, the United Kingdom, Switzerland and Turkey.

Agriculture and veterinary: Greece, Spain, France, Italy, Poland and Turkey.

Health and welfare: Belgium, the Czech Republic, Germany, Greece, Spain, France, Italy, Cyprus, the Netherlands, Finland, Sweden, the United Kingdom, Switzerland and Turkey.

Services: Belgium, the Czech Republic, Denmark, Germany, Ireland, Greece, Spain, France, Italy, Cyprus, Hungary, the Netherlands, Poland, Slovenia, Slovakia, Finland, Sweden, the United Kingdom, Switzerland and Turkey.

Chapter 6

Figure 6.5: Median of country percentages for students studying part-time in tertiary education, by age, 2008/09

Country coverage for most reference ages (see also exceptions below):

Bulgaria, the Czech Republic, Denmark, Estonia, Cyprus, Latvia, Lithuania, Hungary, Malta, Poland, Romania, Slovakia, Sweden, the United Kingdom, Croatia, Turkey, Iceland, Liechtenstein, Norway, Switzerland, Belgium, Germany, Ireland, Greece, Spain, France, Italy, the Netherlands, Portugal, Slovenia, Finland.

Exceptions:

Y15, 16: no data for Lithuania, Poland and Romania

Y17: no data for Poland and Romania.

Y25, 26, 27, 28, 29: no data for Ireland.

Y35-39: no data for Poland and Ireland.

Y40+: no data for Poland, Romania, Ireland, France and Italy.

Figure 6.7: Median of the percentage of students studying part-time in tertiary education, by year, 2000-2009

Country coverage:

2000: Bulgaria, the Czech Republic, Denmark, Estonia, Cyprus, Latvia, Lithuania, Hungary, Malta, Poland, Romania, Slovakia, Sweden, the United Kingdom, the former Yugoslav Republic of Macedonia, Turkey, Iceland, Norway, Albania, Belgium, Germany, Ireland, Greece, Spain, France, Italy, Luxembourg, the Netherlands, Austria, Slovenia, Finland.

2001: Bulgaria, the Czech Republic, Denmark, Estonia, Cyprus, Latvia, Lithuania, Hungary, Malta, Poland, Romania, Slovakia, Sweden, the United Kingdom, the former Yugoslav Republic of Macedonia, Turkey, Iceland, Norway, Albania, Belgium, Germany, Ireland, Greece, Spain, France, Italy, Luxembourg, the Netherlands, Slovenia, Finland.

2002: Bulgaria, the Czech Republic, Denmark, Estonia, Cyprus, Latvia, Lithuania, Hungary, Malta, Poland, Romania, Slovakia, Sweden, the United Kingdom, the former Yugoslav Republic of Macedonia, Turkey, Iceland, Norway, Switzerland, Belgium, Germany, Ireland, Greece, Spain, France, Italy, Luxembourg, the Netherlands, Slovenia, Finland.

2003: Bulgaria, the Czech Republic, Denmark, Estonia, Cyprus, Latvia, Lithuania, Hungary, Malta, Poland, Romania, Slovakia, Sweden, the United Kingdom, Croatia, the former Yugoslav Republic of Macedonia, Turkey, Iceland, Liechtenstein, Norway, Switzerland, Albania, Belgium, Germany, Ireland, Greece, Spain, France, Italy, Luxembourg, the Netherlands, Austria, Slovenia, Finland.

2004: Bulgaria, the Czech Republic, Denmark, Estonia, Cyprus, Latvia, Lithuania, Hungary, Malta, Poland, Romania, Slovakia, Sweden, the United Kingdom, Croatia, the former Yugoslav Republic of Macedonia, Turkey, Iceland, Liechtenstein, Norway, Switzerland, Albania, Belgium, Germany, Ireland, Greece, Spain, France, Italy, the Netherlands, Portugal, Slovenia, Finland.

2005: Bulgaria, the Czech Republic, Denmark, Estonia, Cyprus, Latvia, Lithuania, Hungary, Malta, Poland, Romania, Slovakia, Sweden, the United Kingdom, Croatia, the former Yugoslav Republic of Macedonia, Turkey, Iceland, Liechtenstein, Norway, Switzerland, Belgium, Germany, Ireland, Greece, Spain, France, Italy, the Netherlands, Austria, Portugal, Slovenia, Finland.

2006: Bulgaria, the Czech Republic, Denmark, Estonia, Cyprus, Latvia, Lithuania, Hungary, Malta, Poland, Romania, Slovakia, Sweden, the United Kingdom, Croatia, the former Yugoslav Republic of Macedonia, Turkey, Iceland, Liechtenstein, Norway, Switzerland, Albania, Belgium, Germany, Ireland, Greece, Spain, France, Italy, the Netherlands, Austria, Portugal, Slovenia, Finland.

2007: Bulgaria, the Czech Republic, Denmark, Estonia, Cyprus, Latvia, Lithuania, Hungary, Malta, Poland, Romania, Slovakia, Sweden, the United Kingdom, Croatia, the former Yugoslav Republic of Macedonia, Turkey, Iceland, Liechtenstein, Norway, Switzerland, Albania, Belgium, Germany, Ireland, Greece, Spain, France, Italy, the Netherlands, Portugal, Slovenia, Finland.

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

2009: Bulgaria, the Czech Republic, Denmark, Estonia, Cyprus, Latvia, Lithuania, Hungary, Malta, Poland, Romania, Slovakia, Sweden, the United Kingdom, the former Yugoslav Republic of Macedonia, Turkey, Iceland, Liechtenstein, Norway, Switzerland, Belgium, Germany, Ireland, Greece, Spain, France, Italy, the Netherlands, Austria, Portugal, Slovenia, Finland.

Chapter 7

Figure 7.1: Incoming degree mobility rate – tertiary education mobile students from outside the EHEA studying in the country as a percentage of the total number of students enrolled, by country of destination, academic year 2008/09

Denmark: International students are defined by residence, i.e. foreign citizens who have lived in Denmark less than one year prior to starting an educational programme. Students who have completed a bachelor's degree as international students and subsequently enrol in a second programme (e.g. master's programme) are not counted as international students. This underestimates the number of tertiary students who come to Denmark for the purpose of study.

Armenia and Germany: ISCED level 6 excluded.

Figure 7.2: Distribution of incoming degree tertiary education mobile students from abroad from outside the EHEA by country of destination – academic year 2008/09

Armenia and Germany: ISCED level 6 excluded.

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Armenia and Germany: ISCED level 6 excluded.

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Armenia and Germany: ISCED level 6 excluded.

Figure 7.5: Incoming degree mobility rate – tertiary education mobile students from abroad from inside the EHEA studying in the country as a percentage of the total number of students enrolled, academic year 2008/09

Denmark: International students are defined by residence, i.e. foreign citizens who have lived in Denmark less than one year prior to starting an educational programme. Students who have completed a bachelor's degree as international students and subsequently enrol in a second programme (e.g. master's programme) are not counted as international students. This underestimates the number of tertiary students who come to Denmark for the purpose of study.

Armenia and Germany: ISCED level 6 excluded.

Figure 7.6: Distribution of incoming degree tertiary education mobile students from abroad from inside the EHEA by country of destination, academic year 2008/09

ISCED level 6 excluded for the following countries: Armenia and Germany.

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ISCED level 6 excluded for the following countries: Armenia and Germany.

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ISCED level 6 excluded for the following countries: Armenia and Germany.

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ISCED level 6 excluded for the following countries: Armenia and Germany.

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