



Evolving diversity

**An overview of equitable
access to HE in Europe**



Education and Culture DG

Lifelong Learning Programme

equusnet
working for equitable access to HE in Europe

Authors

Andreas Bohonnek, Anthony F. Camilleri, Dorit Griga, Kai Mühleck, Klemen Miklavič, Dominic Orr

Contributors

Fabio Nascimbeni, Daniela Proli

Editors

Anthony F. Camilleri, Kai Mühleck

Reviewers

Dionyssius Kladis, Per Nyborg, Pavel Zgaga

Standard Number

ISBN: 978-2-930429-21-2

EAN: 9782930429212

Copyright

(C) 2010, MENON Network

The EQUINET Consortium

MENON Network EEIG	MENON	BE
SCIENTER	SCIENTER	IT
Centre for Education Policy Studies	CEPS	SI
HIS-Hochschul-Informationen-System GmbH	HIS	DE
Zentrum für Soziale Innovation	ZSI	AT
European Students' Union	ESU	BE
European Association of Institutions of Higher Education	EURASHE	BE
European Distance and E-Learning Network	EDEN	UK

This project has been funded with support from the European Commission. This publication reflects the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.

This work is licensed under the Creative Commons Attribution-Noncommercial-Share Alike 2.0 Belgium License. To view a copy of this license, visit <http://creativecommons.org/licenses/by-nc-sa/2.0/be/>

Contents

Introductory	1
1.1 The EQUINET Report in context	2
1.2 A Quick Primer to European policies in Higher Education Equity	3
1.3 Setting Targets and Measuring Equity	5
Definitions & Theories	7
2.1 Introduction	8
2.2 A historic shift in European Higher Education in the second half of the 20 th century.....	8
2.3 The massification of Higher Education and the emerging issue of equity and social justice	9
2.4 Equity and contemporary trends in Higher Education policy	10
2.5 Some definitions of equity and frequently used political concepts	11
2.6 Some major theories and approaches to the issue of equity in education and social justice.....	12
2.7 Conclusion.....	15
Data & Methods.....	17
3.1 A low reduction approach of measuring inequity in access to Higher Education across countries	18
3.2 Calculation of equity indicators	19
3.3 Data	21
3.3.1 Data availability	21
3.3.2 Data sources - Statistical	22
3.3.3 Qualitative Data.....	24
3.4 Definitions and variables.....	25
3.4.1 Europe and European countries.....	25
3.4.2 Tertiary education and Higher Education	25
3.4.3 Net entry rate by sex and age	25
3.4.4 Traditional route.....	25
3.4.5 Occupational status of students' parents	26
3.4.6 Highest educational attainment of students' parents	26
3.4.7 Accommodation form	26
3.4.8 Composition of students' income	26
3.4.9 Composition of students' expenditure.....	27
3.4.10 Full time – part time students	27
3.4.11 Parents' education.....	27
3.4.12 Students' time-budget.....	27
3.4.13 Relationship between job and study.....	27
3.4.14 Family status.....	27

3.4.15 Children	27
Entry into Higher Education	29
4.1 Introduction	i
4.2 Entry rates	30
4.2.1 Trend data across regions	31
4.2.2 Net entry rates by age group.....	32
4.2.3 Net entry rates by student age profile	33
4.3 Gender Balance.....	35
4.3.1 Interpretation	i
4.4 Routes to Higher Education	i
4.4.1 Alternative routes to Higher Education.....	40
Access to HE and Socioeconomic Background.....	45
5.1 Introduction	i
5.2 Socioeconomic background and inequitable access.....	47
5.2.1 Occupational background.....	47
5.2.2 Educational background	49
5.2.3 Relation between occupational and educational background.....	52
5.3 Socioeconomic background and qualitative inequality	i
5.3.1 Fields of study.....	55
5.3.2 Studying abroad.....	i
5.4 Social background and expansion of Higher Education.....	57
Income & Expenditure	63
6.1 Introduction	64
6.2 Funding tertiary education in Europe	65
6.2.1 Typologies of funding systems	66
6.3 Students Income	68
6.3.1 Income composition by SES.....	68
6.3.2 Variation by accommodation form	70
6.3.3 Income inequality	70
6.4 Income from parents or relatives	71
6.4.1 Gender differences.....	72
6.5 Income from state support	74
6.5.1 Support rate	76
6.5.2 Grant and enrolment rate	79
6.5.3 Loans.....	80
6.6 Students' expenditure.....	82

6.6.1	Rent for Accommodation:	83
6.6.2	Tuition fees	83
Students in Part-Time Studies.....		87
7.1	Introduction	i
7.1.1	Empirical findings	89
7.1.2	Trends in studying part-time	89
7.1.3	Formal and de facto part-time students	90
7.1.4	Types of part-time studies.....	91
7.2	Employment:.....	91
7.2.1	Importance of job income	i
7.2.2	Employment rate and social status	93
7.2.3	Relationship between work and study.....	94
Conclusions and Recommendations		95
8.1	Introduction.....	96
8.2	Summary of Findings	96
8.2.1	Entry into Higher Education.....	96
8.2.2	Access to Higher Education and Socioeconomic Background	97
8.2.3	Income and Expenditure.....	98
8.2.4	Part Time Studies	98
8.3	Interpretation of Findings	99
8.4	Comments on Data Collection	106
8.4.1	Lack of Data	106
8.4.2	Lack of Definition as to the Concept of a Higher Education Qualification	106
8.4.3	Evidence of Good Practice is Limited	107
8.5	Policy Recommendations.....	108
8.6	Conclusions for Further Research	111
Bibliography.....		113
Index of Tables		120
Index of Figures		122
Index of Boxes		123

Chapter 1

Introductory

Authors

Anthony F. Camilleri

Contributors

Fabio Nascimbeni



1.1 The EQUINET report in context

The EQUINET project was conceived as an independent research and networking initiative, with an aim to increase access to Higher Education for all marginalised and non-traditional groups based on a principle of equity. With the help of European Commission funding under the Lifelong Learning Programme, the project has brought together a consortium of renowned research organisations and stakeholder representatives to work on the project, ensuring a sound methodological base for the research presented here, and a wide audience to which to distribute the recommendations.

As originally conceived, the network has committed to research barriers arising as a result of:

- Educational background (issues revolving around recognition of non-formal and informal education, or non-traditional types of formal learning such as access for young persons who have been schooled at home, and distance learners)
- Socioeconomic conditions (issues revolving around access for people in employment, with family commitments, coming from divergent income groups, by level of dependency upon parents, etc.)
- Structural problems in Higher Education (dealing with issues such as curricula, governance structures, admissions standards, funding policies, etc.).

The project initially set out to analyse the degree and nature of these barriers for individuals from five target groups, namely

- ‘traditional’ students (i.e. 18-22 year olds)
- Migrants
- Continuing learners (professionals building upon a degree)
- Adult learners (without a degree or changing profession)
- Post-Professionals, i.e. those at the end of the lifelong learning curve

In terms of its networking activities, the EQUINET consortium believes that in order to have an impact on equity in Higher Education, as on any complex and multifaceted societal theme, it is fundamental to involve all possible categories of stakeholders and to mobilize all the existing advocacy and decision making energies and dynamics that lay around the theme. Given the specificity of the theme addressed, EQUINET neither intends to create a “new” network nor a “network of networks”, but rather to represent a thematic hub where institutions and individuals working on Higher Education and peers working on equity-assurance can meet, exchange knowledge, and shape a more equitable future for European universities.

In line with this reasoning, EQUINET is aiming at building an evidence-based advocacy network aiming at raising awareness on the issue of equity in Higher Education. The network deals with:

- policy advocacy, by contributing to shaping EU and if possible national policies in its field. Its main concern is to shape agendas by influencing legislation and guaranteeing the representation of interests at the European level (and at a national or regional level);
- dissemination and cross fertilisation, by promoting the EQUINET research findings and by fostering the exchange of best HE equity practices among relevant stakeholders and communities. As a European dissemination network it acts as a platform for mainstreaming and benchmarking of good practices at the Member states level;

- resources documentation, by supporting the creation of an open archive for equity-related documents and resources.

This report is being produced at the end of the first year of a three year project, and was intended to give a broad overview of the information currently available on equity in Higher Education in Europe. As such, we have collected the main secondary sources for such issues, and presented their data throughout the report. By undergoing this process, we have not only given readers a summative snapshot of equity issues in Europe today, but also gained a first-hand understanding of the strengths and weaknesses of the data collection methodologies currently in use, and, particularly, of the limitations of the currently available information on the topic.

The next two reports (to be published consecutively in Autumn 2011 and 2012) will focus more directly on specific issues within the field, including:

- Trends in thinking from the side of the policymakers
- Best practices in improving equity in the various countries
- Theoretical foundations for future equity policies
- Ways to measure progress and impact of policies on equity

As such, this report should be viewed as the first instalment of a three-part work, which, in its entirety, will provide a comprehensive view of the topic. It is also supported by a number of web-based tools, most notably the EQUNET repository, available online at <http://repository.equnet.info>, which is a collection of research materials on the topic, including all materials referenced for this report (where free distribution was legally permissible) as well as any and all other materials we feel may be useful for academics and policymakers.

1.2 A quick primer to European policies on equity in Higher Education

Over the past decade, equity has found a place in both policy initiatives from the European Commission as well as those promulgated through the Bologna Process.

Within the Bologna Process, the social dimension was first mentioned in the Prague Communiqué (2001) as an issue raised by students, and was affirmed by ministers as something to be explored. In the Berlin Communiqué (2003), the role of the social dimension became clear: 'The need to increase competitiveness must be balanced with the objective of improving the social characteristics of the European Higher Education Area, aiming at strengthening social cohesion and reducing social and gender inequalities both at national and at European level.' In the London Communiqué (2007), the role of the social dimension was also linked to the general role of Higher Education: 'raising the level of knowledge, skills and competences in society.' This communiqué also gives the clearest idea as to the overall aim of the social dimension policies, namely that 'the student body entering, participating in and completing Higher Education at all levels should reflect the diversity of populations'. The importance of 'maximising the talents and capacities of all citizens' through Higher Education is reiterated in the Leuven Communiqué (2009) in particular given 'the challenge of an ageing population'. (Westerheiden et al., 2010).

All member states were to provide a report on progress towards an action plan on the social dimension as part of the 2009 stocktaking of the Bologna Process. Nearly all EU states did do so, however with wide differences in terms of practicality, applicability, and specificity.

In terms of policy initiatives from the European Commission, equity was first given a role in 2006 when the European Council invited member states to ensure equitable education and training systems that are aimed at providing opportunities, access, treatment and outcomes that are independent of socioeconomic background and other factors

which may lead to educational disadvantage. After a vast number of references to equity in EU policy documents (see box), 2009 and 2010 saw two important policy developments.

In May 2009, the council of the European Union approved a new strategic framework for European cooperation in education and training up until the year 2020 (the so-called ET 2020 strategy), and identified “promoting equity, social cohesion and active citizenship” as one of 4 key priorities. Within the priority, the concept of equity was phrased in terms of allowing all citizens to acquire and develop skills and competencies needed for their employability. However, amongst the benchmarks set as part of the strategy, none were explicitly related to equity in Higher Education. In addition, the short term action plan from 2009-2011 included no actions in Higher Education related to this priority.

In May 2010, the 3013th Education, youth and culture Council meeting, adopted a set of conclusions relating to the social dimension of education and training. Within the field of Higher Education, it invites member states to:

- Promote widened access, for example by strengthening financial support schemes for students and through flexible and diversified learning paths.
- Develop policies aimed at increasing completion rates of Higher Education, including through strengthening individualised support, guidance and mentoring for students.
- Continue to eliminate barriers to, expand opportunities for, and improve the quality of, learning mobility, including by providing adequate incentives for the mobility of students from disadvantaged backgrounds.
- Promote specific programmes for adult students and other non-traditional learners.

Globally, a number of UN Declarations and conventions make reference to the issue of equity in Higher Education. Most notably, the Declaration of Human Rights States that “Higher Education shall be equally accessible to all, on the basis of merit” (United Nations General Assembly, 1948) and later on that “Higher education shall be made equally accessible to all, on the basis of capacity, by every appropriate means, and in particular by the progressive introduction of free education” (United Nations General Assembly, 1966). More recently, it has stated that “great disparities (in access) persist, constituting a major source of inequality. Governments and institutions must encourage women’s access, participation and success at all levels of education” (UNESCO, 2009).

Box 1: Mentions of Higher Education equity in EU policies

- The Recommendation of the European Parliament and of the Council of 18 December 2006 on key competences for lifelong learning, highlights the importance of developing the provision of key competences for all and of making appropriate provision for those who due to educational disadvantages need particular support to fulfil their educational potential.
- The Council Resolution of 15 November 2007 on new skills for new jobs, stresses the need to anticipate skill needs and raise overall skill levels, giving priority to the education and training of those with low skills and at the risk of economic and social exclusion.
- The Council Resolution of 23 November 2007 on modernising universities for Europe’s competitiveness in a global knowledge economy, which reaffirms the importance of increasing lifelong learning opportunities, broadening Higher Education access to include non-traditional and adult learners and developing the lifelong learning dimension of universities.
- The Council conclusions of 22 May 2008 on adult learning emphasise the need to raise skill levels of a still significant number of low-skilled workers and underlines the contribution of adult learning to fostering social cohesion and economic development.
- Decision No 1098/2008/EC of the European Parliament and of the Council of 22 October 2008 on the European Year for Combating Poverty and Social Exclusion states that the lack of basic competences and qualifications adapted to the needs of the labour market is a major barrier to inclusion in society.
- The Council Resolution of 27 November 2009 on a renewed framework for European cooperation in the youth field (2010-2018)¹⁰, invites member states to ensure equal access for young people to high quality education and training at all levels, and to promote better links between formal education and non-formal learning,

1.3 Setting targets and measuring equity

Within the Bologna Process, the 2009 Communiqué calls for member states to “set measurable targets for widening overall participation and increasing participation of underrepresented groups in Higher Education, to be reached by the end of the next decade”. Two working groups of the Bologna Process, namely the social dimension working group, and the data collection working group, have been working on ways to collect information and indicators that reflect progress in the social dimension as it happens, mainly in line with the definition offered by the London Communiqué. To date, the main source of information has been the independent Eurostudent initiative, which has been referenced extensively in this report, and which is introduced in more detail in Chapter 3.

With respect to the European Commission, apart from general benchmarks for widening overall participation, no specific equity indicators or benchmarks have been adopted, with however two significant references to such indicators having been made to date. As part of its ‘Coherent framework of indicators and benchmarks for monitoring progress towards the Lisbon objectives in education and training’ the European Commission promised to set up a composite indicator on *stratification of education and training systems* based on qualitative data from Eurydice, which was to be used to analyse the impact of the structure and institutional differentiation of education and training systems, while also stating that work on a composite indicator on equity would be initiated.

In addition, as part of the ET 2020 programme, the Council asked the Commission to find ways to reflect the priorities of the programme in the coherent framework of indicators and benchmarks. As equity is a major priority of the programme, this would seem to indicate more progress on establishing indicators for equity, especially since the compound indicators suggested in the communication have yet to come to pass.

In the meantime, over the past decade, a number of research projects have attempted to propose indicators on equity in Higher Education (European Group for Research on Equity in Educational Systems, 2005; European Research Associates, 2006), usually proposing one of two types of indicators:

- Structural indicators by target group: involving looking at current educational statistics and distinguishing them by different factors such as gender, age, socioeconomic background, class, ethnicity etc.
- Global structural indicators: involving indicators such as overall investment into education, student support offered etc.
- Perceptual indicators: involving student surveys of perceptions of difficulties to enter or participate in Higher Education

Chapter 2

Definitions & theories

Author

Klemen Miklavič



2.1 Introduction

The terms equity, equality, access, widening participation, just society and so on appear in various combinations and uses in most discussions of Higher Education – sometimes as a central issue and other times as a side consideration, or even merely for the sake of legitimising a policy recommendation or action. It is difficult to imagine a seriously considered Higher Education policy discussion/agenda without this dimension as an integral aspect. Yet, research and policy approaches can sometimes see equity from different perspectives. Economists often see equity in terms of funding or how to distribute the costs of education, whereas sociologists and political scientists look at equity of access, social mobility and equity in the function of the democratisation, reconstruction or reconciliation of society. It is evident that there is no single, authoritative reference to the topic in the theories and the history of dealing with the matter. This chapter examines the definitions and theoretical approaches surrounding the issue of equity¹ and attempts to provide an overview of the various dimensions of the topic and multitude of approaches addressing it.

2.2 A historic shift in European Higher Education in the second half of the 20th century

Changes in the post-WWII economy and the subsequent restructuring of society have contributed considerably to the changing role and shape of university education in the Western world. The shift from the agricultural to the industrial and then to the service economy has significantly altered the relative sizes of social groups and strata and upgraded the occupational structure. In addition, an ever greater proportion of the workforce has been employed in large, more formal organisations and firms accompanied by the growth of state and public employment (McNay, 2006; Blossfeld & Shavit, 1993). In the immediate aftermath of WWII, enrolment rates did not exceed 5% of the relevant age group, whereas in some countries, by the late 1960s one could observe the considerable growth of enrolment rates in Higher Education (Trow, 2005). The elite nature of studying at universities gradually faded right across Europe. Higher Education opened up to include larger shares of each generation. This process is widely referred to as the *massification* of Higher Education. Today, in many European countries more than 30% of each generation of 20-29 year-olds is enrolled in full-time or part-time studies; with the enrolment of each cohort in most of Europe exceeding 50% in 2007 (see Chapter 4 for a detailed analysis). This phenomenon has dramatically changed the structure of the university community. It inevitably affects the logic of teaching/learning/research, how the institutions are organised and, not least, the structure of the student population. The romantic era of the university as an autonomous venue for the education of a *gentleman* (UK) and a *broadly cultivated man*² (continent) to contribute to the intellectual elite of society came to an end (Trow, 2005). Massification unequivocally represents the main characteristic that makes contemporary Higher Education substantially different from Higher Education in history. There is no doubt that the massification of Higher Education has helped transform its role in contributing to social justice. The widening of participation has affected young people's opportunities to enrol, study and obtain a Higher Education degree.

¹ The EQUINET consortium partners agreed on equity as the central term to refer to the focal topic of this publication. However, the EQUINET consortium is conscious of the normative nature this term carries, especially in contemporary political language. In this paper, where appropriate, the terminology will be used in accordance with the authors/ theories mentioned when referring to them and depending on the context in other cases.

² Both of the terms gentleman and broadly cultivated man are used by Trow (2005: 9) to refer to perceptions pertaining to a specific period in history. The author of this paper has used them for the same purpose and acknowledges their gender bias.

2.3 The massification of Higher Education and the emerging issue of equity and social justice

The developments and changes of the late 20th century caused an expansion of enrolment beyond the small groups that were traditionally expected to be prepared for the ruling elite. Massification has largely been a political process. Although the idea of reaching out to a broader group of people was already present in some Western democracies (Leathwood, 2006), the real boost to enrolment was accompanied by the expansion of the welfare state and the pertaining political priorities. A more cohesive society, with the possibility of disadvantaged groups achieving vertical mobility on the social ladder was also deemed possible through more easily accessible Higher Education.

Despite the dramatic upsurge in enrolment rates, enrolment patterns did not show a particular improvement in terms of the inclusion of less well-off social groups. In some cases the evidence indicated the opposite: massification had worked in favour of better off segments of society. In the early 1990s, Blossfeld & Shavit concluded that the expansion of education largely facilitates the persistence of inequalities in educational opportunities. In other words, despite the higher enrolment numbers of people from lower social strata, by that time inequity in relative chances of entering Higher Education had stayed fairly stable or even increased. The expansion of Higher Education across the examined European countries occurred at a slower pace than at lower levels of education. Secondary school graduates encountered serious bottlenecks in their transition to tertiary education where advantaged social groups were clearly overrepresented in relation to their share in society. This pattern is also visible in the former socialist countries³. There, the radical socialist policies did not manage to reduce the effect of social origin on transitions to further levels of education, as proven by the positioning of bureaucratic elites and their consequent self-reproduction. (Blossfeld & Shavit, 1993) However, in later stages of massification there was some shift towards achieving the acclaimed social justice objective. More recent findings show that the expansion of Higher Education has reduced inequality in more countries under study than it has the contrary (Arum et al., 2007).

This progress can be attributed to growing awareness about social processes related to Higher Education and consequently policies that reflect such awareness. Throughout the post-WWII decades, egalitarian values in Western Europe increased (Trow, 2005). Along with these shifts, research into equity in Higher Education also gradually gained momentum. Systematic and intensive research on inequities in education evolved and was reflected in various policy suggestions and related empirical evidence. Ever since then, the number of authors who have explored ways to overcome the barriers or the reasons for obstacles to the social emancipation of disadvantaged groups has risen (Koucký et al., 2010). This trend also has some parallels with the development of basic theories in education sociology.⁴

The increasing number and diversity of students is being followed by the surging numbers and ever greater diversity of Higher Education institutions. The diversity of institutions and programmes has brought with it complexities and questions including stratification and pertaining poles of excellence, creating areas of exclusion (Neave, 2000). Elite institutions can be found within the growing maze of private, public, professional, academic and other types of institutions in Western Higher Education systems. Trow indicates that the forms of elite Higher Education are distinguished by specific teaching and learning and the relations between the students and teachers. Such schools are *venues of socialisation – for shaping the mind and character*, rather than the mere *transmission of information, skills and knowledge* (Trow, 2005). Today it is also easy to observe the process of agglomerating reputable universities into consortia and networks. Research and intellectual distinction is reserved for a smaller group of excellent institutions. In this context, massification allowed elite Higher Education to adjust to and survive the changes.

³ The work of Blossfeld & Shavit was published in 1993 and used data from some Eastern bloc countries during the socialist period.

⁴ See below the section on theories and approaches to the issue of equity in education.

The massification of European Higher Education took place in quite divergent settings. Norms and beliefs differ considerably between regions as a result of various societal, historical or other factors. We have already mentioned the specific course of enrolment growth in former socialist Europe. Perhaps it is only too rarely that the post-conflict societies along the European periphery, especially those of South-East Europe, are taken as a specific case and analysed through different parameters and variables than those for Western Europe. Compared to massification in developed countries whose pinnacle was reached earlier, the massification of Higher Education in these countries was delayed and occurred in different social and political contexts, essentially without the support of the welfare state and with relatively scarce public funds (Vukasovic, 2009). In terms of the participation of disadvantaged groups, these factors have led to vastly different outcomes compared to the rest of the Western world. In the research by Koucký et al. (2009) it is evident that inequity in most post-socialist European countries under examination increased in the early 1990s, unlike in their Western counterparts where trends indicate a drop in social inequity (See also chapter 5 of this report).

2.4 Equity and contemporary trends in Higher Education policy

The knowledge society/economy is perhaps one of the most popular slogans in the modern European political arena. It is often used to portray the transition from industrial production using lowly educated labour to industry and services based on knowledge and representing the spine of the entire economy (Nokkala, 2007; Robertson, 2005). This evolution is dragging education and knowledge into the centre of economic strategies and attributes a commercial value to them. Some authors have referred to such a phenomenon as the *commodification of education* (Naidoo & Jamieson, 2005). Together with claims that the private benefits of an educated individual exceed the benefits society enjoys from having more people with a Higher Education degree, the idea of charging fees to students gains support. Issues relating to equity are thereby being exposed to serious shifts in perception along with perhaps shifting norms, beliefs and values.

The globalisation and internationalisation of Higher Education as larger changes in society are greatly intertwined with the knowledge society/economy and other broad-scale processes related to global economic and social dynamics. In the last few decades an increase in the internationalisation (or Europeanisation, when it comes to Europe) of policies and trends in Higher Education can be observed. Internationalisation is also part of the response of Higher Education to the globalisation of the labour market (Nokkala, 2005). These processes in Higher Education all require greater staff and student mobility and encourage the intensification of international co-operation. Yet we still need to examine the possible stratifying effects of internationalisation. So far there is little evidence on how the ability to take advantage of internationalisation influences equity in education and the positioning of graduates in the labour market. However, it is possible to trace some trends. The latest findings of the Eurostudent report show that students with a higher parental education background go abroad more frequently, indicating a potential new distinction (Eurostudent, 2008; see also chapter 5 of this report). It is clear that international cooperation requires financial input, as does the mobile student, and this might represent another selective mechanism and division between status groups. The international networking of universities adds to institutional prestige and therefore affects the symbolic value of the degrees that are awarded. If networking is limited to costly and exclusive institutions, we could have yet another mechanism to form an elite on the basis of individuals' economic and social backgrounds. Similarly, it is difficult to assess how the cross-border provision of Higher Education and distance learning arrangements will influence participation and the value of certificates and degrees in the job market in the long run and thereby determine the position of such graduates in society.

The **Bologna Process**, currently perhaps the dominant international educational policy guideline for Higher Education in Europe, started as a proposal for structural reform in order to make the wide range of Higher Education systems more comparable and compatible. Although at its outset this ambition was modest, perhaps also due to the reluctance of governments to give up powers over any education-related matter, the process still cut deeply into the

organisation of Higher Education at all levels. The issue of equity made a shy appearance three years after the start in the third ministerial meeting, the second featuring the larger participation of European ministers ('Bologna' Conference of Ministers responsible for Higher Education, 2003). It was addressed with the term *Social dimension* and advanced modestly to become a well-established component of political documents only in the second half of the first Bologna Process decade. It was no earlier than 2007 when it was clearly stated and defined what social dimension means in this particular policy process.⁵ The statement sent a strong signal to the implementation level in the member states and in some cases gave the stakeholders, especially students, an external argument for enforcing their socially sensitive agendas.

2.5 Some definitions of equity and frequently used political concepts

Defining (in)equity is almost impossible without a normative slander. In many cases, and to a great extent, equity refers to *disproportionality* in the representation of various status groups or strata in Higher Education in comparison to their shares in society. In other words, such definitions say: It is inequitable if one's social origin systematically influences his or her chances to access or attain a Higher Education. However, this definition is not sufficient to address all aspects of Higher Education's role in reducing/perpetuating/increasing social inequalities and pursuing social justice. To create a broader and more complete insight into this problem it is essential to examine it through various theories, conceptualisations and approaches mainly developed in the sociology of education (see the section on theories and approaches below).

At the political level we encounter a myriad of different documents that try to approximate an international consensus on efforts to make Higher Education a more just system for greater justice and/or cohesion in society. The Bologna Process as a dominant policy guideline of the Europeanization of Higher Education initially used *equal access* as the central term, but it also stressed "...the need for appropriate conditions for students so that they can complete their studies without obstacles related to their social and economic background" ('Bologna' Conference of Ministers responsible for Higher Education, 2005) so as to more clearly define "...that the student body entering, participating in and completing Higher Education at all levels should reflect the diversity of our populations" ('Bologna' Conference of Ministers responsible for Higher Education, 2007).

In the meantime, even though it is a co-shaper of the Bologna Process, the European Commission has been running its own process of creating expertise and policy recommendations. An expert paper based on concepts and theories from economics⁶ entitled *Efficiency and Equity in European Education and Training Systems* (Wößmann & Schütz, 2006) uses equity as a specific concept that does not necessarily call for the strict equality of educational outcomes. These outcomes are contingent on the different levels of effort students put into their learning. Thus, according to this paper, one's educational outcome can only be a function of one's effort and not of circumstances such as racial, economic or social backgrounds⁷. Further on, equity is defined in conjunction with efficiency (a comparison of costs and benefits), thus giving the impression that the two are locked in a mutually interdependent relationship. The Communication and Staff Working Paper by the European Commission is based on the abovementioned expert paper and explicitly states that: "Equity is viewed as the extent to which individuals can take advantage of education and training, in terms of opportunities, access, treatment and outcomes. Equitable systems ensure that the outcomes of education and training are independent of socioeconomic background and other factors that lead to educational disadvantage and that treatment reflects individuals' specific learning needs. Inequity in relation to gender, ethnic minority status, disability and regional disparities etc. is not the prime focus here, but is relevant as far as it contributes to overall socioeconomic disadvantage" (Commission of the European Communities, 2006).

⁵ See the section on political concepts' definitions of equity, and Chapter 1 for more detail on the presence of the term in political statements.

⁶ Also see the section on theories and concepts.

⁷ Also see the section on theories and concepts.

The OECD has also developed a specific definition of equity. Equity in education has two dimensions: The first is *fairness*, which implies ensuring that personal and social circumstances – e.g. gender, socioeconomic status or ethnic origin – should not be an obstacle to achieving educational potential. The second is *inclusion*, which implies ensuring a basic minimum standard of education for all – e.g. that everyone should be able to read, write and do simple arithmetic. The two dimensions are closely intertwined: tackling school failure helps to overcome the effects of social deprivation which often causes school failure (OECD, 2007). Both dimensions are relevant to the discussions of equity in Higher Education since the first addresses concrete obstacles at the point of entry, while the second looks into the roots of an individual's (dis)advantage in their education path and the related life opportunities. While building on the principles of this definition, EQUINET expands it further, as explained in the coming pages and the beginning of Chapter 3.

2.6 Some major theories and approaches to the issue of equity in education and social justice

Throughout the history of the sociology of education, the issues of equity and social justice, with education as the central institution in this, have dominated the pages of theory and practice. In the **functionalist approach**, education performs important functions in the development and maintenance of a modern, democratic society, especially with regard to the equity of opportunity for all citizens (Parsons 1959)⁸. Functionalists studied the change from the traditional agrarian society to modern democratic societies. They saw the rise of the meritocratic principle as a dominant mechanism in society. Hard work and talent should replace accidents of birth in determining the allocation of individuals to positions. In modern societies education is becoming a key institution in the meritocratic selection process, guaranteeing fair competition for unequal results. In other words, a democratic and just society makes sure there is equality in opportunity for social and economic advantages and that individual merit and talent replace ascriptive and class variables as the most essential determinants of status. Education was thus seen as the vehicle for ensuring continual movement towards this meritocratic system (Sadovnik, 2004).

The functionalist theory dominated the sociology of education until the 1960s, when it made space for the critique of **conflict theorists**. They viewed the school as serving the interests of dominant social groups, and contended that the functionalists were seeing the world as it ought to be rather than what it is in reality (Sadovnik, 2004). As opposed to functionalists who emphasise cohesion in explaining the social order, the conflict sociologists emphasise struggle and argue that the glue of society is economic, political, cultural and military power. The school becomes a generator or transmitter of specific social identities that enhance or hinder the life chances of individuals.

The prominent French sociologist **Pierre Bourdieu** formed the tradition of conflict theory within the realm of the sociology of education. He combined conflict theory with elements of the functionalists approach (Sadovnik, 2004), thereby developing one of the most elaborated theoretical approaches to educational inequality. In his works *Distinction: a Social Critique of the Judgment of Taste* (1979), *The State Nobility: Elite Schools in the Field of Power* (1996 [1989]) and *Reproduction in Education, Society and Culture* (together with Passeron, 1977 [1970]) he described society as a plurality of social fields and developed the sociological concept of different forms of capital to explain the origin of inequalities. The forms of capital possessed by actors in the field define their positions and possibilities, depending on the relative importance of the forms of capital involved in that specific field.

The most simple to understand is *economic capital*, referring to the material wealth (money, property etc.) behind a person or their family. The correlation with the problem of equity in education is quite trivial: For children of poorer families the cost of education represents a bigger challenge than for their peers with richer parents. More complex

⁸ In Sadovnik 2004, p. 9

are the forms of cultural and social capital and their influence on an individual's educational path and status in society. *Social capital* stems from networks of social relationships, connections and the ensuing influences. An individual's acquaintances, their circle of peers, and the social network of their parents considerably influence the position in their education and society. *Cultural capital* represents the accumulated cultural knowledge that confers power and status (competencies, skills, knowledge, attitudes, degrees, prestigious appointments etc.). The cultural characteristics of individuals and groups are significant indicators of status or class position. Children from lower social strata with less educated parents are inherently disadvantaged in terms of mastering the language, in their attitude to learning and other cultural features of education. The conversion of economic capital into cultural and social capital and vice versa is relatively uncontrollable and education is therefore inherently socially biased and not neutral. Hence, according to Bourdieu, education is the prime mechanism for perpetuating inequalities in society. It plays a central role in the struggle for power in social structures and contributes to the effort of some social classes to maintain their dominance over others.

The British sociologist **Basil Bernstein** attempted to synthesise the micro and macro levels by also using conflict and interaction theoretical approaches. He examined how speech patterns reflect students' social class backgrounds and how students from a working class background are at a disadvantage in the school setting because schools are essentially middle class organisations. Schools need an elaborated code for success which puts a working class student in a disadvantaged position in the dominant middle class code of schooling (Sadovnik, 2004).

Similarly to Bourdieu and Bernstein, **Randall Collins** is considered a scholar who has attempted to combine approaches of various classic theories. In *Functional and Conflict Theories of Educational Stratification* (1971), he compared the functionalist and conflict theory views on the relationship between massifying Higher Education and the increased schooling required for employment. He found that the functionalist explanation of raising educational demands as a consequence of technological change is less supported by evidence than the conflict theory's explanation of this phenomenon. In conflict theory fashion, the process leading to mass enrolments in Higher Education brought with it a rise in entry requirements to professions by extending the duration of studies or increasing the required level of education in terms of degrees. This rise of requirements/credentials was, Collins explains, the response of the dominant classes to the catching up achieved by marginalised groups in order to maintain their advantaged status and leadership positions in society.

The **interactionist theory** emerged as a critique and extension of both the functionalist and conflict theories in the sociology of education. As opposed to the more abstract and macro level oriented functionalist and conflict theories, the interactionist theory focuses on the micro level – e.g. how school practices, such as labelling and ability grouping, contribute to educational and social inequalities. Rist (1970, 1973, 1977)⁹, among others, demonstrated how teachers' expectations of students based on categories such as race, class, ethnicity and gender affect student perceptions of themselves and their achievements.

The more influential theories include the **rational education decisions theory** developed by **Raymond Boudon** in his work *Education, Opportunity and Social Inequality* (1974). This theory explains social inequality in education with the rational choice of individuals or their parents on the educational path to be undertaken. The choices are related to the specific rationales underlying decisions in social classes, contingent on parents' resources and the selection and the allocation function of the education system. He distinguishes two effects of stratification: 1. the primary effect of stratification – the lower the social status, the poorer the cultural background and hence the lower the school achievement, age upon reaching high school etc.; and 2. the secondary effect of stratification – the influence of the family's socioeconomic status on a decision based on costs and utilities, forcing less advantaged children into less reputable education choices or leaving school earlier. He demonstrates that, even if two children from different stra-

⁹ In Sadovnik 2004, p. 14.

ta are not differentiated according to the primary effects of stratification, they would very likely undertake different schooling paths influenced by their own perceptions of the gains and promotion and by their families and status peers (Boudon, 1974).

Boudon paved the way for the following work in the field of equity. Many scholars related their work to his fundamentals. This has resulted in **rational choice theory** today becoming one of the most popular theoretical approaches to explaining equity-related issues in (higher) education. According to authors relying on it, social inequality in education results from rational choices of parents about their children's education (Erikson & Jonsson, 1996; Becker, 2000). They point to the correlation between a class-specific evaluation of the costs and benefits of Higher Education and the education path chosen. The latter depends on the family's economic background and the selection mechanisms in education. The expectation of benefit is one of the main factors in the decision-making process. The rational choice scholars rely substantially on empirical research, finding common ground with the economics of education.

Especially in the recent decades, issues related to equity and social justice have been intensively approached from the perspective of economic theory. Often used as a background, **human capital theory** suggests that an investment in the schooling of individuals is an investment in their human capital that (it is hoped) makes them contribute to society and at the same time makes them gain personally. This approach is often complemented by the rational choice theory in terms of access, equity and educational path. Given the increased attention of economic theory to Higher Education policy and equity issues, one can observe a considerable amount of what Wallerstein refers to as Economism¹⁰. This type of research is frequently attributed to the promotion of political goals and the legitimising of a certain course of action in the policy field. Studies here suggest solutions to often both a lack of resources (or better cutting the public funds) and social injustice in Higher Education using terms and concepts like cost-sharing, equity and efficiency, diversity and equity, widening participation etc. Perhaps one of the most eloquent cases of such practice is the *Analytical Report for the European Commission* prepared by the *European Expert Network on the Economics of Education* (Wößmann & Schütz, 2006). The paper entitled *Efficiency and Equity in European Education and Training Systems* justifies the central position of the economics of education as the leading focus of the analyses, acknowledging other disciplines in the social sciences as being more secondary – the ones that “can add valuable insights into specific aspects of the topic” (ibid. 1). Further on, the authors view modern economics as an economic approach to human behaviour providing a valuable means to understand the behaviour of the people involved in the education process (ibid). Another interesting characteristic of this approach is taking a clear distance from so-called *egalitarianism*, standing for perfect sameness “because people are allowed to choose to differ according to their self-determined effort” (ibid. 3).

The New Labour strategy in the early 2000s of increasing diversity and widening participation in Higher Education in the UK is often regarded as one of the most visible cases of applying the economics-centred education research. It attempted to flatten out inequalities by introducing income-contingent loans, topping up tuition fees in conjunction with measures ensuring a safety net for weaker social groups. The critics of this proposed policy resented, among other things, the assumption that academic ability is inherent, fixed and distributed unevenly throughout the population, an assumption was underpinning the reform proposal and ministerial statements (Leathwood & O'Connell, 2003). The diversification of study possibilities also represents a mechanism to trap disadvantaged groups into shorter and less reputable programmes/institutions. In line with this critique the argument emerges that the New Labour policy hijacked and evacuated the “equality” language to put it into the service of a neo-liberal agenda (Archer, 2007).

¹⁰ A critical term referring to the exclusive priority in using economic factors in explaining social reality (Wallerstein, 2006)

2.7 Conclusion

The issue of equity remains a central element of Higher Education research and policy. While academic systems around the world have expanded dramatically, different forms of equity problems can be found in many parts of the world. Contemporary trends of the growing economic importance of knowledge and the rapid globalisation of Higher Education are bringing new challenges to efforts to achieve equity. Gender, ethnicity and social class persist as determinant factors of success in climbing the social ladder. In many developing countries Higher Education remains an urban phenomenon, and one that is largely reserved for wealthier segments of society (Altbach & Davis, 2004). According to Alan R. Sadovnik, various methods, theories and approaches have to be further combined and connected with practice in order to find out why students from a lower socioeconomic background do less well at school and to provide pragmatic policy proposals for successful reforms in Higher Education as well as education in general (Sadovnik, 2004).

Perhaps one of today's biggest challenges regarding equity in Higher Education is to fully accept the idea of mass Higher Education as something that is substantially different from what Higher Education used to be in the Western world four or five decades ago. In this respect, the current theoretical and empirical work that considers the origin of individuals and mainly addresses access and completion needs to be complemented by exploring what happens to individuals throughout their lives in terms of the social status or other categories affected by their educational paths. Some conceptual and empirical research remains to be done to, e.g., understand the effect of the colourful map of Higher Education institutions on the destinations of graduates in the world of work and their social status after their studies.

However, the field of equity, social justice, social emancipation etc. requires special sensitivity. Dealing with equity in Higher Education inherently means dealing with a normatively and politically charged issue. Definitions and discourses can be harmonious or complementary, or they can coexist, contradict or even exclude each other. A definition holds little value if it is not embedded in a societal context, especially in terms of the norms values and beliefs that prevail at a certain moment in time. Further, understanding the changing social and institutional context is essential for properly positioning the equity dimension of Higher Education policy.

Chapter 3

Data & methods

Authors

Kai Mühleck, Dorit Griga

Contributors

Andreas Bohonnek, Daniela Proli



The EQUINET project seeks to identify indicators that would allow for the measurement and comparison of the degree of (in)equity in access to Higher Education across countries; thereby enabling the measurement of policies that seek to improve equitable access to Higher Education. To do so perfectly it would need to accommodate (at least) four potentially contradictory goals: (1) Allow for comparison across countries and ease cross-country comparison, (2) cover the various dimensions of the multidimensional phenomenon “equitable access to Higher Education”, (3) consider the national context in comparing countries and interpreting statistical figures, (4) relate the findings to previous as well as future policies at various levels. Clearly, the first EQUINET report does not accomplish these four goals fully. Instead it weighs and accommodates the four goals to differing degrees:

1. The first goal of allowing for cross-country comparison is one necessarily to be accomplished for a report intending to give a broad overview of the information currently available on equity in Higher Education in Europe. Comparative statistical figures are a requirement of large-scale cross-country comparison. Thus the first EQUINET report relies only on data sets specifically designed for international comparison. Our main sources are Eurostudent, Eurostat and UOE data (for more details see section on data below). The report also makes an effort in easing comparison but easy comparison is not its primary goal. The report gives more priority to picturing the different dimensions of inequity. Thus it will not try aggregating the various statistical indicators into one single equity indicator as in a ranking study (for more details see below on the low reduction approach of measuring inequity).
2. The goal of describing the multiple facets of equitable access to Higher Education has a high priority in the project and in this report. We believe such a differentiated view is necessary for the project’s aim of supporting policy makers because it reveals strengths and weaknesses of Higher Education systems and thus to some extent shows how to target efforts for equitable access to Higher Education. The first report does not cover all dimensions. It gives a snapshot of access to Higher Education and focuses on the “classical” dimensions of inequity in access to education, e.g. unequal chances of persons of different socioeconomic origin and financial conditions of access to Higher Education. Two subsequent reports will cover other issues, such as access for lifelong learners or for persons with a migrant background. We aim for a good coverage of the most important dimensions of equitable access to Higher Education by all three EQUINET reports together.
3. Considering the national context in interpreting statistical figures is important. This first report, however, intends to give a broad and basic picture of inequity in access to Higher Education across European countries. The variety of topics and figures in the report and the number of countries covered (see below for coverage of countries) makes it impossible to fully acknowledge each country’s context. Therefore, in this report statistical figures are interpreted with caution and not always in analytical depth. Again, subsequent reports will go further in this regard and provide deeper analysis for some countries and on restricted subjects.
4. The same applies to the fourth goal of relating findings to policies, which is the most difficult one. The statistical figures given in this report are used to interpret broad policy directions which will be further analysed and specified in upcoming reports.

3.1 A low reduction approach of measuring inequity in access to Higher Education across countries

The endeavour of measuring equity or inequity in access to Higher Education across countries is complicated by the fact that this is a complex and multidimensional phenomenon. It affects various social groups (e.g. men or women, persons with a low educational background, persons with family responsibilities, persons with a migrant background, disabled persons, persons from rural areas, etc.) and can be attributed to various access barriers (e.g. formal barriers, financial barriers, organisational barriers, etc.). To get hold of this phenomenon, indicators need to be deployed reducing the complexity of the real world to statistical figures. Such quantitative indicators can be graded for cross-

country comparison. Still, the amount and variety of indicators poses the question of whether they should be further reduced to ease international comparison. As ideal types we distinguish three approaches of indicator reduction here to characterise the approach of the EQUINET project.

1. A *high reduction approach* would merge indicators on all dimensions (the various groups and barriers) into one single indicator. Clearly, a single indicator allows an easy ranking of countries. Thus the high reduction approach is chosen in reports whose main aim is to establish country ranking (e.g. Usher & Cervenán, 2005). Despite its usability for rankings, this approach has at least two disadvantages: First, it hides variability within countries¹¹ and within the various dimensions of equity in Higher Education. The Higher Education system of a certain country may have been successfully opened to persons with a low educational background but still have high access barriers to lifelong learners. This country could serve as a best practice example in one dimension while still being confronted with a serious problem in another dimension. A high reduction approach would hide this information, if the single indicators are not shown in parallel. Even though the results of single dimensions are covered, the obvious message of the overall ranking often tends to eclipse the details. Secondly, merging indicators poses a methodological problem. It presupposes weighting of indicators. Researchers need to decide on the relative importance of the various indicators. Irrevocably such decisions remain arbitrary to some extent but they have marked influence on the position of countries in a ranking.¹²
2. In a *medium reduction approach*, indicators would be merged for one subtopic or subgroup, e.g. equitable access for persons with a migrant background, but not across. This keeps variation across dimensions visible and eases ranking within a dimension. Still, the methodological problem of weighting the indicators remains. The work of Koucký et al. (2010) could be labelled a medium reduction approach. They show how four indicators of the socioeconomic dimension of inequitable access can be integrated by use of logistic regression. Such reports necessarily focus only on certain dimensions of equity.
3. This report employs a *low reduction approach*, i.e. indicators are not merged by mathematical operations but combined to an overall picture by use of description. Thus, the full complexity of inequitable access to Higher Education is kept in focus. This approach is most appropriate for the first EQUINET report because it is the very interest of this project to shed light on the different dimensions of inequitable access to Higher Education and their interaction. Rather than giving an overall ranking of countries, the project wants to show the specific strengths and weaknesses of the respective Higher Education systems and their environment. In the view of the project those are more telling and usable for policy enhancement at national, regional and institutional level. At later stages of the project, however, compound indicators within dimensions of inequity (in other words, a medium reduction approach) could be put to test. Other examples of a low reduction approach are the Eurostudent reports (Eurostudent 2002, 2005, 2008), the BFUG report (Eurostat & HIS 2009), or Education at a glance (e.g. OECD 2010).

3.2 Calculation of equity indicators

Most definitions of an equitable access to (higher) education, share the idea of representativeness or proportionality: The share a social group holds in Higher Education should reflect the share this group holds in the general population. Those definitions correspond with current policy aims for example the London Communiqué of the Bologna ministers of May 2007 which states that “the student body entering, participating in and completing Higher Educa-

¹¹ This is especially true in countries with a federal system of government where education is a competence of the federal units.

¹² Rarely rankings use the demanding possibility of estimating weights of different factors by statistical models (e.g. Koucký et al., 2010).

tion at all levels should reflect the diversity of our populations” ('Bologna' Conference of Ministers responsible for Higher Education, 2007; see also chapters 1 & 2).

By definition, the indicator requires an explicit comparison between the social make-up of the student population and the general population in each country. If access is equitable, belonging to one group and not to another, e.g. being a women and not a man, would neither positively nor negatively affect the chances of accessing Higher Education. In other words, chances of accessing Higher Education for the groups in question would be *equal*. Thus the classical indicator for (in)equity is the *comparison of the chances* of two social groups. Accordingly, a straightforward way of calculating the extent of equity or inequity regarding the distribution of chances between two social groups is to *divide* the chances of these two groups. Equation 1 shows this simple procedure for the example of persons with a high and a low educational background:

$$\text{extent of inequity due to educational background} = \frac{\text{chance to be a student for persons with low educational background}}{\text{chance to be a student for persons with high educational background}} \quad (1)$$

A ratio of 1 indicates that chances are equal. If the equity indicator is below 1, persons with a low educational background are disadvantaged in comparison with persons with a high educational background (underrepresentation); a value above 1 would indicate the contrary (overrepresentation). Equation 2 spells out more specifically how the chances for both groups can be calculated:

$$\text{extent of inequity due to edu. backgrnd} = \frac{\frac{\text{number of students with low educational background}}{\text{number of persons in population w. low edu. backgrnd. at same age}}}{\frac{\text{number of students with high educational background}}{\text{number of persons in population w. high edu. backgrnd. at same age}}} \quad (2)$$

Equation 2 is the ideal case of calculating an inequity indicator of the kind this report is looking for. However, the international data sources available do not provide the information necessary for calculating the indicator as spelled out above for the countries of the European Union, let alone the Bologna countries (see below on data availability).

The best approximation to this equity indicator is provided by Eurostudent, the most comprehensive data source on students in the European Union. The Eurostudent dataset has two proxy measures for the socioeconomic background of students: occupational status of students’ fathers or mothers and highest educational attainment of students’ fathers or mothers. As a measure of equity, the Eurostudent project refers to the ratios between the share of students with a certain socioeconomic background and the share of men (women) aged 40-60 years with the corresponding status among all men (women) of that age group. Equation 3 shows this exemplified by a low educational background of students’ fathers as socioeconomic background variable:

$$\text{extent of inequity due to educational background} = \frac{\text{share of students with low educational background}}{\text{share of men with low education aged 40 – 60 in population}} \quad (3)$$

Like the equity indicator of equations 1 and 2, the Eurostudent equity indicator has a value of 1 if the share of a specific group within a society is appropriately represented within the student body, e.g. if access is equitable. Being the best proxy indicator available, this method has some assumptions that might be violated to some extent in reality. More specifically it assumes that (1) the group of persons aged 40 to 60 reflects students’ parents in the respective society, (2) there are no differences in the age structure of parents between countries, and (3) there is no systematic variation in the number of children between groups of different socioeconomic status. We assume that the estimation error is of limited scope. Nevertheless, European data providers could improve on the measurement of equity or inequity. Another weakness of the indicator provided by Eurostudent is that it only refers to fathers’ or mothers’ educational attainment. Having the highest educational attainment of both students’ parents together would allow for a more concise treatment of inequity.

3.3 Data

This section discusses the issue of data availability, weaknesses and gaps in existing data sets, and formulates desiderata on how existing data sets could be enhanced with regard to measurement of equitable access to Higher Education. Furthermore the data sources used in this report are described.

3.3.1 Data availability

Among the data sets relevant for this project one can distinguish between micro level data and macro level data, i.e. data aggregated at country and/or group level. With the exception of the Reflex data this report relies on the latter kind of data, namely Eurostudent III data and data provided by Eurostat (see below). Doubtless micro level data offer more flexibility and would be the first choice of many researchers. On the other hand, macro level data sets can be very handy, because they offer ready-calculated statistics that have been checked for comparability.

In fact, none of the micro level data sets this project looked at was perfectly appropriate for our purpose. This proved to be the case for three of the main European data sets, namely the ESS (European Social Survey), EU-SILC (European Union Statistics on Income and Living Conditions), and EU-LFS (European Union Labour Force Survey).

The **ESS** is a biannual general population survey meanwhile running in more than 30 countries (surveys of 2008 and 2010). It is possible to identify actual students in the ESS but in fact this group is too small in the ESS samples to allow for reliable statistics at national level let alone for the differentiation of subgroups. Analyses of inequity with regard to Higher Education are only possible by using *graduates*. Koucký et al. do so in their publications (Koucký et al., 2007, 2009, 2010; see Koucký et al. 2007 for a detailed study on the suitability of the ESS for studying inequity in Higher Education). Studying educational attainment of graduates can provide very valuable insights. However, EQUINET focuses on *access* to Higher Education. Educational attainment of graduates is a good proxy for access of *former cohorts*. Inevitably it lags behind the actual situation.

Desiderata: Presumably the ESS surveys cannot be expanded to an extent which would allow for analysis of actual students. But the ESS could ease the analysis of graduates at relatively little cost by a more differentiated measurement of educational attainment. In rounds 1-4 of the ESS (2002-2008) educational attainment is measured by the seven main categories of ISCED. Thus, it is not possible to distinguish between academic (ISCED 5A) and non-academic (ISCED 5B) forms of tertiary education using this internationally accepted classification scheme. Koucký et al. (2010) identify academic forms of tertiary education by categorising national degrees given in the ESS. That is an admirable effort which will only be manageable for few researchers. We welcome the intention of the ESS group to provide improved education measures in round 5 (surveys of 2010) of the ESS.

EU-SILC and **EU-LFS** are the two large-scale European household surveys. They provide a considerably larger sample size than the ESS and would also allow for the analysis of actual students (EU-SILC of 2008 achieves an average national sample size of above 16 thousand persons; EU-LFS of 2007 has an average national sample size of roughly 56 thousand persons). Unfortunately, neither in EU-SILC nor in EU-LFS it is possible to identify actual students in academic tertiary education (ISCED 5A), as only the main ISCED categories are offered for the measurement of current education activities of respondents. In EU-SILC this is also the case for the measurement of the level of education attained whereas educational attainment is measured with ISCED subcategories in the EU-LFS and thus allows distinguishing academic and non-academic forms of tertiary education for graduates.

Another problem of household surveys is to get hold of the family background. With the exception of few ad-hoc-modules (e.g. EU-SILC in 2005 and EU-LFS in 2009) the socioeconomic status of parents is only captured if children and parents still live in the same household. This limits analytical possibilities of both data sets as family background is a key variable not only for measuring inequity in access to Higher Education but for sociological research as such.

Desiderata: On obvious desideratum is to have level of education currently attended measured with ISCED subcategories which would allow for distinguishing academic and non-academic tertiary education. Moreover, collecting data on the family background for parents living outside the respondents' household regularly would add considerably to the usefulness of EU household surveys. This information is a prerequisite for the calculation of equity indicators.

Finally, a remark on the **Eurostudent** data: Eurostudent is the most comprehensive data source on the social dimension of student life in Europe. It is Eurostudent's policy to offer aggregate level data only which is provided by national researchers delivering to Eurostudent. The expertise of national experts and extensive communication between the Eurostudent coordination team and the national teams ensures a high level of comparability. Nevertheless availability of Eurostudent data at micro level would greatly enhance its usability for secondary research and would allow for more in-depth analysis based on multivariate methods.

3.3.2 Quantitative data sources

For the sake of international comparability, sources of information were used that fulfilled two criteria: an appropriate geographical coverage and relevant information for the topic concerned. As already mentioned three datasets were mainly used: the Eurostudent III dataset, Eurostat data and the Reflex dataset.

3.3.2.1 Eurostudent III

The Eurostudent III data covers a broad range of data on the demographic characteristics of the student body, modes of access and attendance and types of Higher Education, social make-up of the student body, types of accommodation, funding and state assistance, living expenses and student spending, student employment and time budgets, as well as internationalisation and mobility. The purpose of this data collection is to provide comparative data on the so-called "social dimension" of Higher Education in Europe. The following description of the Eurostudent III data is based on the introductory chapter of the Eurostudent report of 2008 which can be consulted for further details (Eurostudent 2008: 13-21).

Within round III, twenty-three countries participated and delivered data. While data from Eurostudent I and II were based on already existing national surveys which covered the same topic areas but otherwise differed in methodological approach, the third round adopted an output harmonisation approach. Thus, a harmonised list of variables and indicators, together with their related definitions was employed. Countries, therefore, did not provide the international coordinators with raw micro data, but with calculated aggregate indicators for 63 subtopics. In order to collect the data, the majority of countries used online surveys (Table 1). Still, however, survey methods differ across countries.

Table 1: Countries' Methods of Data Collection in Eurostudent

	Online survey	Face-to-face interview	in- Paper and pencil	Telephone interview
Countries	AT, BG, CH, CZ, EE, FI, IE, LV, NL, RO, SI, TR	ES, E/W, LT, NO, PT, SCO, SK	DE, FR, SE	IT
Total	12	7	3	1

The statistical unit in Eurostudent is the single individual pursuing formal education at ISCED 5A level as a home student on the reference date. The Eurostudent consortium spelled out several conventions on the target population (Eurostudent 2008: 19-20):

- “EUROSTUDENT gathers information on academically-orientated tertiary education (ISCED-level 5A). The focus is on publicly funded Higher Education; i.e. according to Eurostat definitions, public or government-dependent private institutions (only those institutions of Higher Education which obtain over 50% of their funding from public sources are included, i.e. not private Higher Education).
- The total target population of the EUROSTUDENT statistics consists of all individuals pursuing an education at ISCED 5A level. This includes both students studying their first degree and those studying their second degree or continuing programmes (e.g. second cycle master students). Students in study programmes of ISCED level 5B (practically oriented / occupationally specified) and ISCED 6 (doctorate students) are not included. In some cases, the indicators differentiate between students studying Bachelor courses and the whole population with a view to observe the effect of changes to study organisation within the framework of the Bologna Process.
- This global population of students is divided into national and foreign population. Only national or permanent resident students are considered the target population of national surveys in each country. Resident students in a particular country, who do not have the respective country’s citizenship, are only included in the target population, if they have obtained their Higher Education entrance certificate in this country and study in this country. By contrast, students of foreign nationality are not included, if they also obtained Higher Education entrance certificates abroad.
- The target population consists of all matriculated students; no matter if they are registered with full-time or part-time status. In some cases, the indicators differentiate between age-groups. In particular, “21-year-olds” are used as a normative category in order to control for the effects of age.”

3.3.2.2 Eurostat

Three databases are used in Eurostat, namely the UNESCO-OECD-Eurostat data collection (UOE), the European Union Labour Force Survey (EU-LFS) and the European Union Statistics on Income and Living Conditions (EU-SILC). Among the three datasets, the UOE database on education statistics commissioned data on key aspects of the education systems, specifically on the context, participation, and the costs and resources of education. It is a secondary collection of existing data compiled on the basis of national administrative sources, reported by ministries of education or national statistical offices according to international standards, definitions and classifications. The collected annual data cover the outputs of educational institutions, the human and financial resources dedicated to education, structural characteristics of education systems, and the economic and social outcomes of education. The objective of this database is to produce and publish internationally comparable indicators and analysis on the operation, evolution and impact of education, from early childhood through formal education to learning and training throughout life. The database consists of following key variables for education: expenditure on education by nature and resource, teachers by number, sex and age, students by education level and field according to the ISCED 97, sex, participation rates and by nationality and graduates by age and field of education. Participating countries were EU-27, EEA, other OECD countries, candidate countries that are not OECD countries and South-East European countries.

3.3.2.3 Reflex

The REFLEX project covered graduates that had already made their transition into the labour market and were currently gaining essential professional experience. The operational definition was: graduates from ISCED 5A who got their degree in the academic year 1999/2000. The sample was restricted to graduates of ISCED 5A (bachelors and masters or equivalent). Graduates of the second stage of tertiary education (ISCED 6) were not included in the sample definition. Although the project followed the national conversion into ISCED 5A some exceptions were applied: (1) Intermediary exams that were not considered as points of exit to the labour market. These were usually intermediary or first exams from which almost all graduates proceed to a next phase of the same programme. In those cas-

es, the sample was taken from the graduates of the next phase. (2) Postgraduate programmes: these were usually considered as training related to the occupational career. Information on this was gathered in the questionnaire. For operational reasons, graduation cohorts were sampled instead of outflow cohorts. In principal, everybody who graduated in an ISCED 5A programme was included in the reference period. This included foreign students who got their degree in the reference country, students who after graduation moved to another country, part-time students, distance learners etc.

To increase the efficiency of the sample, stratified sampling was used. The specific strata depended on the national context, but included categories like type of HE (e.g. university or “Fachhochschule” in Germany), sector of study (e.g. health care, humanities etc.), region and other variables.

The REFLEX data involved data from fifteen countries (Austria, Finland, France, Germany, Italy, the Netherlands, Norway, Spain and the UK plus Belgium-Flanders, Czech Republic, Portugal, Switzerland, Japan and Estonia that have received funding from national sources). A parallel project using large parts of the REFLEX methodology was being undertaken in Russia and Latin America (Mexico, Colombia). The net number of cases in the final data set ranged from 645 in Portugal and 6,794 in Czech Republic.

3.3.3 Qualitative data

This report includes a set of examples of initiatives and practices in Europe, Australia and the US which are meant to tackle access bottlenecks with respect to different obstacles (economic, structural, individual) and target groups, and which exemplify some of the more successful strategies in the field.

In order to identify a framework typology of access initiatives (and then select related examples), major existing trends have been examined by going through policy documents and scientific literature. The former have been mainly covered by the 2009 National Stocktaking reports on the implementation of the Bologna Process, and notably the section on lifelong learning implementation, flexibility of paths and social dimension of Bologna. This review has provided a general overview of the most common policy initiatives and practices to tackle access obstacles and enhance participation in a lifelong learning perspective. Academic literature, mainly that relating to policy analysis, has then provided the theoretical framework to classify these initiatives, while also working as a further source on existing good practices.

The approach adopted refers to Osborne’s classification of access initiatives, which distinguishes between in-reach, out-reach and flexibility strategies. This distinction permits coverage of both financial and non-financial modes of intervention while cross-cutting the whole universe of initiatives, being them from different policy fields and addressing different target groups (Osborne, 2003).

In our approach, in-reach initiatives refer to those actions which act directly on access provision in Higher Education so as to enable people to enter (i.e. improving supply, creating non-traditional access points, customised courses, or financial support for students). The outreach category refers to those initiatives aimed at attracting people far from Higher Education into studies, either by creating structural conditions to widen participation (i.e. passage from other learning systems) and/or by providing information and guidance initiatives out of HEIs, both usually by creating cooperation between actors (HEIs, schools, employers, the community, VET). Finally flexibility refers to “both spatial and temporal matters, namely changes that allow students access to education in locations and modes and at times that to at least a certain degree are of individuals rather than institutions’ choosing.” (Osborne, 2003)

The selection of initiatives proposed in the report is not meant as the collection of the very best practices in Europe. Rather, it tries to present a few clear examples of the diverse strategies which exist to combat inequity in Higher Education.

The case studies selected do suffer from a geographic bias, being mainly sourced from Scandinavian and Anglo-Saxon European countries. This is due to a more sophisticated reporting culture in the latter countries, as well as better data-availability due to language issues.

3.4 Definitions and variables

The following paragraphs spell out the definitions and measurement of the key variables used in this report.

3.4.1 Europe and European countries

This report uses the terms “Europe” or “European countries” without much rigour. The report deploys various data sets (see section 2.3) that differ in their coverage of European countries. Thus the term inevitably refers to different sets of European countries and the exact meaning is often determined by the source of data.

3.4.2 Tertiary education and Higher Education

The report uses the ISCED classification to characterise the level of education students attend and graduate in. Thus, the term ‘tertiary education’ is used in this report as encompassing ISCED categories 5 and 6. In contrast, the term ‘Higher Education’ refers only to the academic strands of tertiary education, namely ISCED 5A and 6. Most figures presented in this report refer to students in ISCED 5A. The classification ISCED 5A refers to programmes that are largely theoretically based and designed to provide qualifications for entry into advanced research programmes and professions with high skill requirements while ISCED type 5B programmes are more occupationally oriented, typically of shorter duration, and lead to direct labour market access.

3.4.3 Net entry rate by sex and age

The net entry rate is a commonly used indicator for access to Higher Education. It reflects the share of people of each age group who access Higher Education for the first time (i.e. new entrants) set in relation to the total population in the corresponding age group. In this way, it accounts for differences between countries in the routes followed into Higher Education and the typical ages of entry. This is not the case for the gross entry rate, which relates the number of entrants to Higher Education to population size at the typical age of entry (although this indicator also does have its merits, see Clancy 2007).

The overall net entry rate of a country is calculated by the sum of all entry rates by age group. In this way it reflects the chance of a person from a certain country entering Higher Education within their lifespan. For instance, a value of 50% means that one in two persons in the country population will enter Higher Education at some time during their lifetime. Following Eurostat conventions, the net entry rates are calculated for the age group 16 to 34 years. In this way both younger and older students are accounted for.

3.4.4 Traditional route

The “traditional route” to Higher Education may be translated into statistics using the ISCED scheme. According to this classification, upper secondary programmes designed to provide direct access to the first stage of tertiary education and that are “largely theoretically based and are intended to provide sufficient qualifications for gaining entry into advanced research programmes and profession with high skills requirements” (ISCED 5A) are labelled ISCED 3A. Post-secondary non-tertiary programmes (ISCED 4) usually straddle the boundary between upper secondary and post-secondary education from an international point of view and ISCED 4A programmes are “designed to provide direct access to ISCED 5A” (Eurostat & HIS, 2009: 56).

The indicator relates the number of entrants to Higher Education (ISCED 5A) to the number of graduates via ISCED 3A and 4A from the previous year. However, the results should be interpreted with caution because the indicator is affected by:

- The share of qualified students taken by institutions of Higher Education, which are likely to be subject to capacity constraints, especially if there are changes in the demographics of the youth population.
- The share of foreign students, who enter the education system at Higher Education level and are therefore counted in the numerator, but not the denominator. This may result in values over 100%. No account is taken either of graduates of upper secondary school, who go on to study in another country (in this case the denominator would be too high).

3.4.5 Occupational status of students' parents

The focal dimension here is the occupational status of students' parents in comparison to the whole population. The indicator focuses on parents within the occupational group which performs (skilled or unskilled) manual or technical labour. This group was chosen because of its relatively low chances of entering Higher Education. For a statistical description of the distribution of occupational status groups within a population we strove to use internationally comparable categories. National participants in Eurostudent were asked to use, where possible, the International Standard Classification of Occupations (ISCO-88), which is also applied by Eurostat and other international statistics agencies. If countries were unable to adopt the ISCO-88 categories, they were asked to apply their own national definition of manual professions to describe both the student population and the national population as a whole.

3.4.6 Highest educational attainment of students' parents

In international comparisons, the educational attainment of students' parents is often viewed as an indicator for the impact of socio-cultural and economic factors on access to Higher Education. Furthermore, using an educational indicator is thematically appropriate, since it can be assumed that parents' educational experiences and aspirations are passed on to their children's generation. In an in-depth national study, it has been shown that this indicator has considerable explanatory value for participation in Higher Education (Isserstedt et al., 2007).

Depending on the availability of data, educational attainment of student's parents is reported in two ways: (1) preferably, educational attainment of parents refers to the highest degree among father *and* mother. Applying this method, instead focusing solely on fathers, is also advantageous with regard to children of single mothers. (2) Unfortunately this information is not always available. Specifically, Eurostudent III data – which is used frequently in this report – does not allow combining the degrees of parents. Thus parents' educational attainment can only be measured by the father's or the mother's degree. Indicators based on both variables are presented.

3.4.7 Accommodation form

The income and expenditure situation of students is strongly influenced by their accommodation form. The EUROSTUDENT III survey measures the living situation of the students by item 4.1: "Where do you live during study terms/semester?". Answer categories are: 1. at home (with parents/relatives), 2. lodging, sublet, private flat, 3. student hall (EUROSTUDENT III: p. 184).

3.4.8 Composition of students' income

The different sources and their importance for students' total income are captured by item 4.2 in EUROSTUDENT III survey: "Please try to calculate the average monthly income-budget at your personal disposal by sources of origin?" Cash only (direct) at your disposal is the money which is meant for monthly consumption, no matter when it was earned.

Answer categories are: 1. provision from family/partner, 2. financial support from state or other public sources: grant (non-repayable) loan (repayable), scholarship from other public sources (non-repayable), 3. self-earned income through paid job, 4. other sources, 5. total income (EUROSTUDENT III: p. 184).

3.4.9 Composition of students' expenditure

The types of students' expenses are measured in the EUROSTUDENT III survey with item 4.3: "Please try to calculate your average monthly expenses by type of expense (please enter figures right-justified). Answer categories are **(A)**. Living costs: own expenses – expenses paid for by family/partner: 1. Accommodation (including utilities), 2. clothing/toiletries, 3. transportation, 4. health costs (e.g. medical insurance) **(B)** Study-related costs (please, convert expenses per semester or other longer periods of time into monthly expenditures): own expenses – expenses paid for by family/partner: 1. by family/partner, 2. tuition fees, 3. registration, examination fees, 4. contribution to student association, university, 5. study books and material, 6. other (EUROSTUDENT III: p. 184, 185).

3.4.10 Full time and part time students

The formal students' status is measured in the EUROSTUDENT III survey by item 3.3: "Which description best fits your current status as a student?" Answer categories are: 1. full time student, 2. part-time student as formal status, 3. guest student, 4. student of distance education, 5. student of continuing professional development, 6. lifelong learning, 7. other (EUROSTUDENT III: p. 183).

3.4.11 Parents' education

The level of education of students' father and mother is connected to students' employment rate. The according Item 6.1 in EUROSTUDENT III is: "What is the highest level of education your father and mother have obtained?". Answer categories are: 1. up to lower secondary (ISCED 0, 1, 2), 2. upper secondary (ISCED 3), 3. post-secondary, non-tertiary (ISCED 4), 4. Higher Education/university (ISCED 5, 6), 5. do not know : (EUROSTUDENT III: p. 188).

3.4.12 Students' time-budget

The de-facto time budget of students is measured by hours per week spend in study related and job activities. The corresponding item 4.5 in EUROSTUDENT III is: "How many hours per week did you spend last week in taught courses, personal study and on paid jobs?" Answers refer to three categories: 1. taught studies (lessons, seminars, labs, tests, etc.), 2. personal study time (like preparation, learning, reading, writing homework), 3. paid jobs (EUROSTUDENT III: p. 185).

3.4.13 Relationship between job and study

The relationship between field of study and job was measured in EUROSTUDENT III survey by item 4.6: "If you have a job, how closely is it related to your studies?" Answer categories are: 1. very closely, 2. broadly related, 3. related to some extent, 4. not at all related (EUROSTUDENT III: p. 185).

3.4.14 Family status

Students' family status was documented in EUROSTUDENT III survey by item 1.3: "Family status". Answer categories are: 1. not married, with long-term partner, 2. not married, without long term partner, 3. married (EUROSTUDENT III: p. 182).

3.4.15 Children

The situation of students with family responsibilities like children is documented in EUROSTUDENT III report with item 1.4 which entails two figures: 1. Number of children, if any, 2. Age of youngest child, if any (EUROSTUDENT III: p. 182).

Chapter 4

Entry into Higher Education

Authors

Dorit Griga, Dominic Orr

Contributors

Daniela Proli



4.1 Introduction

In all European countries, compulsory education ends with lower or upper secondary education. At this stage, young people and their parents have to make a crucial decision: to make an investment in Higher Education, to go into vocational education and training or to directly enter the labour market. This decision is motivated by various factors such as personal motivation and aspirations, existing barriers to Higher Education including the risk of failure and the variety of the ways to enter Higher Education. This chapter looks at those entering the Higher Education system in order to compare overall access across Europe. Net entry rates to ISCED 5A are used as an indicator to measure access to Higher Education. Firstly, net entry rates are compared across countries to determine the relative share of those who embark Higher Education for the first time by age group (Figure 1, 2). This is followed by a closer look at age profiles and how they relate to entry rates (Figure 3, 4, and 5). Secondly, the issue of gender balance is picked up by considering distribution of entrants by field of education (Figure 6). Thirdly, the main routes channelling students into Higher Education are presented. In this section both traditional and alternative routes into Higher Education are presented (Figure 7, 8).

Definitions & measurement: net entry rate

The net entry rate is a commonly used indicator for access to Higher Education. It reflects the share of people of each age group who access Higher Education for the first time (i.e. new entrants) set in relation to the total population in the corresponding age group. In this way, it accounts for differences between countries in the routes followed into Higher Education and the typical ages of entry. This is not the case for the gross entry rate, which relates the number of entrants to Higher Education to population size at the typical age of entry (although this indicator also does have its merits, see Clancy 2007).

The overall net entry rate of a country is calculated by the sum of all entry rates by age group. In this way it reflects the chance of a person from a certain country entering Higher Education within their lifespan. For instance, a value of 50% means that one in two persons in the country population will enter Higher Education at some time in their life.

Following Eurostat conventions, the net entry rates are calculated for the age group 16 to 34 years in this report. The largest share of students has entered Higher Education until the age of 21 and because the curve of Higher Education entrants approximates 0 after the age of 34 this age-range accounts for both traditional and non-traditional students.

Summary of findings

- On average 49% of the 16 to 34 year olds in Europe can expect to participate in Higher Education. Highest entry rates among the 16 to 34 year olds are found in Latvia (81%), Poland (73%) and Romania (69%). The lowest entry rates are reported for Cyprus (11%), Belgium (30%) and Germany (33%).
- Most European students enter Higher Education at the age of 19. Across Europe the typical age to enter Higher Education ranges from 18 to 21. In contrast, people aged 28 or above continue to have net entry rates below 5%. However, countries with high entry rates for this age group also tend to have high overall net entry rates.
- Regarding the policy aim of gender balance, across Europe young women meanwhile outnumber their male peers with respect to entry into Higher Education. Large gender gaps to the advantage of females are observed in Latvia (35%-points margin between male and female entries), Slovenia (25%), Iceland (24%), Denmark (23%), Norway (23%), Greece (21%) and Romania (20%).
- Correspondingly, underrepresentation of women has been bridged in five out of seven fields of education. Moreover, four out of the seven subject groups considered are already appropriately described as being “female-dominated”. However, science and engineering are still dominated by men.
- With respect to different routes to Higher Education across the European Union, on average 86% of secondary stage graduates of academic-profile school qualifications directly enter Higher Education. England and Wales, Sweden and Spain have relatively large share of students entering via alternative routes.

4.2 Entry rates

One of the main indicators used in comparative publications to highlight the chance of people actually entering Higher Education in a country or region throughout their lifespan, is the so-called net entry rate. The net entry rate looks at the number of entrants in relation to the size of the respective population of a country in a certain age group (see box Definitions & measurement). In this section, we look at the basic trends in student enrolment using this indicator. We shall start at the highest level, looking at trend data for various regions in Europe. This will be followed by a focus on the age profiles of those students entering, with special attention played to coun-

tries which are attracting older students into Higher Education. This latter group is of particular interest, since it is made up of persons who did not continue directly into university or college after obtaining their school qualification.

4.2.1 Trend data across regions¹³

- Although net entry rates in Higher Education among young people in Europe are on average still below those of the U.S., Europe is catching up. The average net entry rate in the European Union¹⁴ (un-weighted) increased from 38% in the year 2000 to 49% in the year 2007 (Figure 1).
- Among the country groups considered, the net entry rate increased, especially in the Eastern and Southern European countries (up over 50%). Access to Higher Education widened by around 25% in the Anglo-Saxon countries. The lowest increase was for Western countries, but this was still 10% up on the year 2000.
- The Western and Southern regions now have the lowest net entry rates at around 40%.

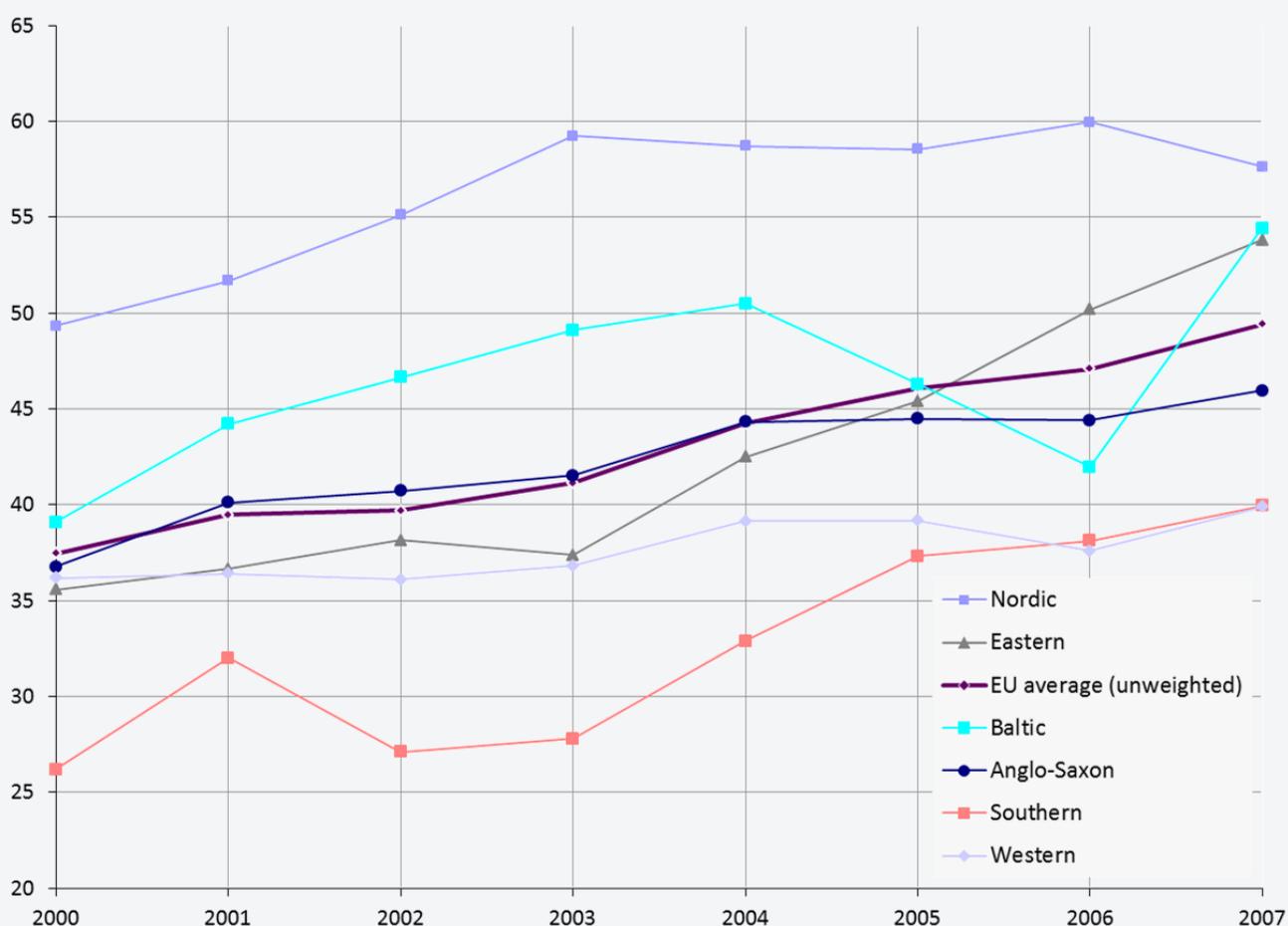


Figure 1: Net entry rate for Europe and regional clusters (16-34 years), ISCED 5A – 2000-2007

Source: Eurostat, own calculations. Note: For the Baltic region data only available for Estonia from 2006 and for Latvia from 2007. Estimation of data for Lithuania for 2002. For the Southern region data only available for Portugal from 2006 and missing data for Italy for the years 2000, 2002 and 2003.

¹³ Country regions: Western – Belgium, Germany, Netherlands, Austria; Eastern – Bulgaria, Czech Republic, Hungary, Romania, Slovenia, Slovakia; Nordic – Denmark, Finland, Sweden, Iceland, Norway; Baltic – Lithuania, Latvia, Estonia; Anglo-Saxon – Ireland, United Kingdom; Southern – Spain, Malta, Cyprus, Italy, Portugal

¹⁴ All countries that were member states of the European Union in 2009.

4.2.2 Net entry rates by age group

A closer look at the data provides insights into the age profile of the student groups in each of the countries considered here and in Europe in general (Figure 2).

- On average 49% of the 16 to 34 year old population in Europe (EU-27 weighted average) can expect to participate in Higher Education, whether immediately after having finished their studies or as young adults respectively. However, net entry rates vary markedly in Europe with a percentage point range between the last country in the top quartile and the first country in the bottom quartile (IS and ES respectively) of 18-percentage points. High entry rates are observed especially in the Eastern European and Northern European countries. Latvia has an overall net entry rate of 81%. Next to Latvia, Poland (73%), Romania (69%), Slovakia (63%), Finland (63%), Sweden (62%), Iceland (58%), Hungary (57%), the Netherlands (57%), Norway (55%), Portugal (54%), Italy (52%) and Denmark (51%) all have rates above the 50% mark. This means that at least one in two people in these countries can expect to participate in Higher Education during their lifetime.
- In contrast, access rates are significantly lower in many Southern and Western European countries. By far the lowest entry rates are reported for Cyprus (11%) where the majority of tertiary students do not study academically orientated courses (i.e. they study vocationally orientated courses at ISCED 5B level).¹⁵ Below average entry rates to ISCED 5A are also reported for Belgium (30%), Germany (33%), Switzerland (35%) Estonia (35%), Bulgaria (38%), Spain (39%), Austria (40%), Greece (42%), Ireland (44%), Malta (44%), Lithuania (48%), Czech Republic (48%), Slovenia (48%) and the United Kingdom (48%).

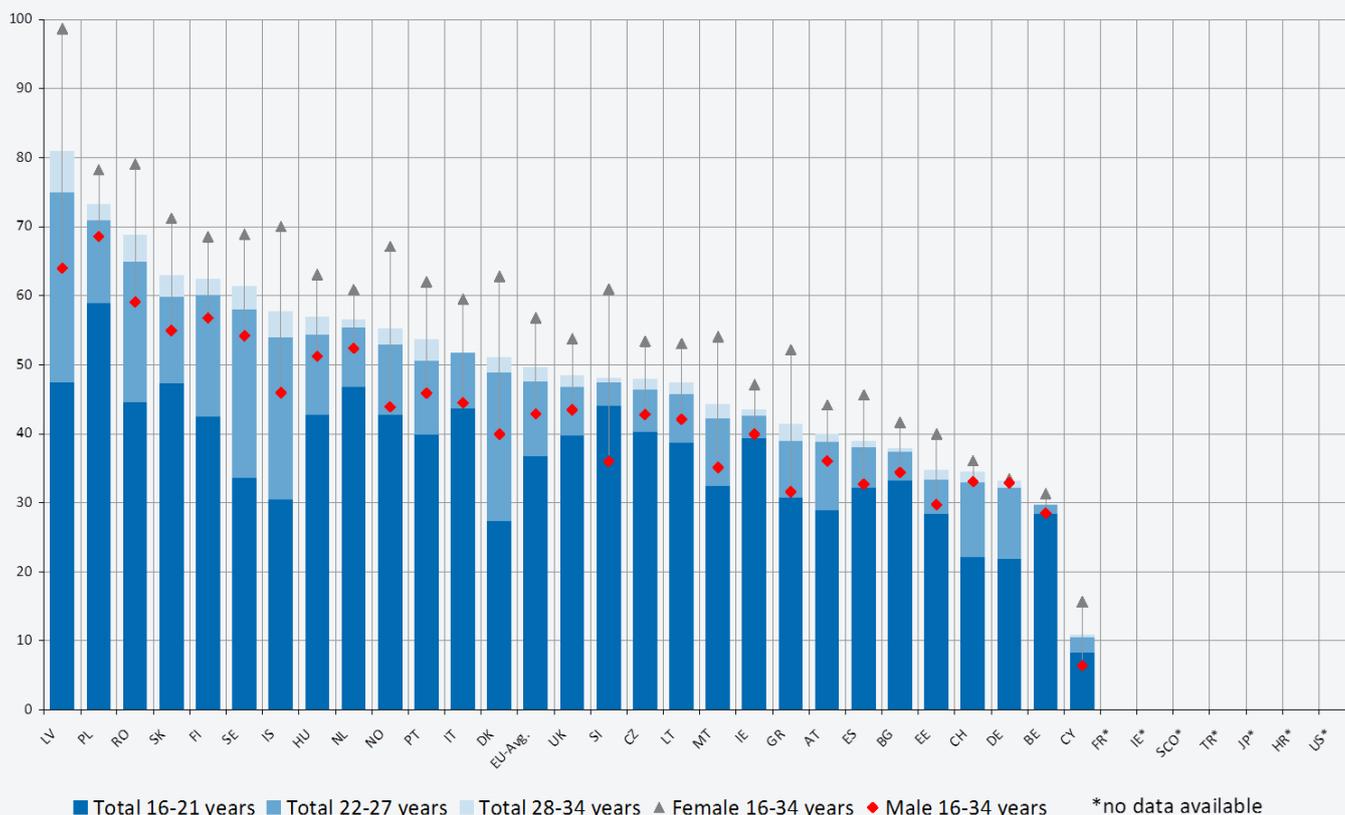


Figure 2: Net entry rates, ISCED 5A – 2007 by age group and sex

Source: Eurostat, own calculations.

- Although entry to Higher Education is most frequent among the group aged 16-21, only Poland is able to achieve a participation rate of 50% without adding in the cohort of those aged 22-27. If high entry rates are

¹⁵ However, around half of Cypriot students of academically orientated courses are studying abroad and are therefore not counted here.

to be achieved, this group is important in nearly all countries. In contrast, those aged 28-34 are of minor importance for the sheer volume of net entries in most countries. Relatively high shares of older first entrants are reported for Latvia (6%), Romania and Iceland (both 4%). This could, amongst other factors, reflect the suitability of their programmes to students with jobs or family-related commitments.

- The chart also shows a wide difference in participation rates by sex. In every country shown, the net participation rate is higher for women than for men. The EU weighted average net entry rate is 57% for women and 43% for men. Large gender gaps in favour of females, are observed in Latvia (35%-points margin between male and female entries), Slovenia (25%), Iceland (24%), Denmark (23%), Norway (23%), Greece (21%) and Romania (20%). For some subjects, however, the majority of students is still male (see below).

4.2.3 Net entry rates by student age profile

The age groups used above hide some of the differences between countries, which can better be shown in a full age profile. Figure 3 shows the profile for the EU weighted average while Figure 4 highlights some country profiles that are especially interesting.

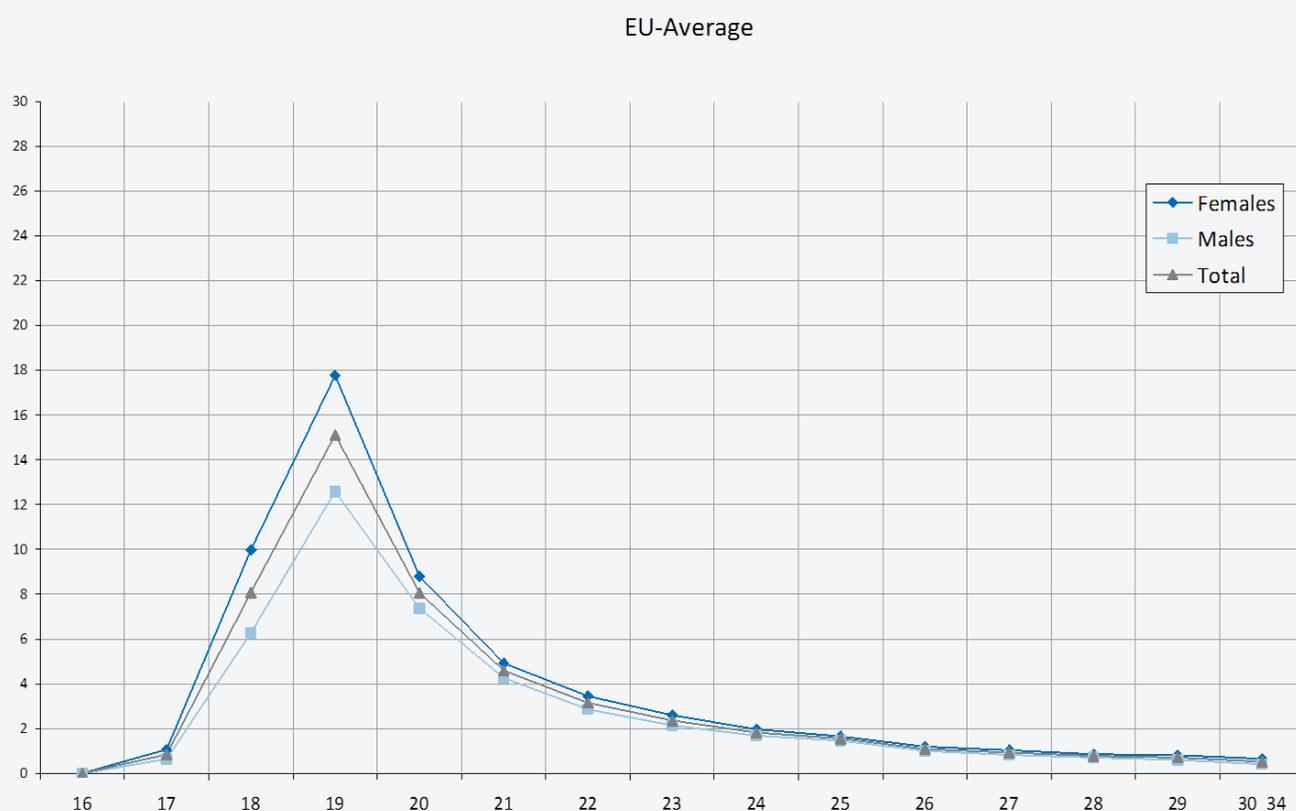


Figure 3: Net entry rate, ISCED 5A – 2007, by age and sex for the EU Region

Source: Eurostat, own calculations.

- European students enter Higher Education on average at the age of 19. Nevertheless, each European country has its own way of organising its educational system, and young Europeans do not embark on Higher Education for the first time at the same age. Instead, the age at which most students enter university differs considerably across Europe. It ranges from 18 in Spain to 21 years in Denmark. Apart from Spain also in Belgium and Ireland, the Netherlands or the United Kingdom students entering Higher Education most frequently do so at the age of 18 (see appendix). Differences in the entry age of students within a country may be explained by the possibility of failing to obtain the upper secondary school diploma, civil obligations, se-

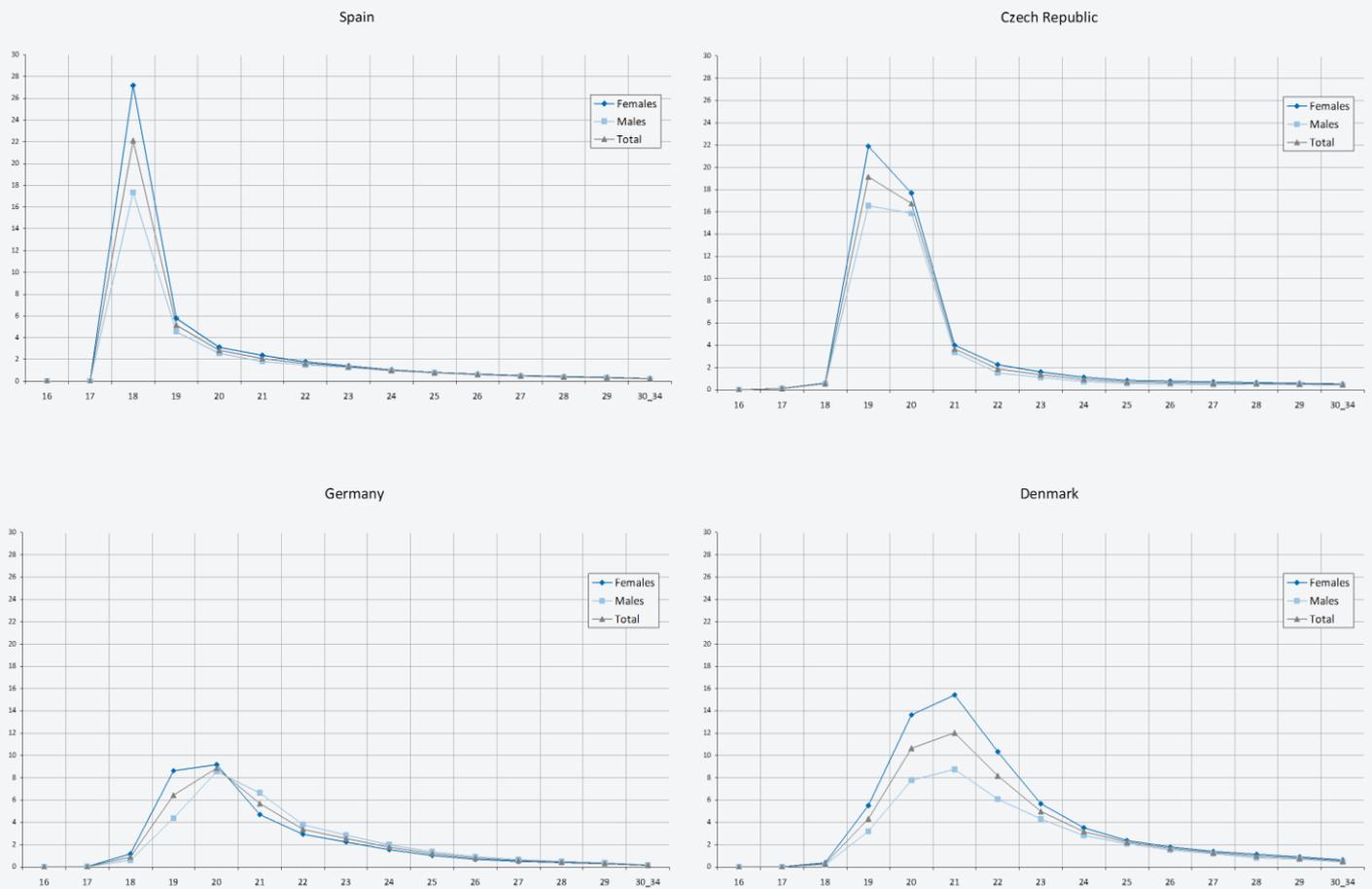


Figure 4: Net entry rate, ISCED 5A – 2007, by age and sex for selected countries

Source: Eurostat, own calculations.-

lection procedures as well as both explicit and implicit decisions on the part of the students to postpone their studies and enter the labour market before enrolling in Higher Education.

- In some countries the age of Higher Education entrance varies, whereas in other countries most students enter Higher Education at one certain age. For instance in Spain, the vast majority of youths enters university at the age of 18. Unlike in Germany, the Czech Republic and Denmark where entry rates range from between 19 and 22 (see Figure 3).
- Only few countries show diverging age patterns for young men and women that enter Higher Education. In countries where such differences occur, males are usually lagging behind their female peers presumably due to conscription duties in the corresponding countries for the most part (e.g. Austria, Cyprus, Germany and Norway).

4.2.3.1 Interpretation

The previous sections have looked at age profile and overall net entry separately. In Figure 5 these data are presented together with a focus on the link between recruiting students beyond the typical entry age into Higher Education and achieving a higher net entry rate. The chart clearly shows that countries with a high net entry rate (i.e. above the median value for the observed countries) also have a relatively high net entry rate for students between the ages of 28 and 34. Four country clusters can be observed (see Figure 1.4):

- Denmark, Iceland and Sweden are countries with a higher than median share of adult students and a higher than median overall entry rate. However, their share of younger students is below median. Their positions

are related to the generally late entry to Higher Education in these Higher Education systems, largely due to the practice of taking one or more gap years between secondary and tertiary education.

- Latvia, Romania, Finland, Slovakia and Poland have higher than median shares on all three criteria. This is because they have high overall net entry rates, which are well spread across the age groups (also see appendix).
- The Netherlands and Italy have lower shares of older students, despite a higher than median overall net entry rate. This is due to a large share of younger students entering at roughly the same age.
- Estonia and Belgium are examples of countries with lower than average values on all three criteria. They have relatively low overall entry rates and a focus on younger students.

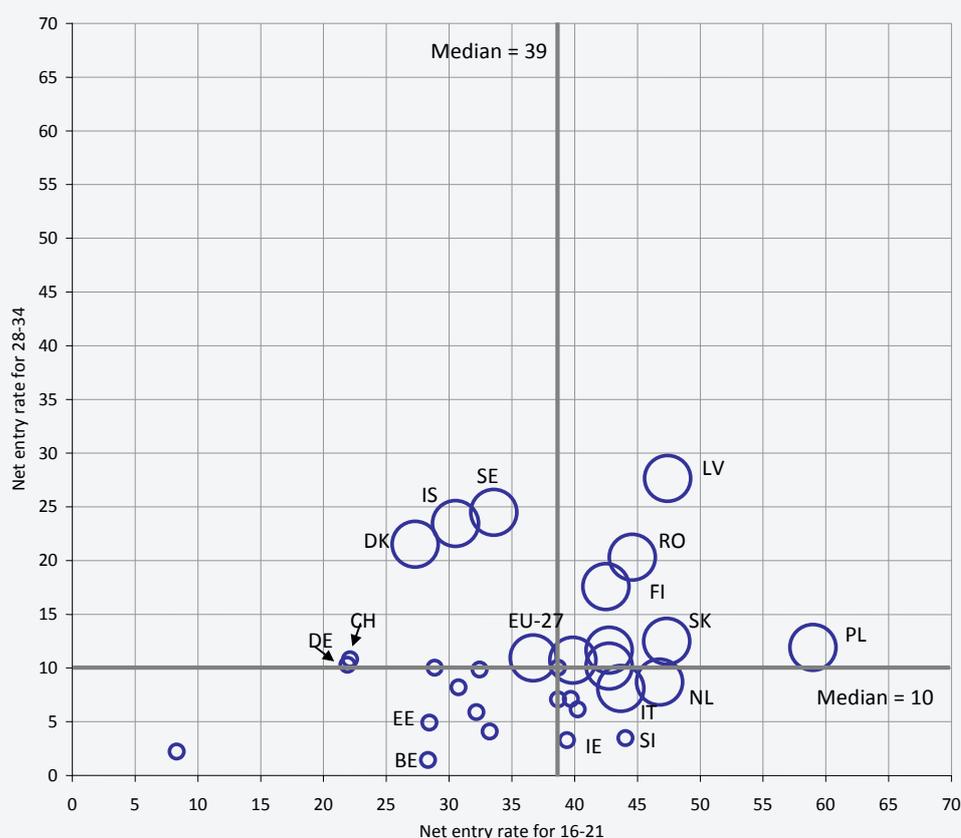


Figure 5: Net entry rate, ISCED 5A – 2007, by age group and overall value

Source: Eurostat, own calculations. Note: This chart shows a comparison between the net entry rates for the age groups 16-21 (young entrants) and 28-34 (older entrants) with the size of bubbles indicating whether the overall entry rate is above (big) or below (small) the median net entry rate.

4.3 Gender balance

The previous analyses have already shown that there are some differences in the participation of women and men in Higher Education. One of the clearest differences is the fact that rates of participation are higher for women. A look at gender balance by subject area gives some insight into what is behind this. It seems that students choose their field of study not only according to intrinsic interest, job prospects, potential career development and selection procedures, but also according to gender specific norms. As female disadvantage in the vertical level of education has largely disappeared, the issue of gender inequalities in education seems to have shifted to the issue of horizontal gender disparities in the choice of field of study.

- As can be seen in Figure 6, significant gender disparities exist in 6 out of 7 fields of study. Of these, four subject groups are best described as being female-dominated. Amongst those subject groups, the share of female students is highest among teacher training and education science (75%), followed by health and welfare (71%) and the humanities and arts (67%). Meanwhile women also represent 58% of students studying social sciences, business or law. Female students represent 50% of entries in agriculture and veterinary studies.
- This said, there is still significant discrimination between the sexes in some academic subjects, which partly accounts for the labour market income inequalities experienced by women. Female students are thus clearly underrepresented within the STEM-subjects covered by subject group science, mathematics and computing (share of women 38%) and engineering, manufacturing and construction (26%). In particular, computing (16%, subgroup not shown), engineering and engineering trades and computing (18%, subgroup not shown) are job fields with tremendous future potential. Not only the predicted changes at the labour market but also the increasing variety of these jobs are objective criteria of so-called “dream jobs” (Huber et al., 2006).
- Percentages of female students differ across the European member states. Most often, highest percentages

Box 2: Access courses as a gateway to Higher Education for mature students: examples from UK and Ireland

Access courses to Higher Education are special courses designed for people who would like to enter Higher Education but lack the necessary formal qualification. For the most part, these are adults who for some reasons left education before obtaining a school leaving certificate or who have been out of education for a number of years. Access courses are a widespread modality to help these people to move close again to education. They are conceived to equip mature students with basic preparation to succeed in university studies, and they can be both subject specific (preparing for particular HE courses) as well as providing more general preparation for studying in Higher Education. They usually include a compulsory core element, including transversal skills (i.e. study skills), so as to fill the preparation gap of students with no recent experience with study and enable them to face university commitments. Access courses can be designed and delivered either at the HEIs or in adult centres in the community; they exist in several countries, taking different forms and names but all aiming at offering a preparatory path to Higher Education so as to equip candidates with the necessary formal requirements to enrol and the preparation to positively face university studies.

In the UK, these courses usually last one year and part-time formulas are also available so as to meet the extra-study commitments which usually define a mature learner. Likewise, evening or distance courses are also an option for those who need to work full-time while studying. Access courses lead to the so called “Access to Higher Education Diploma”, a qualification of 60 credits which requires certain units of study in relevant subject areas, and might be gained in different steps. An Access to Higher Education Diploma attests that the student is ready to undertake study at HE level. Transfer to Higher Education works thanks to the fact that access courses are designed in cooperation with the Higher Education Institutions themselves and they are accredited by the universities’ own Quality Assurance (the UK Quality Assurance Agency for Higher Education). Interestingly, while most of the courses are delivered in further education colleges, they can be found also in universities, adult education centres, community centres hereby enhancing out-reach capacity in the adult community.

In Ireland, access courses take the form of foundation courses offered by Universities and leading to a Foundation Certificate which ensures then direct entrance into a specific Higher Education program in the same HEI or at least the possibility to apply and compete for a place on the same playing ground with the “traditional” candidates. For instance, the Trinity College in Dublin runs a one-year preparatory course for access to the third level aimed at mature students (23 years or over) who for social, economic or educational reasons have not yet realised their full educational potential. The course is organised in classes of 25 students, it is designed and delivery by Trinity College academic staff and no fees are charged to students. Selection is based on motivation and likelihood to complete studies at third level, while no qualification is required to be accepted.

For more information:

- “Access to Higher Education” official web site: <http://www.accesstohe.ac.uk/>
- Trinity college access course web site: http://www.tcd.ie/Trinity_Access/courses/mature_students.php
- Irish Higher Education Authority (2004), Towards a National Strategy, Initial review of HEA targeted initiatives to widen access to Higher Education, National Office for Equity of Access to Higher Education, at http://www.heai.ie/webfm_send/2510

are observed within the Baltic States (e.g. 84% in teacher training and education science, 83% health and welfare, 76% in humanities and arts and 67% in social sciences business and law), but also in Eastern European countries. The picture is slightly different for STEM-subjects. Thus, the share of female students studying those subjects is highest in the Southern European countries (45% and 31%, respectively). Lowest percentages of women studying STEM-subjects are observed within the Western European countries (32% and 22%, respectively). It is sometimes discussed why in the social democratic Scandinavia the concentration of women in 'female' fields of study is particularly high while it is especially low in the 'familistic' countries in the South of Europe (Müller & Haun, 2010).

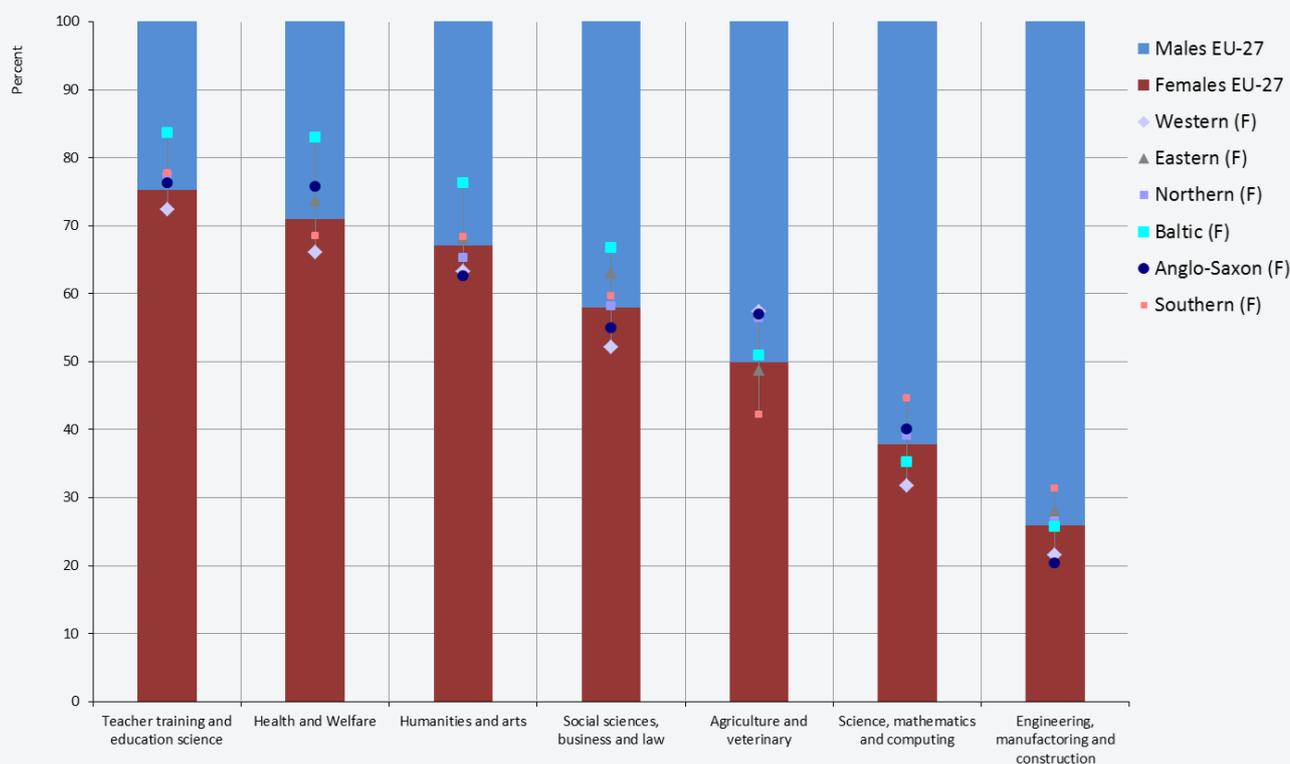


Figure 6: Percentage of female vs male students by subjects for Europe and regional clusters, ISCED 5A - 2007

Source: Eurostat, own calculations.

4.3.1 Interpretation

The trend towards a higher female participation in Higher Education mirrors similar patterns that have been observed with respect to attainments at secondary level or even university completion. To give an explanation, DiPrete and Legewie refer to changes in society, which have particularly affected women or young girls and made them more upwardly mobile. Thus, according to them, daughters of families with a low socioeconomic background are aware of two facts. First, that the jobs that their fathers had were generally male-dominated and thus not an attractive career choice for them. Well-paying jobs for women, in contrast, required Higher Education. Moreover, they realised that the marriage market was changing in a way that chances of marrying a well-paid man were substantially higher, if they had a college education. Paralleling these changes was the fact that the incentive for even traditionally-minded parents to favour sons over their daughters in terms of educational investment was diminishing as the gender gap in earnings decreased (DiPrete & Legewie, 2009).

A further factor for consideration is that the propensity for women to study certain subjects has coincided with the areas of growth in numbers of study places. A comparison of the number of students between 1998 and 2007 for Europe shows that whilst the total number of students has increased by a ratio of 1.5 over this period, the number of students in the subject health and welfare has increased 1.9 times. In contrast, the ratio is 1.3 for engineering sciences (own calculation on the basis of Eurostat data). That is to say that many places have been provided in study

areas in which women have shown a preference to study. However, the recent emphasis on STEM-subjects may go some way to change this (see Box 3).

Box 3: STEM-subjects and the gender gap

According to de Welde and Gulf, diverging international evidence on women in STEM-subjects suggests that underrepresentation is mainly a cultural phenomenon, rather than due to innate differences, and that policies can affect workforce diversity (de Welde et al., 2007). Asked what such policies should begin with, the authors mention classroom and faculty climate which has been classically described as “chilly” (Hall & Sandler, 1982), the lack of role models for balancing career and family, poor preparation and lack of encouragement in STEM-subjects at secondary school level, a lack of “critical mass” of women in sciences departments which may lead to dissatisfaction and greater attrition of women as well as bias and discrimination in hiring and advancement of women eventually leading to slower advancement of women in science, particularly in academic science.

On the European level, the ETAN report (2000) on “Science policies in the European Union” recommends that European member states tackle sex stereotyping of science and scientists through different channels starting from pedagogy, the media and the curriculum. Among the corresponding strategies are role models, mentoring, networks, schemes for parents returning after career breaks and encouragement of women to apply for fellowships and posts.

Box 4: Promoting women participation in STEM subject. Out-reach strategies to make girls feel attracted with sciences: examples from Germany and the US

Governments in Europe as elsewhere are promoting different initiatives to encourage women participation in STEM subjects. The main problem they try to tackle is that girls rarely apply for these study fields, due to a gender-biased school system which tends to reproduce societal role models. Therefore, most of the strategies have an outreach profile, trying to make girls from their first school years feel attracted to STEM subjects and consider them a serious option for study and career purposes. They are combined in several cases with more comprehensive strategies to affect role models and removing structural barriers hampering full participation of women in scientific and technical professions.

Starting from 2007, the German federal government has promoted a comprehensive strategy to ensure more “equal opportunities in education and research” for women in STEM subjects, in order to encourage girls and young women to embrace high level studies and careers in fields where they are traditionally underrepresented. The “KOMM, mach MINT!” initiative is based on joint national campaigns and projects by partners drawn from the scientific, research, industrial, political and media sectors, aimed at attracting young girls in STEM subject in their education choice, with counselling and information activities accompanying them starting from school up to Higher Education. Among its several initiatives, “KOMM, mach MINT!” includes for instance a yearly girls’ day, during which organizations and companies with technical departments and vocational training areas, HEIs and research establishments invite female school pupils to come and learn about professions that are not considered “typical” for women. Likewise, the taste-MINT suitability test is made to give students at the interface school-university the opportunity to demonstrate their potential for the MINT fields. A Cyber mentor from MINT professions is also available to girls, answering their questions about the MINT-area via e-mail, and informing them with a variety of online and offline offers.

Similar initiatives can be found in the US. The PREP programme in the University of Rochester (NY), “Pre-college experience in Physics”, is a 3-week summer program offered by the university to young women aged 14 to 16 from the Rochester community who have either little or no experience in physics, but show passion to learn and curiosity about a science career. PREP is organised in the university campus and involves interactive lectures and constructive learning, hands-on-job activities, project work, as well as visits to university laboratories and meetings with guest speakers from a science background telling their own experience, mainly women working in the university. Based on the belief that traditional science classroom does not favour girls and tends to reproduce role models, the pre-college experience is based on discussion and encouragement of creativity, trying to convey the message that “there is no such thing as a stupid question” in science studies, and favours team working and a gender approach to sciences which is closer to women.

For more information:

- “Komm mach MINT!” official website www.komm-mach-mint.de
- PREP website: <http://www.pas.rochester.edu/PREP/>
- Julie Fry (1999), *Winning over future scientists*, Department of Physics and Astronomy and Department of Chemistry, University of Rochester

4.4 Routes to Higher Education

One of the functions of school education is to give pupils the founding knowledge and skills necessary for the next level of education (pro-paedeutic function) and to afford a certain pre-selection of appropriate candidates through a final examination. This route to Higher Education through an academic examination at the close of secondary school might be considered the traditional route (Eurostat, 2009).

- Across the European Union member states, on average 86% of secondary stage graduates directly enter Higher Education (see Figure 7).
- Disparities across countries are strong. In the first cluster of countries, entries to Higher Education are close to or even exceed the number of graduates from secondary stage. These countries are Romania (144%), Slovenia (134%), Latvia (134%), Switzerland (132%), Por-

Definitions & measurement: traditional route to Higher Education

The “traditional route” to Higher Education may be translated into statistics using the ISCED scheme. According to this classification, upper secondary programmes designed to provide direct access to the first stage of tertiary education and that are “largely theoretically based and are intended to provide sufficient qualifications for gaining entry into advanced research programmes and profession with high skills requirements” (ISCED 5A) are labelled ISCED 3A. Post-secondary non-tertiary programmes (ISCED 4) usually straddle the boundary between upper secondary and post-secondary education from an international point of view and ISCED 4A programmes are “designed to provide direct access to ISCED 5A” (Eurostat & HIS 2009: 56).

The indicator relates the number of entrants to Higher Education (ISCED 5A) to the number of graduates via ISCED 3A and 4A from the previous year. However, the results should be interpreted with caution because the indicator is affected by:

- The share of qualified students taken by institutions of Higher Education, which are likely to be subject to capacity constraints, especially if there are changes in the demographics of the youth population.
- The share of foreign students, who enter the education system at Higher Education level and are therefore counted in the numerator, but not the denominator. This accounts for the values over 100%. No account is taken either of graduates of upper secondary school, who go on to study in another country (in this case the denominator would be too high).

Box 5: Supporting VET students transfer to Higher Education: examples from the Netherlands.

The Dutch government has for the last several years acting been acting upon an explicit commitment to raise participation in Higher Education. With the direct continuation rate from upper secondary education to Higher Education now almost at its limit (around 80%), attention has turned to under-represented groups (namely ethnic minorities) and alternative routes into HE, with a specific effort paid to increase recruitment in HE from upper secondary vocational graduates.

This includes a set of initiatives to facilitate the passage between vocational and higher education, including recognition of work experience to obtain a certificate of upper secondary vocational education; the reduction of the study period in bachelor curricula on the basis of learning outcomes acquired in VET; the introduction of an Associate Degree as a two-year vocationally oriented program embedded in regular bachelor programs and then transferring directly to bachelor studies. Within this framework of initiatives and to ensure their effective implementation, efforts have been made for the establishment of specific agreements between the Hogescholen (which are HEIs of the non-university sectors of tertiary education) and the upper secondary vocational sector with the aim of lowering barriers between the two so as to increase transfer of students to tertiary education and lower dead-ends.

The project “golden gate” for instance promoted a bilateral cooperation between an upper secondary vocational school (department high tech metalektro Konig Willem I college) and an Hogeschool (the Avans Hogeschool of applied sciences). The initiative was aimed at putting potential prospective students in contact with tertiary education before they finish their vocational school. Specifically, in their third school year a general information session took place explaining the different technical HE programmes. As a result of that information, a limited number of VET students attended a three-day orientation programme in the HE institution. Then some of them attended an evening course at HE level in math. Moreover students from VET spent one day per 20 weeks at a HEI under the guidance of a HEI staff member, where they were supported in their math tasks and worked on a project at university level. The idea underpinning this type of initiative is that of mainstreaming a joint offer and joint responsibility between VET institutions at secondary level and HEIs, so as to complement the creation of transfer paths from VET to HE with effective information, guidance and support to ensure students will be in the condition to know and opt for these routes to Higher Education.

More information:

- Luomi-Messerer, Karin (2008, Ed.), Permeability between Vocational Education and Training and Higher Education at: <http://www.vocationalqualification.net/vqts/>

tugal (129%), Iceland (123%), Norway (122%), Malta (114%), Denmark (107%), Spain (105%), Austria (105%), and the Netherlands (101%). Above EU-average figures are also reported for Sweden (98%), Slovakia (96%), Hungary (93%), and Poland (91%). High relative entry rates can be the result of a close link between (national) secondary school leaving certificate and entry into higher education. They may however also be due to the provision of alternative routes. Additionally, mobile students are counted here, who come from abroad and are therefore not registered as school graduates (see box “Definition and measurement”)

- Countries with transition rates lower than 80% and above 60%, namely Greece (75%), France (72%), Italy (71%), Germany (69%), Croatia (69%), Czech Republic (69%), Japan (65%) and Lithuania (63%) can be seen as countries with a link between obtaining a school-leaving certificate and entry to Higher Education, which is to some extent selective i.e. some of the graduates with the school-leaving certificate are not entering higher education or cannot enter higher education for some reason. The further cluster is characterised by a rather weak connection between the schooling system and higher education. This pattern is observed for Bulgaria (54%), Turkey (53%), Ireland (53%), Finland (53%), Estonia (52%), Belgium (45%) and Cyprus (16%).

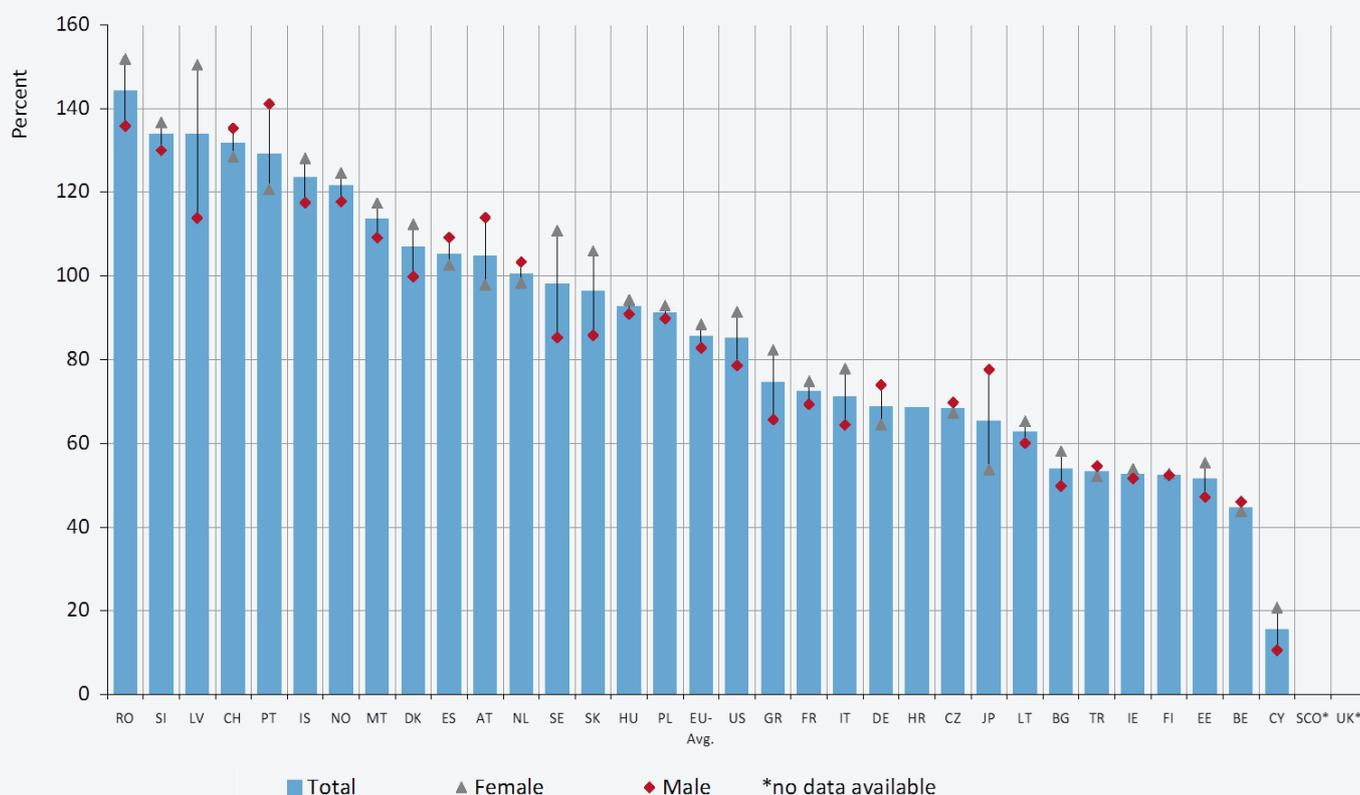


Figure 7: Entrants at ISCED 5A as a percentage of qualifying graduates of secondary schooling (ISCED 3A and 4A) the previous year -2007

Source: Eurostat. own calculations.

- In two thirds of the countries for which data are available the ratio between higher education entrants and secondary education graduates is higher for women than for men, which again shows that more women enter higher education earlier than men.

4.4.1 Alternative routes to Higher Education

Systems of secondary education can reinforce social, cultural and economic differences between pupils and thus impair equitable access to Higher Education. One way of counterpoising this effect is to introduce measures which provide prospective students with a “second chance” of entering Higher Education, i.e. through an alternative route. Since these routes are nationally embedded, contextual information is necessary for a full assessment of the implementation of any policy initiatives. For this section, data from the Eurostudent project will be used, having the ad-

vantage of being based on information given directly by students themselves (see Definition & measurement box; Figure 8).

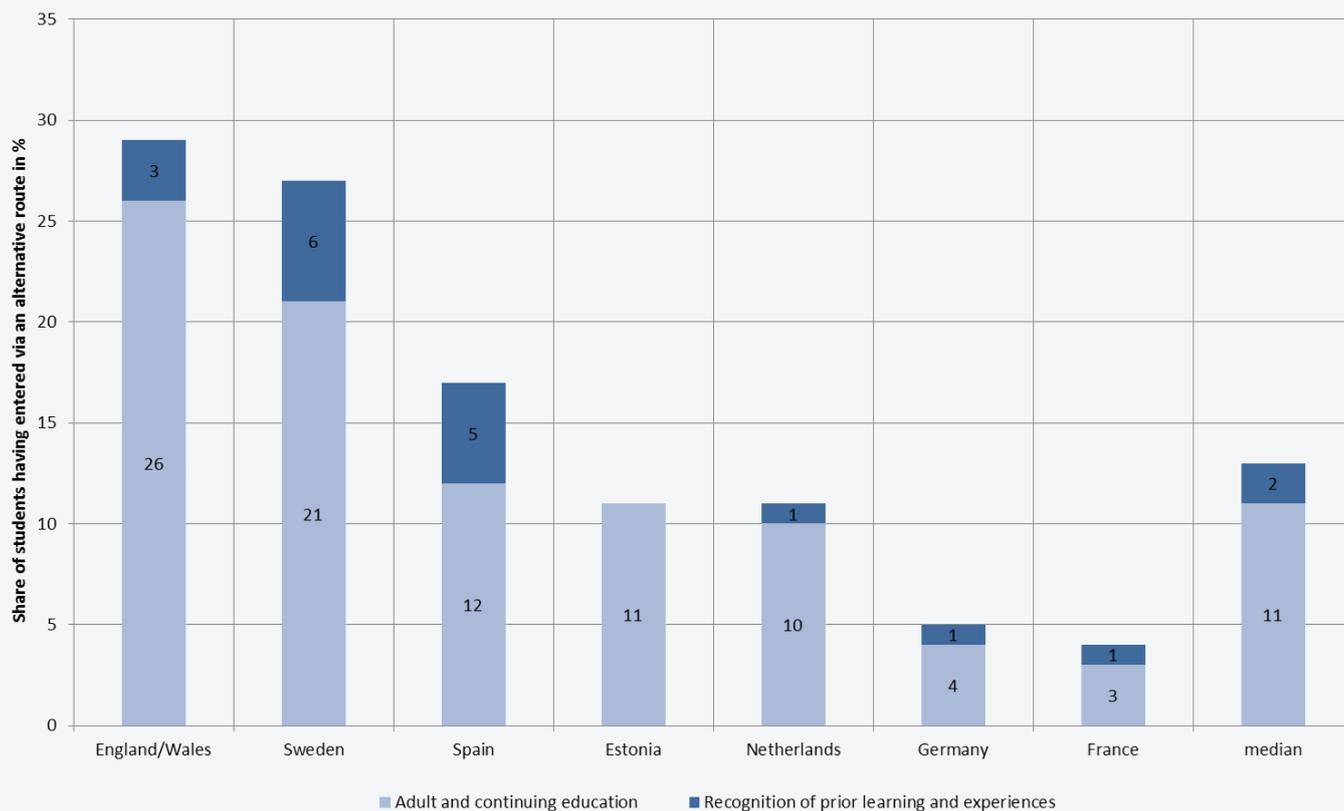


Figure 8: Share of all students with alternative routes to Higher Education (in %), 2007

Source: Eurostudent III. Note: No data on recognition of prior learning for Estonia

- Figure 8 shows England and Wales¹⁶ and Sweden leading, with over one quarter of students having entered Higher Education via an alternative route. This is part of the lifelong learning strategies being implemented in both countries. For instance, Sweden places an emphasis on access schemes in order to encourage non-traditional students. One clear measure in Sweden is the 25:4 scheme, which focuses on students who have already passed the typical age to enter Higher Education.

Definitions & measurement: alternative route to Higher Education

The Eurostudent III dataset quantifies the share of students entering higher education via an alternative or non-traditional route. In contrast to other data sources, the results do not reflect the extent of initiatives taken by countries, but instead they quantify the real share of students, who state that they have entered higher education via a special route.

In order to obtain a classification that is appropriate for the diverse national concepts Eurostudent established a common definition, which was used for cross-country comparisons. It is typified as “narrow”, since it does not consider all alternatives:

- Access to Higher Education through the validation of prior learning and work experience – with or without a Higher Education entrance examination.

A recent report, which re-looked at the data, extended this view of alternative routes to include adult and further education provision. It also linked the results to context information in order to better understand the structures behind the headline data (Orr & Riechers 2010).

In order to be eligible for this initiative, students must be at least 25 years old and have a minimum of four years of work experience. Special efforts are made to recognise real competencies (*reell kompetens*) which may have been obtained in non-formal learning settings such as the workplace.

- Spain also has a high share of students, who have entered Higher Education through recognition of prior learning and experiences (5%). In Spain, applicants without admission qualifications can enter Higher Education via a special entrance examination. This entrance examination (*prueba especifica*) is only open to

¹⁶ The Eurostudent dataset differentiated between two Higher Education regions in the United Kingdom: England and Wales and Scotland. For this question, data is only available for the former.

25 year olds or over. The examination is regulated nationally, but it is organised by the institutions for Higher Education. A further initiative has just been introduced for people aged 45 years or over.

- In Germany, the small share of students nationally hides special initiatives being taken by individual universities. In particular, the Humboldt University has a number of outreach programmes. Furthermore, some of the universities of states in eastern Germany are commencing initiatives to recruit older students as a reaction to dropping numbers of young people due to a sharp decrease in birth rates at the beginning of the 1990s. The West German states of North-Rhine Westphalia and Lower Saxony introduced state-wide initiatives in spring 2010. In order to participate, a person must have at least three years' work experience. Such initiatives are also being undertaken by other countries (see Box 6).

This final section has shown what initiatives are being undertaken by countries in order to widen participation. In this sense, it has left the wider statistical landscape to consider how entry into Higher Education is actually organised and implemented. However, the effects of such initiatives are not always visible on a national scale. This is because they are just one of a multitude of dimensions which affect both the number and type of student attending Higher Education in a country. However, not shown here is the fact that Spain, the United Kingdom and Sweden, the countries with high shares of students entering via alternative routes, have higher than average shares of students in the age bracket for students 30 years and over.

Box 6: Investing in a lifelong learning framework to “mainstream non-traditional routes” in HE: the Scottish credits and qualification framework

An implemented and well-oiled national qualifications framework including HE qualifications is among viable strategies to embed the concept of lifelong/lifewide learning in Higher Education and widen access from non-traditional routes.

By relating one to the other degrees and qualifications form different formal education paths, and by certifying experiential learning within a common framework, a NQF might be a useful tool to favor vertical and horizontal passages among learning systems, also in an international mobility perspective. With regards to Higher Education a certain amount of caution is present, as the theoretical cut and high level of university studies raise concerns on the viability of non-traditional routes to entrance in HE and on the exemption from parts of HE programs based on accreditation of prior learning. However many countries are developing national qualification frameworks in close cooperation with their HE community so as to put learning systems in close communication and permit access in HE from non-traditional routes.

In Scotland, thanks to the transparency and quality assured system of the Scottish Credit and Qualifications Framework scope has been created to access HE degrees from VET and work experience, that is through validation and accreditation of prior learning thanks to the mechanisms of a jointly developed credit rating system.

The SCQF is a comprehensive framework including Higher Education an academic and vocational qualification and it aims to include non-formal and informal learning. In order to describe and compare qualification, the framework utilizes two dimensions: amounts or volume of learning and level of learning outcomes. The latter is measured in SCQF credit points which are allocated to outcomes of learning that are subject to valid, reliable and quality assured methods of assessment. This learning could be delivered through units, modules, group awards or learning gained through experience submitted to assessment. The credit system is used in program design and entrance requirement as well as for transfer. Any short programme, module, unit or work-based learning has the potential to be credit-rated provided that it is based on learning outcomes, is included within an appropriate quality assured system and is subject to reliable and valid methods of assessment.

In a variety of fields and disciplines SCQF Levels 7, 8 and 9 are coming into use for entry by VPL into Years 1 and 2 of HEI courses. Universities and colleges, SQA and other awarding bodies decide how many of the credit points already received from previous learning can be transferred into their programmes.

More information:

SCQF official website: www.scqf.org.uk

Valew Project, to validate learning at work, a Scottish case study (2009) www.valew.eu

Box 7: Validation of non-formal and informal learning in Denmark

Based on manifold criteria additional to improving access to Higher Education, in 2007 CEDEFOP judged Belgium, Denmark, Estonia, Finland, France, Ireland, Netherlands, Norway, Portugal, Slovenia, Romania, Spain and the UK to have made validation on non-formal and informal learning a reality. Most countries thus have legal structures supporting validation methods, together with a strong policy framework. Moreover, all sectors – public, private and the third sector – have developed and applied methods to validate competences acquired outside the formal education system.

For example, the Danish 2004 policy Recognition of prior learning in the education system, which follows up the 2002 Better education action plan, gives validation a high priority and very specific focus. The policy paper proposes recognition of informal and non-formal learning be taken into account throughout the entire education system, and that initiatives be taken in adult education and continuing training to improve opportunities for assessment and recognition of non-formal and informal learning (OECD, 2007). Systems for validation of informal and non-formal learning stretch from general upper secondary to vocational, adult education and tertiary education. Validation is most prominent in adult vocational education and training. A legislative amendment in 2007 gave each individual the right to have their prior learning experiences validated in relation to adult education and continuing training. The new policy focuses on individual's needs and aims to make the process as accessible and flexible as possible.

Chapter 5

Access to HE and socioeconomic background

Authors

Dorit Griga, Kai Mühleck

Contributors

Daniela Proli



Summary of findings

- Students with a lower socioeconomic background, as measured by their parents' occupational and educational status, have disproportionately low chances to access Higher Education in most European countries under investigation. The degree of socioeconomic inequity differs considerably across countries.
- Underrepresentation due to the socioeconomic background is lowest in Finland and in the Netherlands; representation of students with a disadvantaged occupational or educational background is also relatively good in Sweden and Ireland.
- In contrast, inequity caused by socioeconomic disadvantages are most pronounced in four Eastern European countries, namely Bulgaria, Latvia, Czech Republic, Slovakia, as well as in Germany.
- Countries with relatively low socioeconomic inequity show relatively high proportions of access to HE via alternative routes (e.g. adult education or recognition of prior learning).
- Socioeconomic differences are also visible with regard to qualitative aspects of Higher Education: On the one hand, young people with a high educational background prefer fields of study that award a particularly high status to those graduates or are financially most rewarding, such as law or health. On the other hand, they tend to study fields without a clearly defined vocational field, e.g. arts, social and behavioural science, or humanities.
- In contrast, students with a low educational background are more likely to study fields clearly leading to certain occupations. These fields of study constitute a 'safe' pathway to upward mobility and are often preferred by social climbers: business and administration, teacher training and education science as well as engineering and engineering trades.
- Another form of qualitative differentiation between the social strata is studying abroad. With the exception of Austria, students whose parents attained tertiary education, study abroad more frequently than their less privileged peers. This is specifically true Italy, Turkey, Slovenia, and the Czech Republic.
- Apparently, educational expansion has helped reducing inequity. At the European level, the chances of the educationally most underprivileged to graduate from Higher Education have increased over time. In the group aged 55-64 only 13% of all persons with a low educational background attained Higher Education. Among those aged 25-34 this share increases to 23%. Educational attainment of persons with a high educational background did not increase at the same pace.
- However, countries differ in that respect. Young people with a low educational background have benefited most in Spain, United Kingdom and France. Other countries where participation of underprivileged youths has increased, though to a lesser extent, are Cyprus, Luxemburg, Ireland, Poland, Greece, Sweden, Austria, and Denmark.
- In contrast, in five Eastern European countries participation rates have actually decreased in the groups of underprivileged young people. Those countries are Slovak Republic, Latvia, Estonia, Hungary and Lithuania.

5.1 Introduction

The social make-up of the student body helps to show the extent to which countries are making full use of their potential to generate future human capital. Thus, providing equal opportunities for all individuals is a key issue for educational systems. To enable people from a less privileged socioeconomic background to participate in Higher Education is not only a matter of equity; it is a way of increasing the recruiting ground for highly skilled jobs and overall competitiveness. Barriers to Higher Education resulting from the socioeconomic status of one's family most clearly conflict with prevalent definitions of equity (see chapter 2). Their existence has been shown by numerous sociological works. Thus, this analysis starts by comparing participation rates of students from different socioeconomic backgrounds.

An important critique on many studies analysing social selectivity within the Higher Education system is that they ignore forms of qualitative differentiation within tertiary education programmes (e.g. Arum et al., 2007). Most education systems are tracked, in one form or another, and students must choose among various tracks within the system. Choices of field of study are socially stratified as well. Therefore this chapter also considers qualitative aspects of studies regarding the representation of students from different socioeconomic backgrounds.

In view of the expansion of educational systems in Europe over the last decades, the question must be raised whether educational expansion diminishes or magnifies existing inequalities in educational attainment. The effect of expansion on educational inequality in tertiary education is of particular importance, as Higher Education has become increasingly relevant for labour market prospects and life course opportunities. In order to analyse progress to equitable access, completion rates are broken down by socioeconomic background together with birth cohort.

5.2 Socioeconomic background and inequitable access

Sociological rational choice theory views inequalities in the choice to embark to Higher Education as the result of an origin-specific assessment of benefits and costs as well as probabilities of success associated with the available educational options. Since costs for attending a study programme (e.g. costs of moving, costs of living, fees, opportunity costs etc.) induce a relatively lower burden to households endowed with a high income, probabilities of students to enter Higher Education differ according to the socioeconomic status of their parents, e.g. determined by their occupation. Students whose parents attained Higher Education are more likely to access Higher Education institutions even if their income is average. Theoretical and empirical studies suggest several reasons for that (see chapter 2): (1) highly educated parents are more able to support their children by sharing their knowledge with them. (2) They transfer the habits of the highly educated to their children (e.g. the way of expression). (3) Highly educated parents have a higher educational aspiration, i.e. they are more interested in their children attaining Higher Education as well. As a result, students with a high educational background have a higher propensity to access and successfully complete Higher Education than students with a low educational background. In order to analyse the impact of socio-cultural and economic factors on access to Higher Education, two proxy measures are normally used by sociological studies: occupational status and highest educational attainment of students' parents.

5.2.1 Occupational background

In Figure 9, a comparison is drawn between the shares of fathers with a manual-labour job among all students' fathers and the share of men with manual-labour jobs aged 40-60 among all men of this age group (see box). The ratio

Definitions & measurement: occupational background

To compare access rates between students with respect to their occupational background we use data from the Eurostudent project. In most countries, the Eurostudent project used the ten main occupational groups of the International Standard Classification of Occupations (ISCO-88) for the measurement of parents' occupations (see table below). The unit of classification at the lowest level – a job – is defined as a set of tasks or duties designed to be executed by a person. A key concept of the classification is the skill level required to fulfil certain tasks (for details see the website of the International Labour Organisation: www.ilo.org/public/english/bureau/stat/isco/index.htm). A few Eurostudent countries did not use ISCO-88 (Austria, Germany, England/ Wales, and Scotland). For these countries, Eurostudent provides the category of the blue-collar occupations (main groups 6-9). The Eurostudent category is a gross measure of occupational status but it has two assets: Firstly, in contrast to ISCO's main groups, it provides a clear hierarchy as e.g. used by Eurostat (Kailis & Pilos 2005: 5). Secondly, its gross category limits problems of international comparability (see chapter 3 for a discussion of the measurement of the occupational background).

ISCO-88 Basic occupational groups	Eurostat hierarchy	Eurostudent III
1: Legislators, senior professionals	Highly skilled white-collar	(not applicable)
2: Professionals		
3: Technicians and associate professionals		
4: Clerks	Low skilled white-collar	
5: Service workers and shop and market sales workers		
6: Skilled agriculture and fishery workers	Highly skilled blue-collar	Blue-collar
7: Craft and related trades workers		
8: Plant and machine operators and assemblers		
9: Elementary occupations	Low skilled blue-collar	
0: Military	(not applicable)	(not applicable)

(Eurostudent 2008: 61)

A common understanding of equity (see chapter 2) is that it is achieved if the student body reflects the diversity of the population. The indicator for equity regarding the occupational background transposes this definition (exemplified by the indicator related to the occupational position of the father): The share of students with a father having a blue collar job is divided by the share of men with low skilled blue-collar job aged 40 to 60 years among all men of this age group. A 'perfect representation' would result in an equity indicator of 1.0. Figures below 1.0 indicate underrepresentation of students with a blue-collar background, larger figures indicate overrepresentation. The same method can be applied to other occupational groups.

(blue dot) of both shares depicts the degree of (in)equitable access due to a low occupational background in cross-country comparison.

- In total, and despite differences between countries, students with a lower socioeconomic background, as measured by their father's occupational status, are underrepresented in higher education in each country for which data is available.
- In Finland, the share of students whose fathers have manual-labour occupations comes closest to a perfect representation (ratio of students' fathers having manual-labour occupations to all men aged 40-60 having manual-labour occupations: 0.92). Also in the Netherlands (0.79) and Slovenia (0.78) the impact of parents' occupational position on the social composition of the student body is limited compared to other countries. In contrast, underrepresentation of students with a low occupational background is most striking in Lithuania (0.08), Bulgaria (0.27), Latvia (0.33) and Spain (0.37).

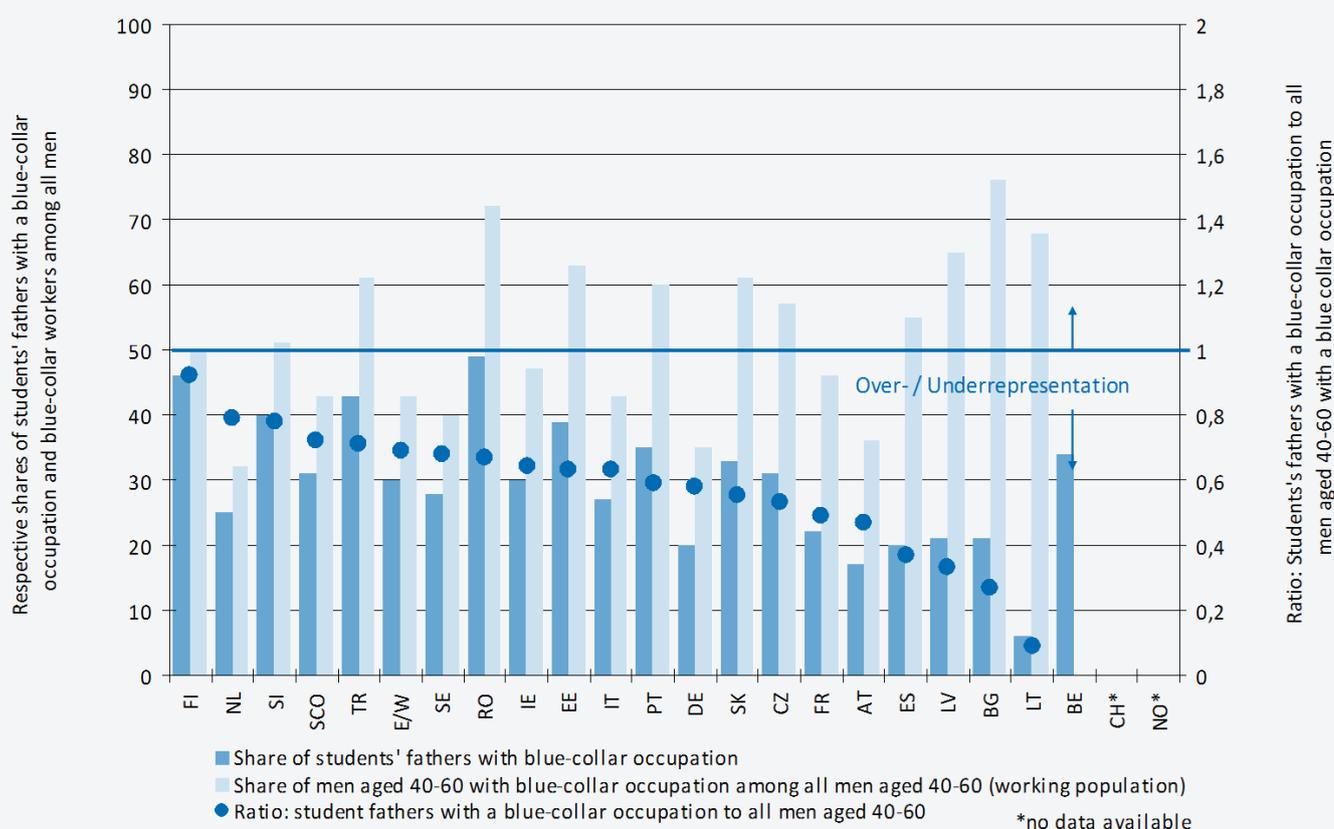


Figure 9: Ratio of students' fathers with manual-labour occupational status to manual-labour workers in the general population, 2005

Source: Eurostudent III, own calculations

The picture is quite similar if the occupational background is measured by the mother's status (figure 10). In most countries students with mothers holding a blue-collar occupation are underrepresented. By and large, the level of underrepresentation resembles that indicated in figure 9 and country groups with low or high levels of inequity tend to overlap. Some countries do however show marked differences.

- For the Netherlands (1.22), Finland (0.97), Slovenia (0.79), Sweden (0.76), Estonia (0.74), Scotland (0.72), and Romania (0.69) quite low levels of inequity are shown, regarding the occupational status of mothers and fathers as well.
- For Italy, Ireland, Turkey, and Spain results for mother's and father's occupational status are inconsistent. This could have substantial reasons but figures should be treated with caution. Moreover, we interpret figures for Italy and Ireland as clearly indicating a data problem. They are not only inconsistent with the find-

ings based on the father's status but also deviate considerably from the figures of all other countries. Furthermore they suggest a strong *overrepresentation* of students with a mother working in a blue-collar occupation in both countries which contradicts theoretical considerations.

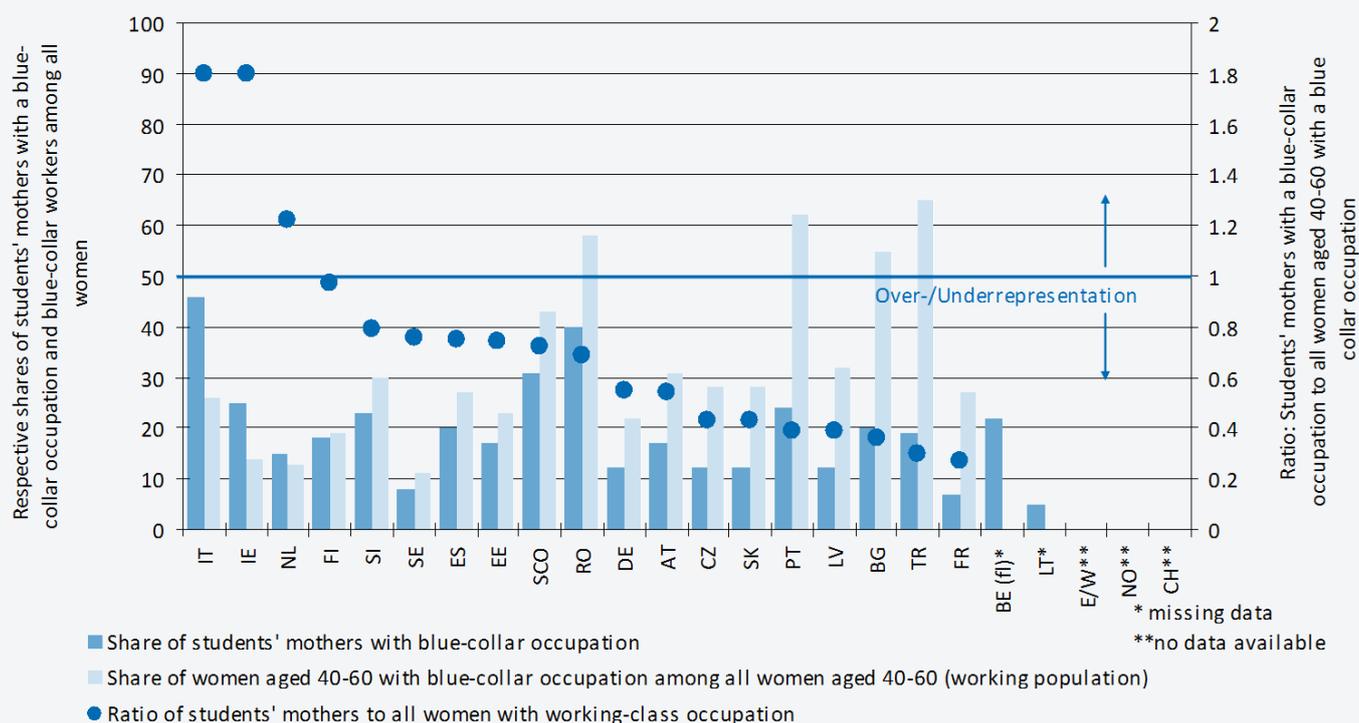


Figure 10: **Ratio of students' fathers with manual-labour occupational status to manual-labour workers in the general population, 2005**

Source: Eurostudent III, own calculations

Definitions & measurement: educational background

Students' educational background is measured by categories of the International Standard Classification of Education (ISCED). The main ISCED categories or levels "represent broad steps of educational progression from very elementary to more complex experiences with the more complex the programme, the higher the level of education" (UNESCO 2006[1997]: 15). Thus the ISCED levels are ordinal in nature. The table shows the main levels and a short description.

Level	Description
0	Pre-primary education
1	Primary education: first stage of basic education
2	Lower secondary education: second stage of basic education
3	(Upper) secondary education
4	Post-secondary non-tertiary education
5	First stage of tertiary education
6	Second stage of tertiary education

(UNESCO 2006 [1997]: 19)

For analytical purposes these levels have been aggregated to three groups: (1) The first group encompasses all levels up to lower secondary education (ISCED 0-2). Compulsory schooling ends in many countries at this level. (2) The second group is made up of upper secondary education and post-secondary non-tertiary education (ISCED 3 and 4). These programmes open the way to tertiary education of vocational (ISCED 3B and 4B) or academic (ISCED 3A and 4A) kind. (3) Programmes of tertiary education are summed up by the third group (ISCED 5 and 6). ISCED level 5 consists of academic programmes (offered by universities, polytechnics, etc.) and non-academic vocational programmes (e.g. technicians). ISCED 6 is the doctorate.

The educational background is measured by highest level of education attained by a student's mother or a student's father (likewise the occupational background). In the last decades the influence of the educational attainment of mothers on successfully graduating from HE came close to those of fathers in most countries. In some countries mother's educational attainment has proven to be even more influential (Koucký et al., 2010).

- As can be seen in Figures 11 and 12, persons whose parents attained up to first stage secondary education as their highest degree are underrepresented in higher education in nearly all countries considered. In a group of five countries, however, the equity indicator based on educational attainment of fathers and mothers is close to 1.0 thus showing an approximately equitable representation: the Netherlands (ratio based on father's educational attainment: 1.04, ratio based on mother's educational attainment: 1.07), Spain (f.: 1.03, m.: 1.01), Finland (f.: 0.96, m.: 0.9), Switzerland (f.: 0.9, m.: 0.95), and Ireland (m.: 0.81, f.: 1.04). For Scotland only the ratio based on mother's educational attainment is available, again indicating only minor underrepresentation (0.94).

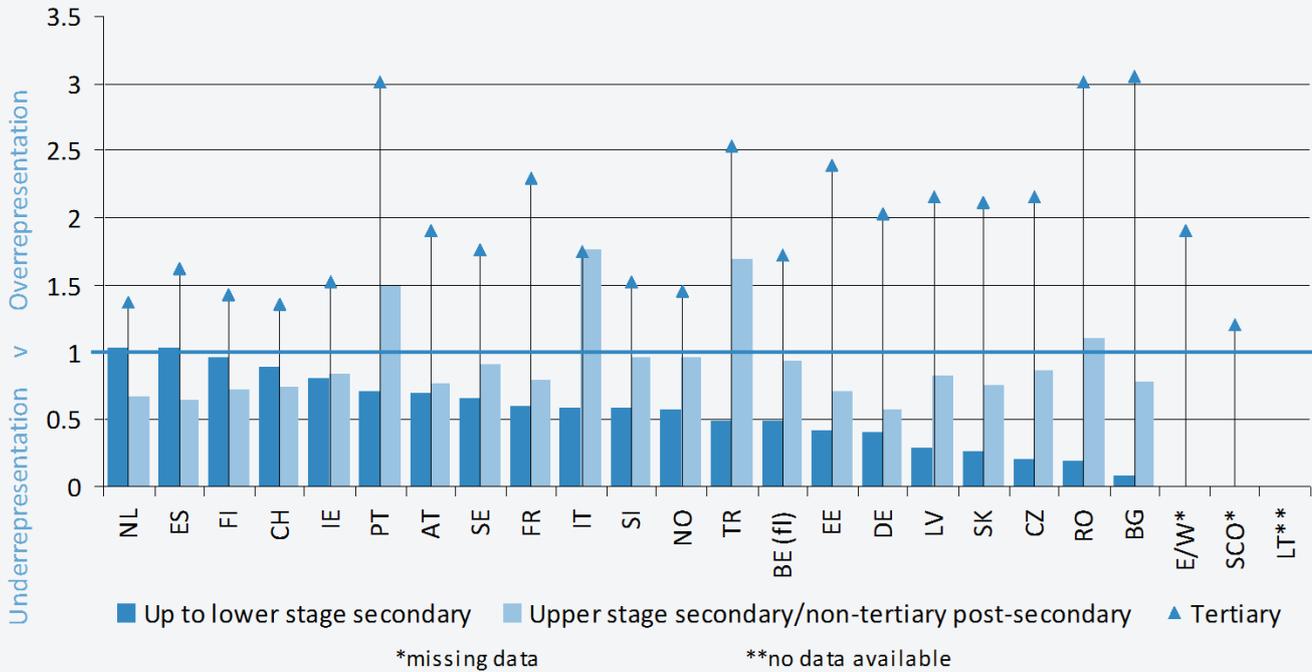


Figure 11: Ratio of highest educational attainment of students' fathers compared to the general population, 2005 (men 40-60 yrs., %)

Source: Eurostudent III, own calculations

- Towards the right hand side of the graph underrepresentation of persons with a low educational background gets increasingly severe. Underrepresentation of this group is specifically clear in Bulgaria (f.: 0.09, m.: 0.06), Romania (f.: 0.2, m.: 0.21), Czech Republic (f.: 0.21, m.: 0.24), and Slovakia (f.: 0.27, m.: 0.14). Also Germany (f.: 0.4, m.: 0.44) and Estonia (f.: 0.42, m.: 0.37) report quite high levels of inequity for both measures.
- Persons whose parents attained upper stage secondary education or other forms of non-tertiary post-secondary education (ISCED 3 or 4) are underrepresented in higher education of many countries as well. Their representation is lowest in Germany (0.58). However, there are three countries where these students are significantly overrepresented within the student body; these are Italy (1.76), Turkey (1.7) and Portugal (1.5). Interestingly, in some countries participation rate of students whose fathers attained ISCED 3 or 4 is slightly outperformed by the participation of students with the lowest educational background, namely in the Netherlands, Spain, Finland and Switzerland. This could be due to the existence of support programmes which only the least advantaged are entitled to.
- Persons whose fathers did attain tertiary education are overrepresented in all European higher education systems for which data are available. In figures, their overrepresentation ranges from 1.21 in Scotland to 3.05 in Bulgaria.

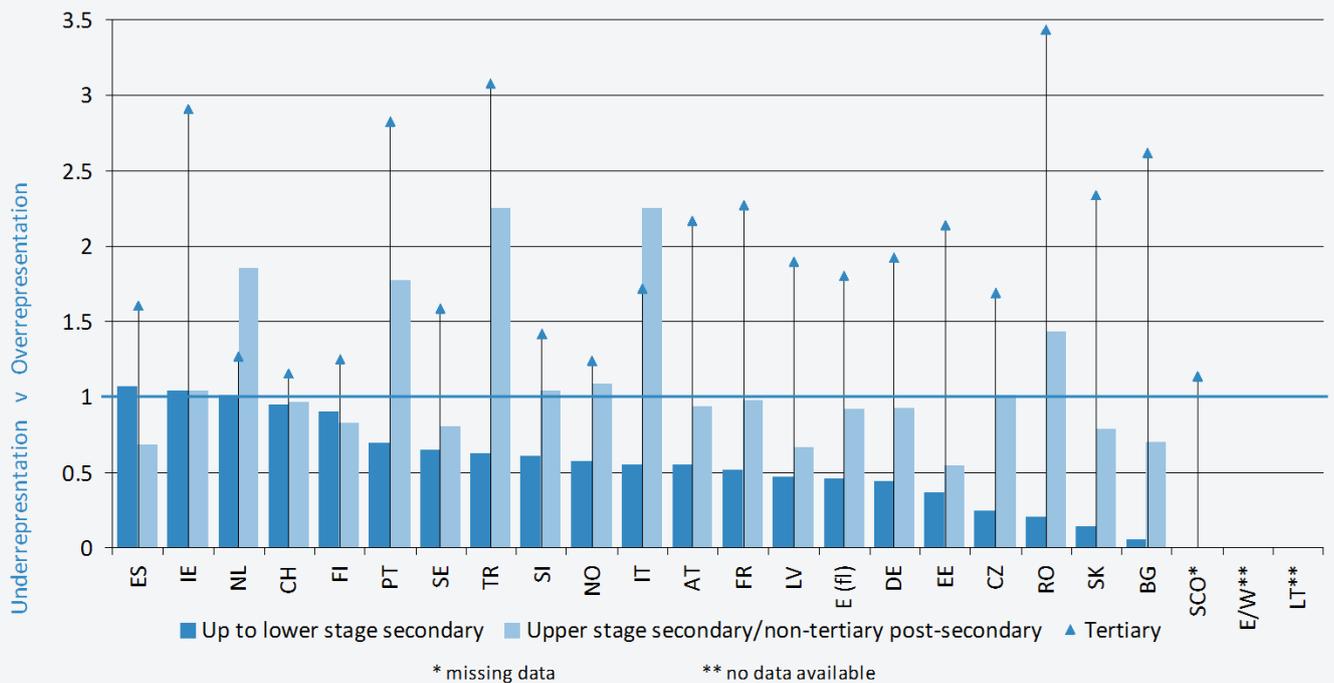


Figure 12: Ratio of highest educational attainment of students' mothers compared to the general population, 2005 (women 40-60 yrs., %)

Source: Eurostudent III, own calculations

- Mostly, the degree of underrepresentation of persons with low educational background reflects the degree of overrepresentation of persons with high educational background. The five countries with the highest ratios for persons with low educational background (NL, ES, FI, CH, and IE) also show relatively low ratios for persons with high educational background.

Box 8: In-reach strategy: establishing quotas for the disadvantaged: the HEAR “Higher Education access route” programme in Ireland

The HEAR program in Ireland is a nation-wide program implemented at the level of individual Higher Education Institutions and is meant for school leavers coming from disadvantaged socioeconomic background who are willing to attend Higher Education and fulfil all academic requirements (matriculation and subject requirement) to enrol.

The rationale of the program is the creation of a quota of places reserved for students from a lower socioeconomic background, so as to let them compete more equally with the peers from a similar condition, while enjoying a series of support services.

Each participating Institution has allocated a quota of places at lower leaving certificate points for students entering through the Higher Education Access Route. Once they have provided evidence as to their socioeconomic circumstances, applicants compete on the basis of their school-leaving certificate results for a HEAR place. When entering through this channel, HEAR students are also provided a variety of services and post-entry support, determined at the specific institution level, including a mandatory orientation program to introduce students to university/college, extra-tuition, study skills exam preparation, individual mentoring, advisor, social gathering, bursaries, advice concerning grants and a scholarship.

So as to select students for the HEAR, the programme refers to the definition of educational disadvantage used by the Higher Education Authority (HEA), for which “the source of educational disadvantage is rooted in differential economic, social and cultural capital of families”.

As a consequence, a combination of financial and socio-cultural indicators are employed to select candidates, including the pupil’s socioeconomic group, the school he/she attended and the area he/she comes from.

More information:

HEAR official website: <http://www.accesscollege.ie/hear/index.php>

- Obviously, the educational systems of some countries are able to reduce the disadvantages of persons with a low educational background. Other systems carry forward these disadvantages into the next generation. Generally, unequal access conditions prevail in most countries.

5.2.3 Relation between occupational and educational background

How are the two socioeconomic dimension, occupational and educational background, related? Are inequities due to occupational or educational background equivalent or do they measure something different? Which countries perform well or badly on both dimensions of socioeconomic inequity?

Figures 13 and 14 show the dispersion of countries on both dimensions of inequity as operationalised by the ratios presented above (only those countries with data on both dimensions). Figure 13 covers the ratios based on the status of students' fathers; figure 14 shows inequity levels based on the status of students' mothers. Occupational and educational background measure different concepts and respective ratios diverge to some extent. But all in all, inequity regarding educational background goes together with inequity regarding occupational background. In most countries, a high share of students who inherit a low occupational background is matched by a high share of students who inherit a low educational background. This is also indicated by the positive correlation between both indicators. The correlation of the Inequity indicators as calculated from fathers' status is 0.41. This correlation is statistically significant at the modest 10-percent level, i.e. not random in the statistical sense. Spain is a clear outlier in Figure 13. Omitting Spain from the analysis results in a remarkably high correlation coefficient of 0.64 (not shown). This coefficient is statistically significant at 1-percent level. The correlation of the Inequity indicators as calculated from mothers' status is also positive (0.49) and statistically significant at 10-percent level. The positive relation of both indicators is also expressed by the regression lines in figure 13 and 14 which approximate the dispersion of countries in a linear way.

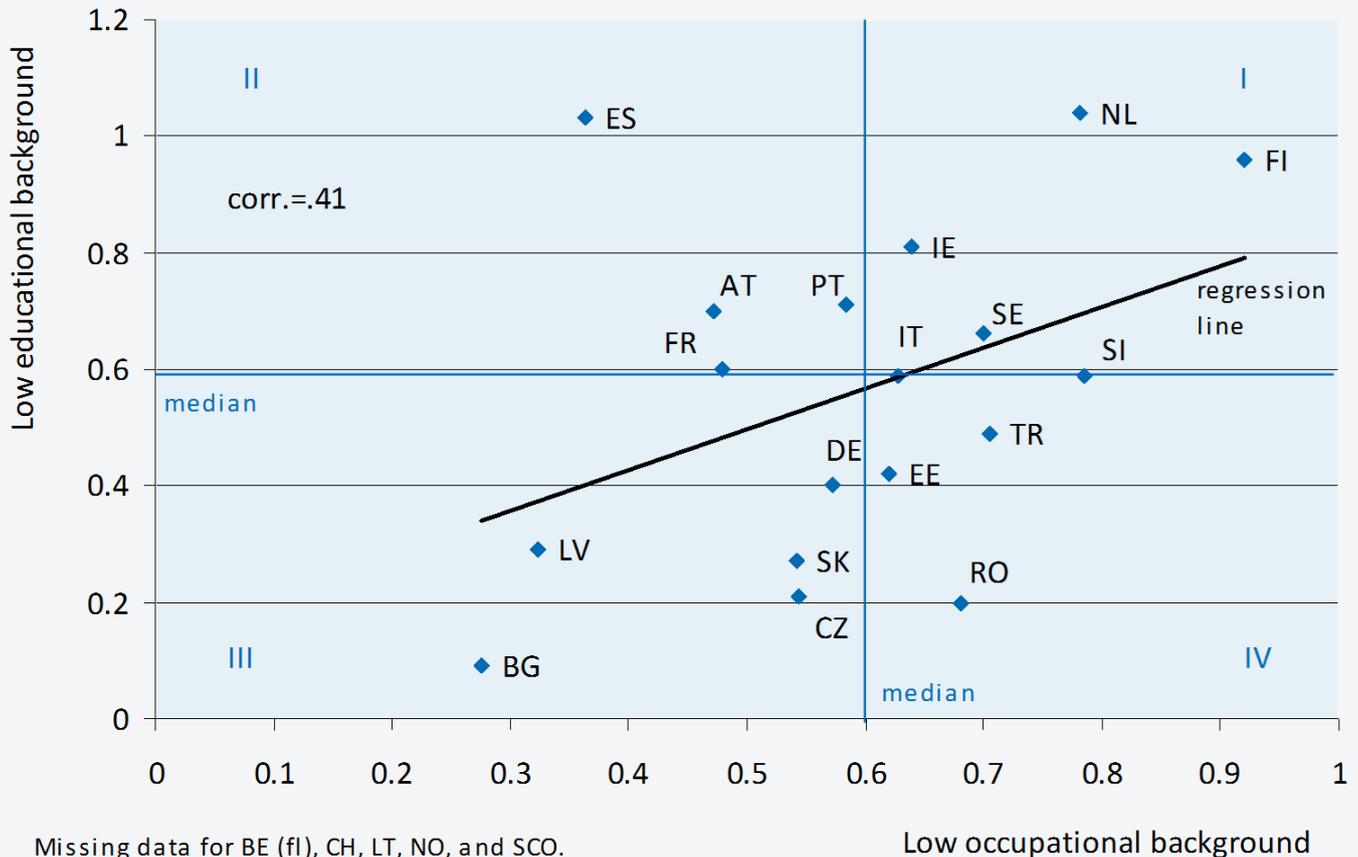


Figure 13: Representation of students with low occupational and educational status of the father, 2005

Source: Eurostudent III, own calculations

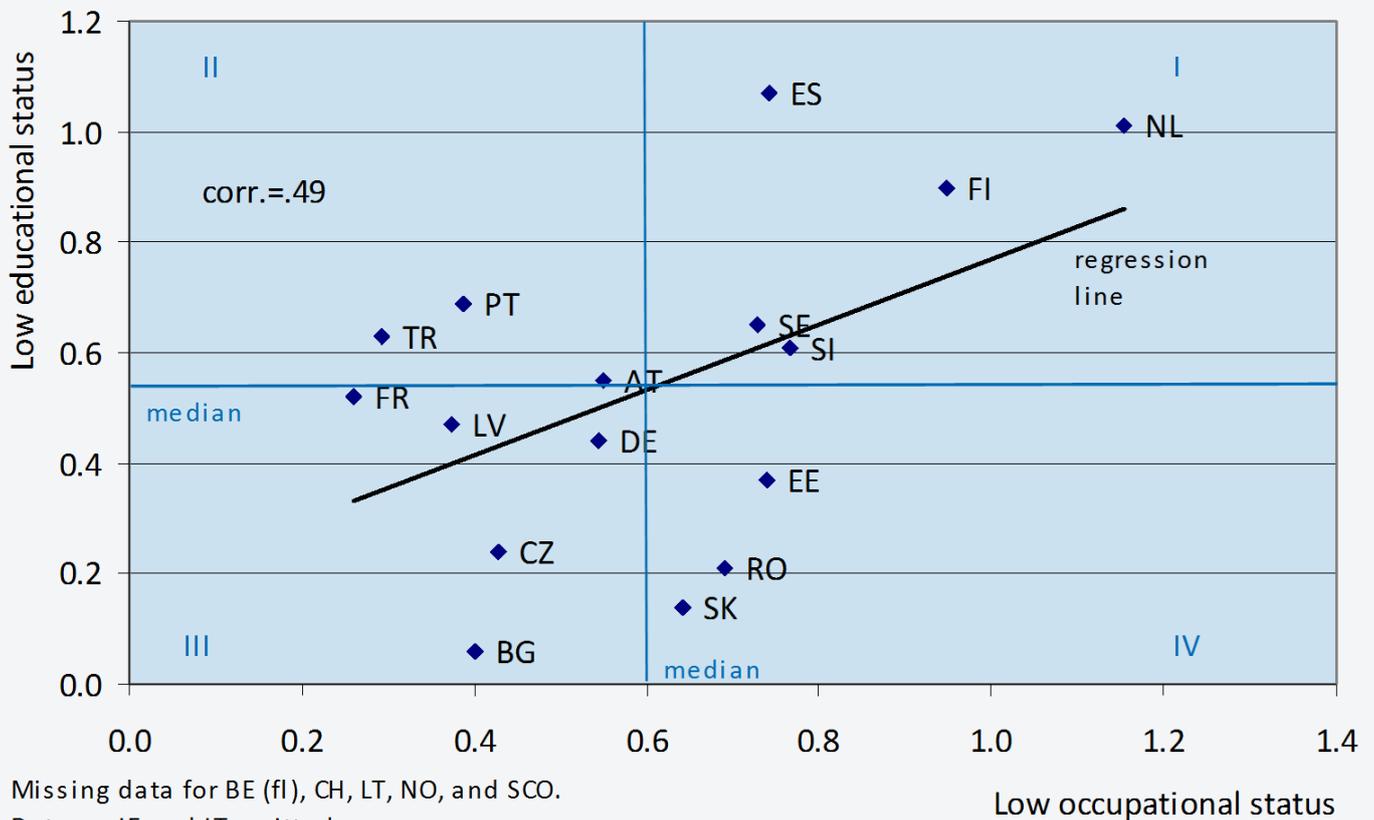


Figure 14: Representation of students with low occupational and educational status of the mother, 2005

Source: Eurostudent III, own calculations

Some remarks on Spain (Figure 13): It shows very low inequity on the educational dimension and one of the highest levels of inequity on the occupational dimension. This should not be overly interpreted but it could hint to specifically high financial barriers and low barriers due to educational background. In fact, Spain reports relatively high income disparities among students and a very high proportion of working students (see chap. 7 on income and expenditure). Moreover, Spain has relatively high shares of students accessing higher education via alternative routes which alleviates educational barriers (see chap. 4 on participation and routes). This is, however, not a safe conclusion. Outliers can also be produced by data problems. A confident interpretation presupposes that this finding is confirmed by other sources or later EQUINET reports.

In Figure 14 results for Ireland and Italy are not shown. Equity indicators based on the occupational status of the mother were extreme and hinted to a data problem (see above).

Generally, for countries below the regression line in Figure 13 and 14 respectively barriers due to the educational background seem to be more important whereas for countries above the regression line the occupational background is more influential.

5.2.3.1 Interpretation

Countries in the first quadrant of Figure 13 and 14 have a relatively high degree of equitable access with regard to both, educational and occupational background: In Figure 13 (fathers' status) these countries are Finland, the Netherlands as well as – to a lesser extent - Sweden and Ireland. In Figure 14 the group is made up of Finland, the Netherlands, and Sweden again. Also Spain and Slovenia are in quadrant I. The groups largely overlap. By use of both figures we identify Finland, the Netherlands, Sweden, and also Ireland as the countries doing relatively well regarding equitable access to HE (Ireland is assigned to this group as it performs above average on three of four indicators and has no reliable data on the fourth indicator).

In contrast, countries in the third quadrant are characterised by high barriers due to both dimensions of the socioeconomic background. In Figure 14 these countries are Bulgaria, Czech Republic, France, Germany, and Latvia. In Figure 13 Bulgaria, Latvia, Czech Republic, Slovakia, and Germany are located in quadrant III. Again, these groups largely overlap and result in a group of four countries showing above average barriers to HE on all indicators consulted: Bulgaria, Latvia, Czech Republic, and Germany.

An obvious difference between both groups is their economic strength. With the remarkable exception of Germany, all countries of the high-barriers-group are Eastern European countries. Expanding the higher education system and specifically reducing economic barriers is harder for this group than for more affluent countries. In fact, in all of these countries investments in tertiary education are approximate EU-27-average (CZ, DE) or are below average (BG, LV) as measured in total public expenditure in per cent of the GDP (Eurydice 2009: 124; OECD 2010: 243). In contrast, with the exception of Ireland (average) the countries with low barriers show investments clearly above average (NL, FI, and SE).

Of course, inequity is not simply a question of investments. The degree of inequity is influenced by the structure of the educational system. Two countries in the low-barriers-group, namely Sweden and the Netherlands, have relatively high shares of students accessing the higher education system via non-traditional routes (see chapter 4). This indicates relatively permeable borders between educational branches. In contrast, Germany reports low shares of non-traditional students. Results of Eurostudent (2008: 42) support this interpretation and report high shares of students having taken alternative routes to HE for Ireland, Sweden, and Finland (no data on the Netherlands) whereas all countries of the high-barriers-group (BG, CZ, DE, LV) had near to zero shares of entrants via non-traditional routes in the year the data were collected (2005).

Inequity in higher education is also influenced by the structure of the school system. Socioeconomic barriers tend to increase with the number of 'track switches', the number of hierarchically ordered tracks, and early differentiation of tracks. In Germany pupils are differentiated quite early (depending on the federal state, mostly at the age of 12). Moreover, high school graduates with a lower socioeconomic background are more easily diverted away from academic higher education if vocational training is an attractive alternative. Lörz (2007) showed that even well-performing children with blue-collar background in Germany enter academic tertiary education less frequently than their peers of higher social strata.

5.3 Socioeconomic background and qualitative inequality

An important critique of many studies of social selectivity is that they ignore qualitative inequalities. Many scholars have argued, that concurrent with educational expansion, qualitative differentiation would complement or even replace inequalities in the sheer level of educational attainment (Gamoran & Mare, 1989) (Shavit, 1984). Persons stemming from the higher social strata might not only target more prestigious institutions of Higher Education but might increasingly enter the most rewarding fields of study as well. Thus, academic disciplines or fields of study can be considered to be an additional, horizontal axis of stratification. Another qualitative dimension is a study-related period abroad, which is less easy to afford for the less affluent students.

Definitions & measurement

For the analysis of inequalities in fields of study, data of the REFLEX project has been examined. The Reflex project focused on (1) the issues of competencies required by Higher Education graduates, (2) the role played by Higher Education institutions in helping graduates to develop these competencies, and (3) tensions that arise as graduates, Higher Education institutions, employers and other key players each strive to meet their own objectives (for more details see www.fdewb.unimaas.nl/roa/reflex/index.htm).

Since data on qualitative aspects of Higher Education are scarce, data from this project are referred to in this section although they have been collected already between 1999 and 2000. The numbers of cases by country vary between 645 in Portugal and 6,794 in Czech Republic.

5.3.1 Fields of study

In Figure 15 and Table 2 a high educational background was ascribed to graduates, if either their fathers or mothers had attained tertiary education (ISCED 5 and 6). From all fields of study distinguished within the survey those are shown for which at least 500 cases were observed. All percentages given are different from the corresponding sample mean (“Total”) on a 95% confidence interval with the only exception of “architecture and building”.

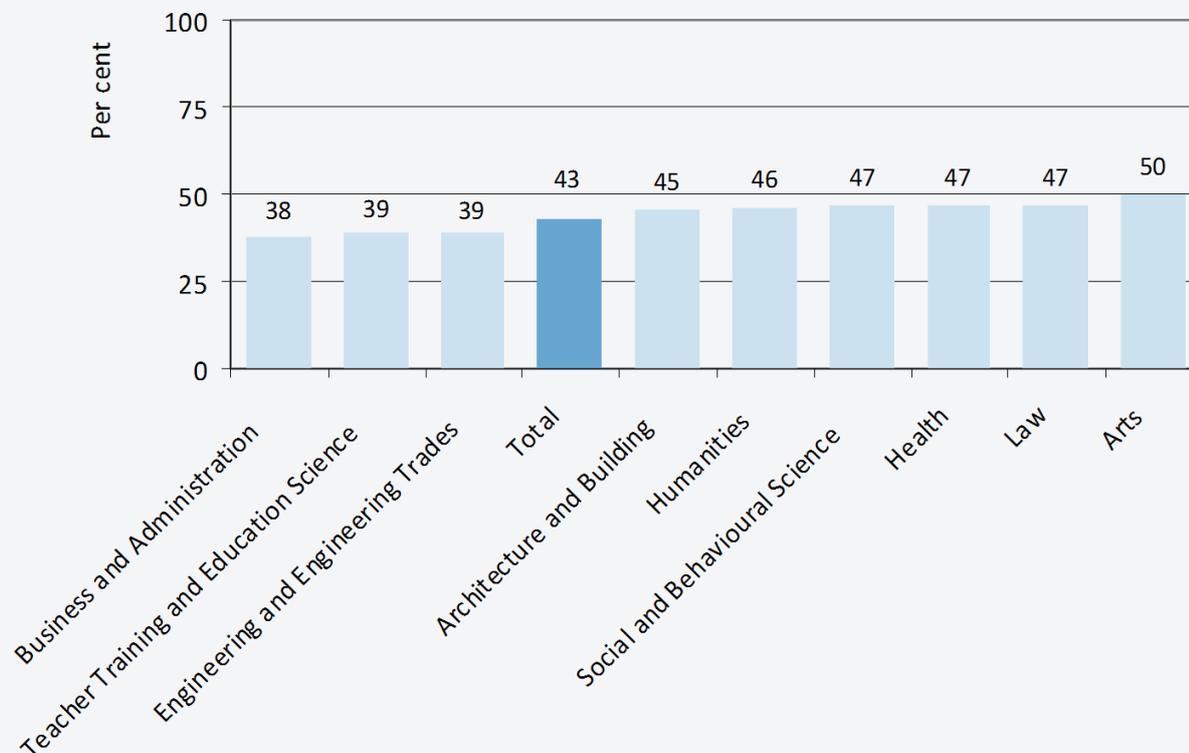


Figure 15: Graduates from Higher Education institutions (1999/2000) with a high educational background by field of subject

Source: Reflex 2000, own calculations, N= 26,616 (total), weighted averages

- The overall share of graduates from selected European countries and Japan who have at least one parent that attained Higher Education is 43% (Figure 12). Comparison across fields of study reveals that shares of these graduates differ by subject. Overall, shares of graduates from a privileged educational background are highest in the arts (50%). Beyond arts, shares of graduates with a high educational background are above average in law, health, social and behavioural sciences (all three 47%), humanities (46%), an architecture and building (45%).
- Shares of graduates with a privileged educational background are below average in those subjects that offer a safe path to social upward mobility. At the overall level, these fields of study are business and administration (38%), teacher training and education science, and engineering and engineering trades (both 39%).
- In table 2 additional to the sample average national percentages are indicated, if the national means are different from the sample average in this category or field of subject respectively. E.g. in Germany the overall share of graduates with a high educational background is particularly high (Total: 67.4%). In accordance with the pattern of socially stratified subjects identified above, shares of privileged graduates are above the sample average within the fields of health and law too (87% and 75.1% respectively).
- Some countries show other patterns than the one described in Figure 15. For instance, in France shares of graduates with a privileged educational background are particularly high in two of the subjects which were

identified to be generally more open to students with a less privileged background: business and administration and engineering trades.

	Average	AT	BE	CR	DE	EE	FI	FR	IT	JP	NL	NO	PT
Business and Administration	38.0	23.8	48.7	36.1	66.3	68.5	27.5	60.3	18.7	35.1	45.7	40.4	22.4
Teacher Training and Education Science	39.0	20.0	85.2	35.7	62.2	64.4	24.9	43.7	9.9	47.9	44.5	44.5	19.5
Engineering and Engineering Trades	39.1	23.8	57.4	31.8	66.3	68.5	27.5	60.3	18.7	44.5	45.7	57.0	22.4
Total	42.8	31.1	66.3	38.6	67.4	70.1	29.9	53.9	23.0	44.4	48.2	51.0	22.9
Architecture and Building	45.3	38.9	68.7	43.9	62.9	63.8	43.1	48.6	18.4	49.1	51.0	49.3	20.7
Humanities	46.4	32.9	70.6	42.1	68.4	67.5	32.7	59.5	23.9	47.1	51.1	69.1	11.1
Social and Behavioural Science	46.6	31.2	64.1	53.0	67.5	73.9	34.4	41.5	18.4	38.0	59.9	62.0	36.5
Health	46.7	47.7	73.6	52.4	87.0	83.0	23.0	51.9	25.0	72.3	52.4	46.8	17.6
Law	46.9	33.6	64.7	35.5	75.1	75.4	43.8	52.4	33.2	49.2	59.2	75.2	42.9
Arts	49.7	47.8	74.1	47.1	66.9	78.3	38.9	42.0	19.9	38.1	52.1	77.6	26.7

Table 2: Graduates from Higher Education institutions (1999/2000) with a high educational background by field of subject and country

Source: Reflex 2000, own calculations, N= 26,616 (total), weighted averages; means are marked fat, if they are different from “average” on a 95% confidence interval.

In general, these results are in accordance with other studies at the national level that revealed choice of field of study to be socially stratified (Davies & Guppy, 1997) (Hansen, 1996) (van de Werfhorst et al., 2003) (Reimer & Pollak, 2010)

5.3.2 Studying abroad

- In most European countries, students whose parents attained tertiary education have more frequently been abroad for study-related reasons than have their less privileged peers (figure 16).
- Only in Austria (ratio of students whose parents attained first stage secondary to students whose parents attained tertiary education: 1.08) and Switzerland (0.91) do students from a low educational background benefit approximately as frequently from educational opportunities to study abroad as do their privileged peers. In the remaining countries, the ratio of students from a low and high educational background respectively varies between 0.66 (IE) and 0.08 (CZ).

Definitions & measurement

Another form of qualitative differentiation between the social strata includes the decision and opportunity to study abroad. The Eurostudent (2005) data provides a comparison of foreign study-related experiences by social background (highest educational attainments of students' parents). The related Eurostudent-question is question 5.3: “Have you been abroad for study reasons or been enrolled abroad as a student of Higher Education in the past?”

- While inequality tends to be especially pronounced in countries where overall foreign enrolment is low, a country's performance as measured by the ratio between the two groups also seems to differ by economic development and its geographical position in the Western, Northern, Southern or Eastern part of Europe respectively.

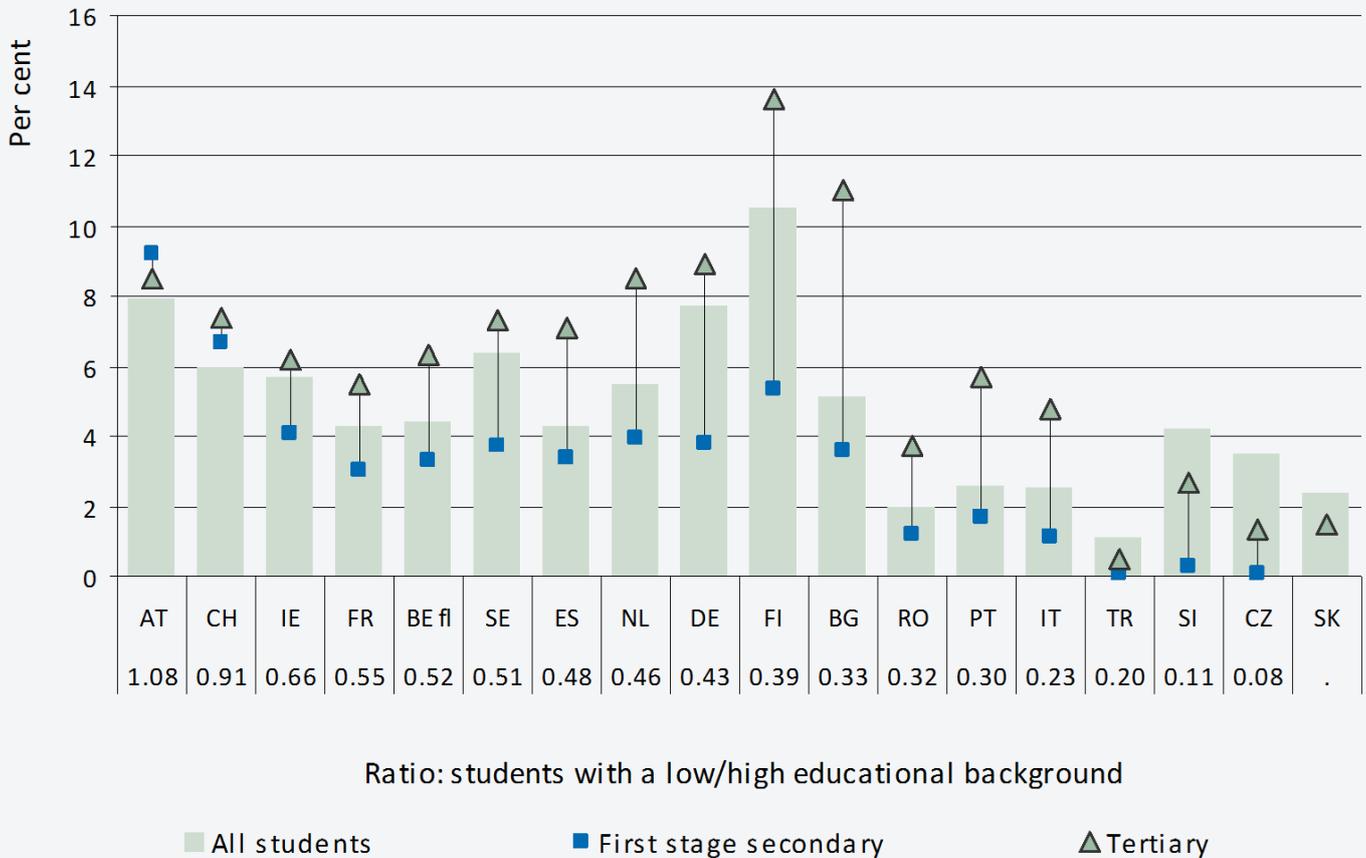


Figure 16: Percentages and ratios of foreign enrolment by parents' education

Source: Eurostudent 2008

On the one hand, differences between students with a high and low educational background might be a result of inequalities in their family's financial capabilities to afford a study-related stay abroad. On the other hand, students with a high educational background might more often command excellent foreign language skills, due to primary effects (see chapter 2). At the same time students with such skills might be more open to the benefits of a period abroad and therefore more motivated to take up the opportunity. The Eurostudent study has shown that such motivational aspects play a significant role in student mobility.

5.4 Social background and expansion of Higher Education

For scholars of social stratification, one of the key questions regarding educational expansion is whether it diminishes or magnifies existing inequalities in educational attainment. The effect of expansion on educational inequality in tertiary education is of particular importance, as Higher Education has become increasingly relevant for labour market prospects and life course opportunities. While educational expansion is associated with many advantages, including enhancement of people's well-being and of societies' macroeconomic development, expansion does not necessarily reduce class inequalities in education. One argument is that inequality between any two social strata in terms of the odds of attaining a given level of education persists until the advantaged class reaches the point of saturation (Raferty & Hout, 1993). Until that point, the advantaged group is typically better equipped to take advantage of any new educational opportunities. Only when the privileged class reaches saturation at a given level of education, would further expansion of that level contribute to the reduction of inequality in the odds of its attendance.

Definitions & measurement

To approach the intergenerational transmission of disadvantages in education, undertaken again shares of persons whose parents have completed up to first stage secondary education (ISCED 0-2 and 3c short) or upper secondary and post-secondary non-tertiary education (ISCED 3-4, excluding 3c short) or tertiary education (ISCED 5-6) and who themselves have completed Higher Education (ISCED 5-6) are calculated. Widening access to Higher Education implies that young generations have more chances of successfully completing Higher Education than their elders. The following indicator presents the intergenerational transmission of disadvantages for four age groups (25-34, 35-44, 45-54, 55-64); results by age group provide information on how chances of success in Higher Education have changed over time for a specific virtual cohort. Cross-country comparisons should be considered with caution due to sample sizes and structural differences in Higher Education systems. In fact, in countries where Higher Education lasts longer than in others, the indicator is less accurate for the youngest age group (25-34-year-olds) (Eurostat, 2009).

This hypothesis, known as “Maximally Maintained Inequality” (MMI), is consistent with results that were reported by Shavit and Blossfeld (1993) who found that in most countries they surveyed, educational expansion did not reduce educational inequality.

In an attempt to assess the relationship between expansion and the degree of social bias in Higher Education systems, this section breaks down rates of completion of tertiary education by generation.

- At EU-25 level, for someone whose parents only had first stage secondary education or less, the chances of graduating from Higher Education have increased over time (figure 14). Only 13% of all persons aged between 55 and 64 years whose parents achieved at most first stage secondary education graduated from Higher Education, but this share stood at 23% among those aged between 25 and 34.

- The European pattern is slightly different for those whose parents have achieved upper stage secondary or tertiary education as highest educational level. Regarding the former, about 30% of children whose parents attained upper secondary education as highest educational level achieved tertiary education across the generations. Though completion rates of the latter vary significantly across generations, those aged between 25

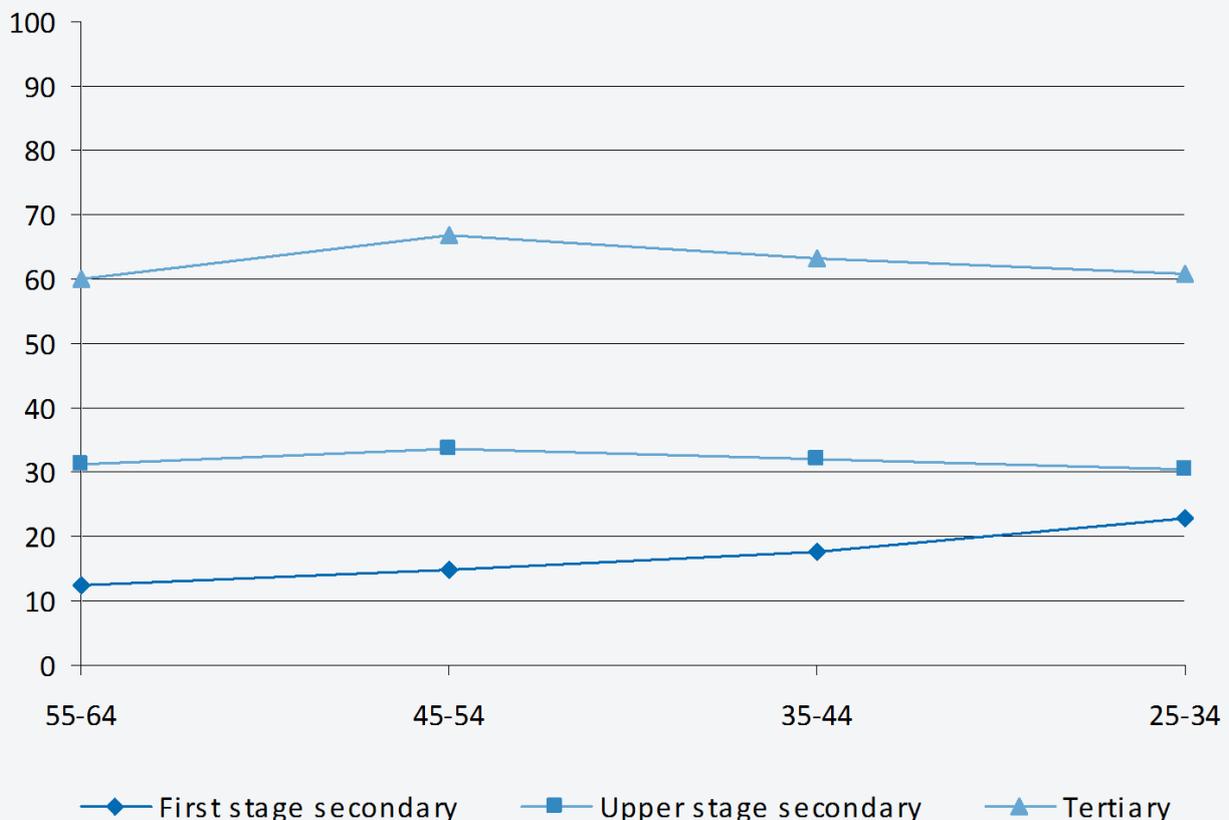


Figure 17: Percentage of individuals (EU-25) having completed tertiary education (ISCED 5-6), according to the educational background of their parents – 2005

Source: Eurostat, EU-SILC

and 34 years who completed tertiary education are proportionally as equally numerous as those aged between 55 and 64 years. For the youngest generation, completion rates of those whose parents achieved tertiary education themselves settled at a high level of 61%.

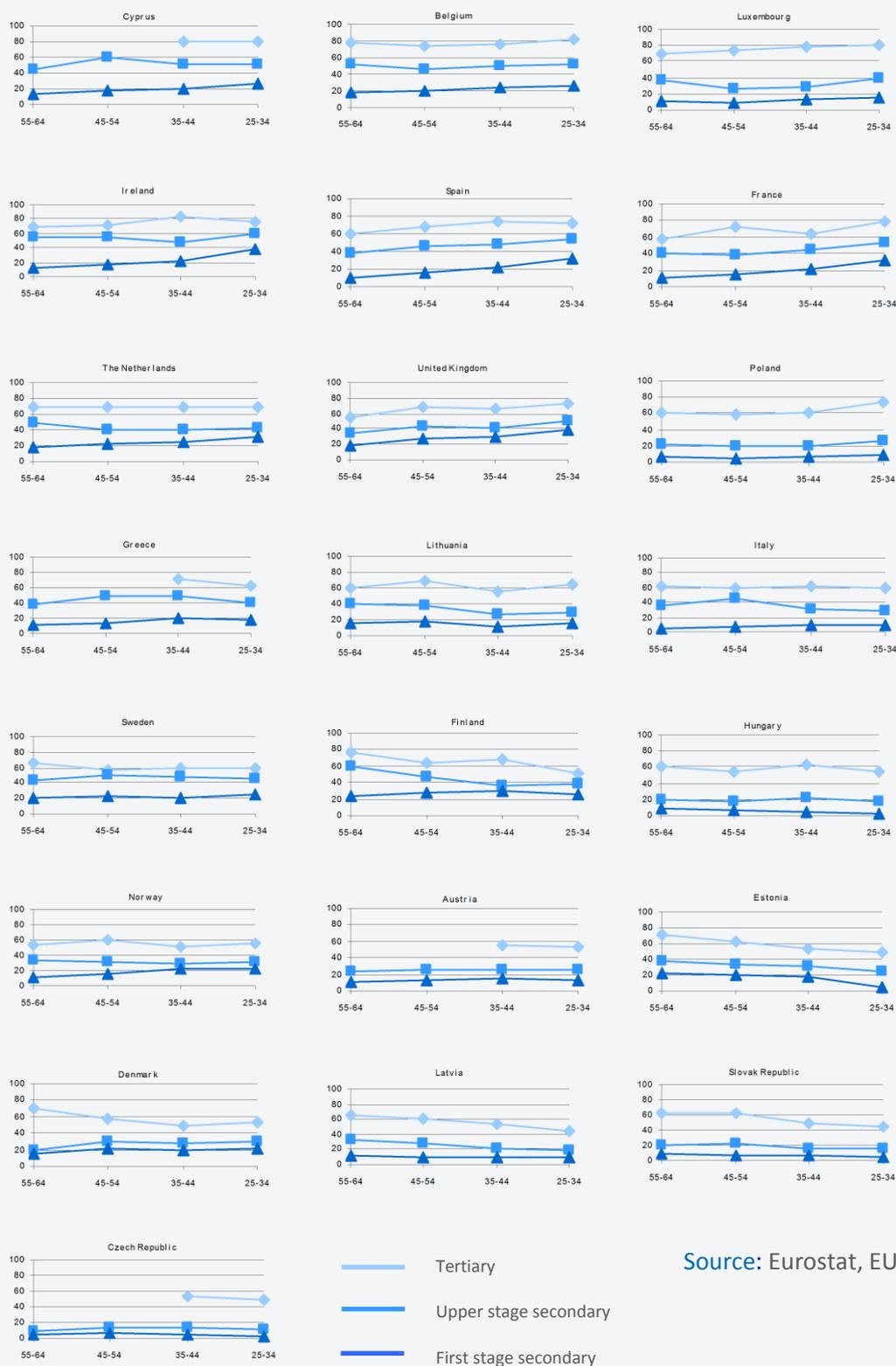
- At the national level, underprivileged young people have benefited from the development of higher education in many European countries (Figure 18). Thus, proportions of those whose parents achieved first stage secondary or upper stage secondary education as highest educational level and who themselves graduated from tertiary education are higher among 25-34-years-olds than among those aged between 55-64 in these countries. For example, corresponding shares increased by more than 10 percentage points in Spain, United Kingdom and France. Other countries where participation rates – although to a lesser extent – increased in these groups are Cyprus, Luxemburg, Ireland, Poland, Greece, Sweden, Austria and Denmark.

These results are in accordance with recent studies in single countries that have found declining inequality in education. These countries include Germany (Müller & Haun, 1994) (Henz & Maas, 1995) (Mayer et al., 2007), Italy (Shavit et al., 1998), Sweden (Erikson & Jonsson, 1996) (Erikson & Jonsson, 1993), the Netherlands (Sieben et al., 2001) and Norway (Lindbekk, 1998).

- In contrast, the completion rates in five Eastern European countries decreased in the groups of graduates with a low educational background. Those countries are Estonia, Hungary, Latvia, Lithuania and the Slovak Republic.

Figure 18

Percentage of individuals (aged 55-64, 45-54, 35-44, 25-34) having completed higher education, according to the educational background of their parents, 2005¹⁷



¹⁷ Figures are ordered by average completion rates of graduates whose parents had attained tertiary education.

Box 9: Outreach strategies to attract pupils from lower socioeconomic backgrounds into Higher Education. The Aim Higher initiative in the UK and the WHAP programme in Scotland

Outreach strategies for widening participation in HE include initiatives which target individuals who believe Higher Education “is not for them” by countering dispositional barriers. As research shows, this target is highly represented by pupils from low socioeconomic backgrounds, as this is demonstrably one of the most important factors affecting participation, affecting both the capacity to pay as well as aspirations, expectations and motivation to initiate a HE path. In this sense, early intervention through outreach strategies is perceived as both more successful and inclusive as well as cost-effective for society as a whole.

In the UK, *Aim Higher* is a nation-wide initiative which is run specifically to widen participation in Higher Education by raising the aspirations and developing the abilities of young people from under-represented communities, namely people from lower socioeconomic groups and disadvantaged backgrounds.

Specifically, *Aim Higher* promotes regional and sub-regional partnerships between Higher Education Institutions, schools, colleges and employers to promote interest and support progression into HE, by raising aspiration as well as academic achievement of pupils through a heterogeneous set of activities. These include summer schools so as to give school pupils a taste of university life, taster days, master-classes, visits to HE providers and one-to-one mentoring programmes with undergraduate students coming from the same background acting as mentors and guides in the university tours (the so called “road shows”). In particular, activities include:

- aspiration raising activities (i.e. university residential visits, taster days, student talks),
- attainment raising activities (master classes, mentoring schemes and study groups to improve attainment),
- information, advice, guidance (including working with employers and students on the vocational route to encourage progression).

The programme is supported by a Higher Education Progression Framework, which is a model for delivery of sequential and progressive activity by *Aim Higher* partnerships in schools and colleges based on a learner centred approach. The framework aims at facilitating effective cross-sector collaboration by placing the emphasis on and indicating the steps of an individual learner progression towards full preparation for HE, in line with both the aims of widening participation and school and college priorities. It remains up to the individual partnerships to decide what the key components of a progression model are, though a set of learning outcomes have been identified to be adapted locally and related activities to be sequenced in order to produce desired results.

A similar outreach initiative in Scotland aims at raising the participation of students from disadvantaged backgrounds in subjects such as medicine, veterinary medicine or nursing where they are dramatically underrepresented. The WHAP initiative (Working in Health Access Program) is based on the acknowledgement that a social class bias turns into far lower application from certain classes in these fields, due to factors such as finance, academic achievement or lack of aspiration. WHAP therefore targets pupils in selected schools and is based on both the administration of psychometric assessment tools as well as the organisation of awareness-raising activities to let pupils get in contact with either health care or university settings. WHAP was developed thanks to the involvement of 5 Scottish medical school which developed firm links between local health care professionals and pupils, parents and teachers, as well as those involved in other widening access activities.

For more information:

AimHigher Official website: <http://www.aimhigher.ac.uk/>

Making a difference: The impact of Aimhigher, case studies, at <http://www.actiononaccess.org/resources/files/aimhigher-AceTaster.pdf>

Chapter 6

Income &

expenditure

Authors

Andreas Bohonnek

Contributors

Daniela Proli



6.1 Introduction

Summary of findings

- There are three sources of students' income: family, state and work.
- The cost sharing ratios differ considerably between country specific funding systems and social-economic status of students.
- In the Bologna Area, Higher Education institutions receive one fifth of their total resources from private funding.
- Students' income varies significantly by accommodation form. Family provision of accommodation is an indirect form of financial support.
- The parental contribution to students' income plays a key role for students with high SES (socioeconomic status); they receive significant more cash support from parents than students with low SES.
- For younger students (21-year-olds) direct family support is dominant in all but four countries where state support dominates.
- The percentage of first year students receiving state assistance (grants, scholarships, loans) varies widely by country, from 7% in Lithuania to 94% in Turkey.
- Working during studies is a significant income source. Its contribution to total income is over 20% in all countries, except Turkey.
- Student employment is frequent in all countries and the rate is affected by age and social background. More than 50% of students in 11 of 22 countries work alongside their studies. The employment rate of 21 years old students during term is about 43%.
- The financial significance of students' employment differs widely between countries. In the Czech Republic, Spain, and Slovakia more than three quarters of total income is derived from students' work.
- The share of paid work to students' income varies between 34% in the group living with parents and 18% who are living in own households.
- Accommodation is the most important cost for students maintaining own households. The range runs from more than 46% in Sweden down to 11% in Bulgaria, average at one third of total expenditure.
- For German students with own home and high SES indirect support (child allowances, benefits paid to parents, tax exemptions...) is more than half of public support.
- The contribution to institutions of Higher Education as a proportion of total expenditures ranges from 22% in Turkey to 0% in Sweden, Scotland, Finland and Germany.

The following chapter concentrates on the “financial questions and barriers” of Higher Education.

The costs of tertiary education are typically shared between four groups (Santiago et al., 2008):

1. The state (taxpayers) subsidises tertiary education by tax revenues.

2. Parents and family may bear some costs of tertiary education through the payment of tuition fees or by covering some of the students living costs (e.g. by keeping the student at home).

3. Students may bear part of the tuition and living costs through employment earnings, past savings, non-repayable public financial assistance or borrowing.

4. Individual donors may contribute to institutional budgets or financially assist some students through grants.

The costs of tertiary education are typically shared between the public and the private side, between state and the students and their families.

These cost sharing ratios differ considerably between European countries. The “macro-view” of private – public funding of tertiary education and students typically shows country specific models of students' income and expenditure structures (Schwarzenberger, 2008; Eurostudent, 2008; OECD, 2008). In countries

where students are seen as “dependent children” family contributions play a much more important role than in countries that take students as “independent adults”. This perspective identifies typologies of European funding systems and concerns the role of tuition fees, grants and loans. OECD data shows that in recent years, there has been a shift of tertiary education costs from state to students and their families (Santiago et al., 2008).

The “micro-view” demonstrates the differences in income composition within the countries by students’ socio-economic status (SES). Research of Schwarzenberger (2008) and Eurostudent (2008) shows that the composition of income varies considerably by SES: In all countries the tendency can be observed that students with a higher SES receive more family support. For students from a lower SES, work plays a more important role. As a consequence, they have less time for studying than their peers from higher SES. This would seem to require more public support to students from lower SES (Santiago et al., 2008).

Children from parents with higher SES profit from their cultural resources, having an advantage compared to children from lower educated parents: “The lower the social status, the poorer the cultural background – hence the lower the school achievement, and so on. These are what we have called the primary effects of stratification” (Boudon, 1974). Secondary effects act beyond the school performance of the child: the individual decision process is based on costs and benefits of tertiary education. The perceived costs and benefits of education vary by SES.

Wealthy parents cover the direct and indirect costs of education more easily; for low-income families it may be a serious financial barrier (Erikson & Jonsson, 1996; Blossfeld & Shavit, 1993; Becker, 2000; Tieben, 2009).

Three types of financial constraints must be satisfied if a student attends tertiary education, involving the assessment of whether (Santiago et al., 2008):

1. The benefits of tertiary education outweigh the total cost of tertiary education (“price constraint”).
2. The individual can obtain sufficient funds to cover the immediate cost of obtaining tertiary education (“liquidity constraint”).
3. The individual is reluctant to incur debt in order to obtain an education. This constraint holds in those cases the liquidity constraint can only be met through loans (“debt aversion constraint”).

Recent research into German students’ motivation shows that the financial situation is a main reason not to start university education (Heince & Quast, 2009): 24% of the German graduates with higher school certificate, qualified to enter university, don’t start tertiary education. The survey findings show that financial barriers are one of the most crucial reasons not to start university education: For 77% of those who’ve not enrolled “financial conditions” are an important reason not to start tertiary education, followed by 73% who are afraid “to run into debts by loans” and 69% who “cannot afford the tuition fees”. We can assume that these findings are not only restricted to Germany. Financial barriers are more important than other study related reasons: in the same survey, only 45% claim that “missing necessary academic skills” are an important reason not to start university education, for 44% the “unsure job opportunities after university” keep off from tertiary education.

For 20% of German students who leave university without graduation “financial problems” are the primary factor for study termination, for 50% “financial problems” are one of more reasons to leave university (Heublein & Hutzch, 2009). These empirical findings for Germany show the importance of the “financial question”.

Parents’ income background as a main factor for students’ access to university plays a key role in countries like Germany, where parents have to finance tertiary education of their children. This dependence on parents in Germany correlates with the under-representation of students with low occupational family background.

6.2 Funding tertiary education in Europe

The contribution of private households to the costs of tertiary education varies significantly across countries: in Australia, Chile, Korea, Mexico, New Zealand and the United States the proportion of private household expenditure on tertiary education institutions exceeds 30%.

In Austria, Denmark, Greece and Sweden the corresponding level remained below 5%. In countries where private contributions to tertiary education are low, tertiary education is paid mostly by taxpayers. Between 1995 and 2004 the private share of tertiary funding increased in 11 of 13 observed countries (Santiago et al., 2008) which demonstrate an international tendency of shifting the costs of tertiary education from the public to the private side.

6.2.1 Typologies of funding systems

Analysis done by OECD shows significant differences in cost-sharing scenarios between countries. By grouping around the dimensions level of contribution from students in tertiary-A-education and the received public subsidies four types can be identified (OECD, 2009).¹⁸

1. Countries with no or low tuition fees and generous student support system: Denmark, Finland, Iceland, Norway, Sweden, Czech Republic and Turkey. There are no (or low) financial barriers for tertiary education due to tuition fees and even a high level of student aid. The funding of institutions and students is based on the principle that free access to tertiary education is a right. In Nordic countries entry rates are significantly high, at about 70%, which is significantly higher than the OECD average. In these countries the level of public expenditure on tertiary education as a percentage of GDP and taxation on income are among the highest of OECD partner countries. Finland, Norway and Sweden are among the seven countries with the highest entry rates to tertiary-type-A education. More than 55% of students benefit from scholarships, grants or loans.

The Czech Republic and Turkey have a different pattern: lower access to tertiary-Type A education compared to the OECD average, especially for Turkey, combined with low levels of public spending and of tax revenue on income as a percentage of GDP compared to the OECD average. In these two countries, more than three-quarters of students enrolled in tertiary-type A programmes benefited from grants in the Czech Republic or from a loan in Turkey. The average amount of these public subsidies is small compared to the Nordic countries and compared to the OECD average. This indicates that these two countries are also close to those included in model 4 (OECD, 2009). The Eurydice – report 2009 indicates that also Estonia, Hungary and Greece do not charge tuition fees (Eurydice network, 2009).

2. Countries with a high level of tuition fees (> EUR 1000 per year) and well developed student support systems: Australia, Canada, the Netherlands, New Zealand, the United Kingdom and the United States. These countries potentially have high financial barriers for entry to tertiary-type A education, but also provide large public subsidies to students. In these countries entry rates are about 68%, slightly above the OECD average and higher than for most countries with low levels of tuition fees, except the Nordic countries. More than 68% of tertiary-type A students benefit from public subsidies in Australia, the Netherlands, New Zealand and the United States. Student support systems are well developed and mostly accommodate the needs of the entire student population, with a proportion of public subsidies in total public expenditure on tertiary education higher than the OECD average (19%) in six out of the seven countries: Australia (31%), the Netherlands (30%), New Zealand (42%) the United Kingdom (26%), the United States (31%) and Chile¹⁹ (47%). Countries in this group do not have lower access to tertiary-type A education than countries from the other groups: For example Australia (84%) and New Zealand (72%) have among the highest entry rates to tertiary-type A education also explained by a high proportion of international students enrolled in tertiary-type A education. The Netherlands (58%), the United Kingdom (57%) and the United States (64%) are above OECD average of 55% for 2006. Chile (43%) is below the OECD average, although entry to tertiary-type A education in this country increased by about 10 percentage points between 2000 and 2006. Countries in this group spend

¹⁸ Most statistics cited here from OECD (2009) refer to the year 2006.

¹⁹ At the time of the publication of the referenced OECD report (2009) Chile was not yet a member of the OECD and thus is also not considered for the cited OECD average of 19%.

more per tertiary student on core services than the OECD average and have a relatively high level of tax revenues based on income as a percentage of GDP compared to the OECD average (OECD, 2009).

3. Countries with a high level of tuition fees but less developed student support systems: Japan and Korea present this type: while cost sharing is extensive and broadly uniform across students, student support systems are less developed than in Models 1 and 2 above. This places a considerable financial burden on students and their families. In these two countries, tertiary-type A institutions charge high tuition fees (> EUR 3000 per year) but a relatively small proportion of students benefit from public subsidies: 25% of students receive public subsidies in Japan, and 13% of total public expenditure on tertiary education is allocated to public subsidies in Korea. Tertiary-type A entry rates in these two countries are 45% (Japan) and 59% (Korea), which is below the OECD average in the case of Japan and slightly above the average for Korea. This relatively low access rates to tertiary-type A education are counterbalanced by an above OECD average entry rate to tertiary-B programmes. These two countries are among those with the lowest levels of public expenditure allocated to tertiary education as a percentage of GDP (OECD, 2009).
4. Countries with low tuition fees (< EUR 1000 per year) and less developed student support systems: Austria, Belgium, France, Germany, Ireland, Italy, Portugal and Spain. These countries have relatively low financial barriers for entry to tertiary education combined with relatively low subsidies for students. Subsidies for students (scholarships, grants, loans) are targeted on specific groups. There is a high level of dependence on public resources for the funding of tertiary education and participation levels are typically below the OECD average. The average tertiary-type A entry rate is about 48% and lower than in countries from other groups. Similarly, expenditure per student in tertiary-type A education is also comparatively low. While high tuition fees can raise potential barriers to student participation, this suggests that the absence of tuition fees, which is assumed to ease access to education, is not sufficient to entirely meet the challenges of access and quality of tertiary-type A education. Less than 40% of students benefit from public subsidies. In these countries students and their families can benefit from subsidies provided by sources other than the ministry of education (e. g. housing allowances, tax reductions and/or tax credits for education). For example in France housing allowances represent about 90% of scholarships/grants and about one-third of students benefit from these allowances. In Poland cost sharing is achieved through arrangements in which some students have their studies fully subsidised by the public budget and the remainder pay the full costs of tuition. The burden of private contributions is borne by the part of the student population rather than shared by all (OECD, 2009).

Schwarz-Hahn and Rehburg (2002) distinguished four concepts of funding tertiary education in Europe by using two dimensions: independence of students (from parents) and financial role of state. Combining these two dimensions results in four types of students which are considered as either “responsible citizens”, “adolescent family members”, “dependent children” or “investors” (Schwarz-Hahn & Rehburg, 2002)

- States which consider students as **responsible citizens** offer direct financial aid to students covering the costs of tertiary education. Students are young adults which maintain their own households. Nearly all students are supported by grants or loans, independent of their family background. There are no tuition fees or support of students’ parents. The Nordic countries (Denmark, Sweden, Norway and Finland) are typical exponents of this type of funding tertiary education.
- The second concept considers students as **adolescent trainees**. Parents have to finance tertiary education of their children. The state offers financial aid only for families with low SES. Students have a legal right to maintenance support from parents. In return, the parents of students receive public support. In some countries students have to pay low or medium tuition fees. This concept is dominant in France, Belgium, Austria, and Germany. In some countries there are direct and indirect subsidies which reduce study costs.

- The third type of funding tertiary education is characterized by low state support and little financial independence of students. Students are considered as **dependent children**. The costs of tertiary education have to be borne by the students' parents. Financial support by the state is only offered in rare cases and tuition fees are the norm. Students depend on support from their parents or own work. The role of grants and loans are not important but there are subsidies for accommodation, travel, meals or health care. This concept is common in Italy, Spain, Portugal and Greece.
- The fourth model is characterized by low state responsibility with simultaneous financial independence of students. Students are considered as **investors in profession**. High tuition fees push up the economic value of tertiary education, while at the same time many students get state support, especially through loans. Students do not claim maintenance from their parents. Also students' parents are not supported by the state. The Netherlands and the United Kingdom are exponents of this type of funding tertiary education.

6.3. Students income

As described above, students have three main income sources: parents, state support and paid work. In many countries parents are seen as the "first stop" for financial support. In some cases the state supports parents by providing special benefits to them for the support of their children. In all cases, direct financial support from parents is a common and essential form of financial support for students. To lower dependency on parental support, countries often introduce programmes to support students financially. These programmes are often targeted at those students in need of such support, based on their socioeconomic background. Other approaches are to support all students based on the premise that they are independent young adults or to support the best according to merit. Income from employment can be seen as a coping strategy used by students to top-up their other funding sources (Commission of the European Communities, 2009).

Our main research questions are: what are the main sources of students' income in the different countries, in the different funding systems and for students with different socioeconomic background? How much do students get from family, state and paid work? How important is the relative amount of these three income sources?

Income	Expenditure
<ul style="list-style-type: none"> • Grants • Loans • Earnings • Family contribution in cash • Family contribution in kind • Other 	<ul style="list-style-type: none"> • Cost of study: Tuition fees, Social/ administrative fees, instruction material • Maintenance: Accommodation, Nutrition, Clothing, Personal care, Communication, Leisure, Travel, Other

Table 3: Micro level: Students' Income & Expenditure
Source: **Schwarzenberger, 2008.**

6.3.1 Income composition by SES

The microeconomic view according to Schwarzenberger (2008) concentrates on comparing cost-sharing scenarios according to students' socioeconomic background. In the report edited by Schwarzenberger four student prototypes were established (see below). For each of these types the respective income and expenditure was calculated and the share of public support was compared to these amounts. The main data sources used for this were the national surveys gathered in the EUROSTUDENT project. To establish the socioeconomic background of a student, data on the income distribution in each country were required, which are taken from Eurostat EU-SILC (Statistics on Income and Living Conditions; UDB 2005-version 2 of June 2007; cross-sectional data). The student prototypes reflect four different socioeconomic background groups: low, lower medium, higher medium and high socioeconomic background.

Students in the “low socioeconomic background” group have parents whose income falls within the lowest quarter of the respective national income distribution, while students from a “high social background” have parents whose income ranges in the top quarter of that income distribution. Students who are not living with their parents usually get a higher amount of support than those still living with their parents. Therefore sub-cases are defined for each social background by living situation with parents or away from home. The comparison of six European countries (Czech Republic, England, Germany, the Netherlands, Norway and Spain) by Schwarzenberger (2008) shows overall trends in income-composition differences by SES:

- “Concerning grants, there is a clear tendency that the higher the SES, the lower the grant – regardless of the living situation ... students not living at home do tend to get a higher grant than those living with their parents ... Whilst the differences are very marked in Germany and Spain, the difference is lower in England and the Netherlands; and in the Czech Republic and Norway even data contradicting this general tendency can be observed. Independent Norwegian student will not receive the standard support for accommodation if they live with their parents.
- As for public loans, that general tendency is still discernible here, but there are some exceptions. In Germany, the tendency is most clear, in England and the Netherlands it is still visible but for Norwegian students not living at home, the opposite is true: the higher their SES, the higher the amount of the loan. These differences have to be seen in the context of whether students can choose to take out a loan ... and/or if the loan is means-tested.
- Concerning students’ own earnings as part of his/her income, the general trend is that they go down with increasing SES, but there are quite a few exceptions to this.
- By contrast, family contributions clearly are markedly higher for students with higher SES and it would not be unusual for a student with very well-off parents to receive twice as much support from them than a student with the lowest SES would.” (Schwarzenberger, 2008)

Box 10: Supporting students with children or adult dependants: student finance “extra help” in the UK

“Student finance” is a UK partnership between the department for business, innovation and skills and the students’ loans company, providing financial support on behalf of the UK government to students entering Higher Education. It helps students with both tuition fees and living costs, by providing for different students finance packages depending on the student status and individual profile. Extra-help is foreseen for those experiencing special circumstances and among them students with children or adult dependants are reserved special support. In particular, people with this kind of extra-commitments willing to enrol in a full-time undergraduate course might be awarded extra-financial help in the form of a child-care grant, a parents’ learning allowance and an Adult Dependants’ Grant. All these forms of help do not require to be paid back, and they do not affect eligibility for further benefits in the tax system.

The child-care grant helps with childcare costs (up to 85% depending on the household income) if the student has a dependent child under 15 at the beginning of the academic year or under 17 with special educational needs, in registered or approved childcare.

Parents’ Learning Allowance helps students’ parents with course-related costs calculated on the basis of the student’s income and the income of his/her husband/wife or partner and any dependants.

The Adult Dependants’ Grant helps students having an adult who depend on them, including a partner, and is calculated on the basis of the student’s income and the income of his/her husband/wife or partner and any dependants.

Furthermore, the access to learning fund that provides extra help to students who are having financial difficulties and may need extra financial support to stay in Higher Education, considers students with children as a priority target group.

6.3.2 Variation by accommodation form

Students' monthly income varies strong by accommodation form (e.g. Schwarzenberger, 2008). Figure 19 shows how the average monthly income of students living with their families deviates from income of students maintaining their own household. Students who live with their parents have a significantly lower income than students who live in own households (student halls, flat or flat share). E.g. in Portugal students living with their family have 58% less monthly income than students who maintaining their own household. In most countries the majority of students are living in their own flat.

Figures for Bulgaria do not fit into the overall pattern. One explanation for this is the higher amount of income which these students earn to supplement other income sources.

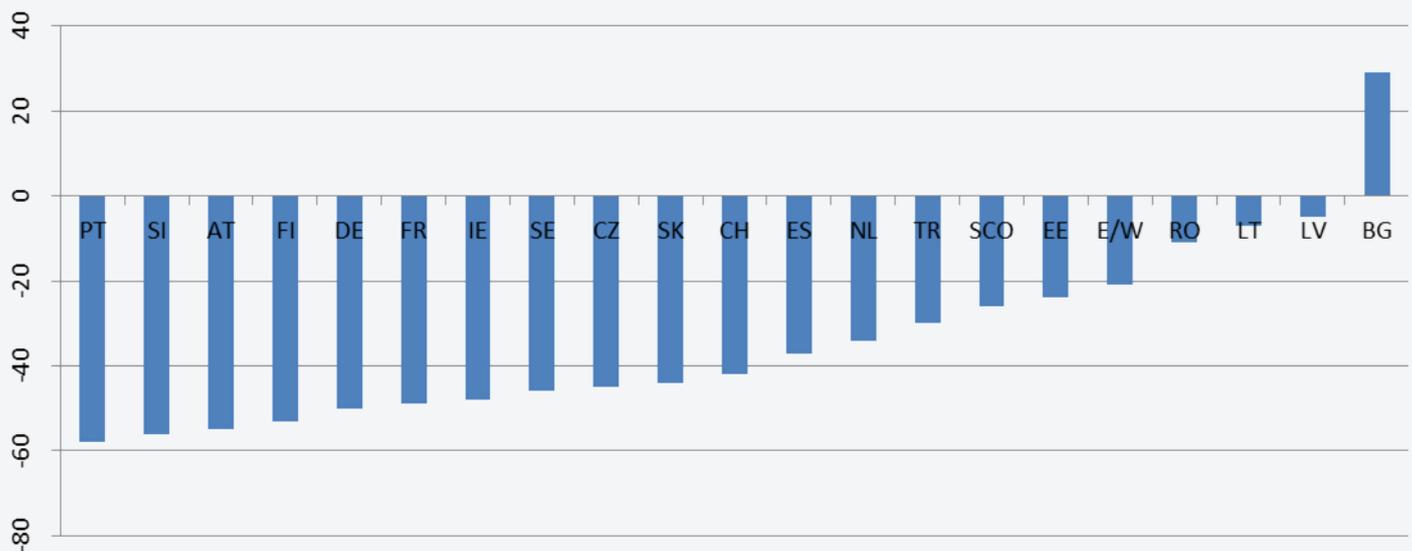


Figure 19: comparison of monthly income between students maintaining own households and students living with family using maintaining own households as a reference value in %

Source: Eurostudent III, own calculations.

6.3.3 Income inequality

EUROSTUDENT III data shows the heterogeneity of the students regarding their financial resources. For use of comparison students have been grouped in quintiles of income. In Ireland the top income group of students (i.e. the top 20%) have 88% more monthly income than the average student. On the other hand, students in the lowest 20% income group have 66% less income than the average.

The income difference between the median and the lowest 20% income percentile is highest in Ireland, Spain, Romania and France and lowest in Sweden, Germany, Switzerland, England/Wales and Netherlands.

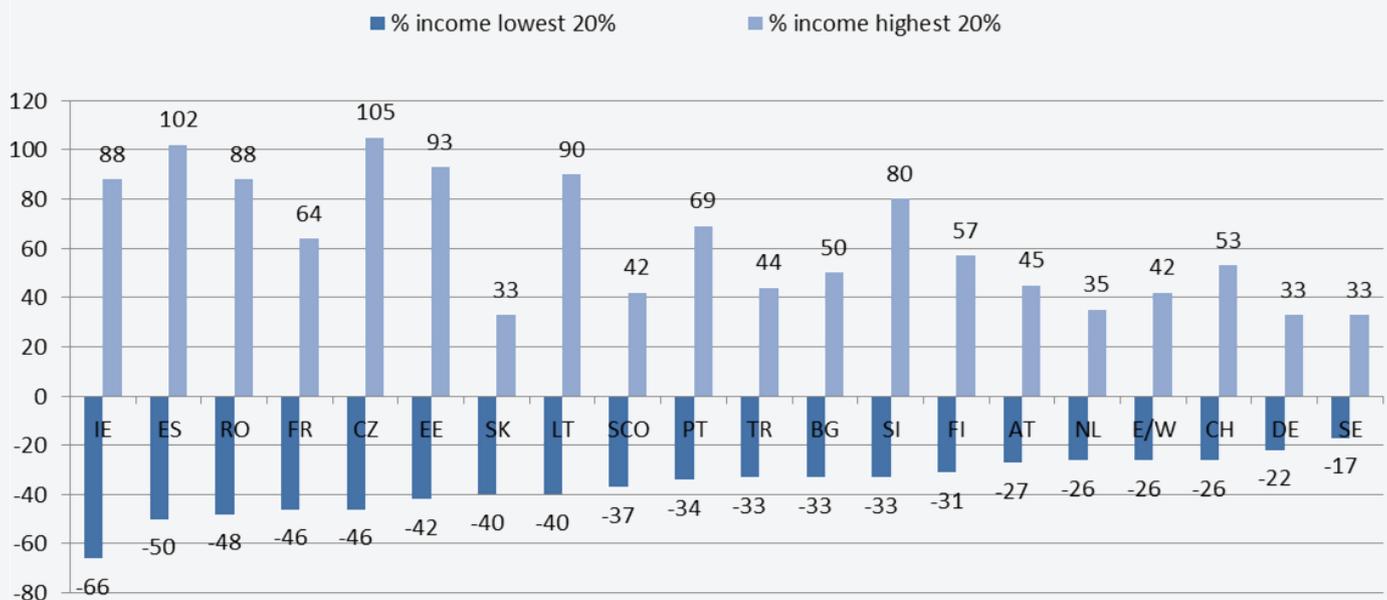


Figure 20: deviation from average income level from all students (median) in %

Source: Eurostudent III, own calculations.

6.4 Income from parents or relatives

This form of financing is especially prevalent in countries where students are seen as “dependent children”. It includes financial contributions from parents, other relatives and non-relatives, gifts in kind and gifts in money. In many countries the state supports parents directly with continuing child benefits, or indirectly by means of tax rebates. Empirical findings of Schwarzenberger (2008) in six European countries show the more dominant role of parental contribution in cash for students with high SES.

Parents’ or relatives’ provision of accommodation is a way of reducing students’ expenses and therefore their income needs. So the focus is set on students maintaining their own households. For this group it can be assumed that their assessment of the income mix is more robust because they are responsible for the management of their finances. This situation is not comparable for students living with family or relatives because a large proportion of their support is intangible like free food or accommodation.

The special importance of parental contributions to students’ income shows the relative amount of this income source as can be seen in Figure 21: in the observed countries the amount of parental contributions to students’ income ranges from 72% in Portugal, followed by 69% in Ireland, 67% in Turkey and 58% in Germany.

The lowest parental contributions to students’ income are observed for the Slovak Republic (8%), followed by Sweden (13%), Finland (18%), the Netherlands (19%), the Czech Republic (21%), England/Wales (23%), Scotland (31%), Estonia (33%), Lithuania (36%) and France (37%). Eurostudent data shows that family contributions are below 30% of students’ income in only six of 21 countries. In these countries state support and/or own earnings play a dominant role.

Within the group of countries where family contribution are comparatively less important to students’ income (< 40% of total income) two subgroups can be distinguished:

1. Countries where state support is dominant (> 40% of total income): Sweden with 63%, followed by Scotland with 45%, the Netherlands with 44%, England/Wales with 43% and Finland with 40%.

- The other group is characterised by the dominant role of job income (> 40% of total income): Slovak Republic with 92%, Czech Republic with 72%, Estonia with 60% and Latvia with 53%.

In Finland the share of students' income from state and job is with about 40% nearly equivalent.

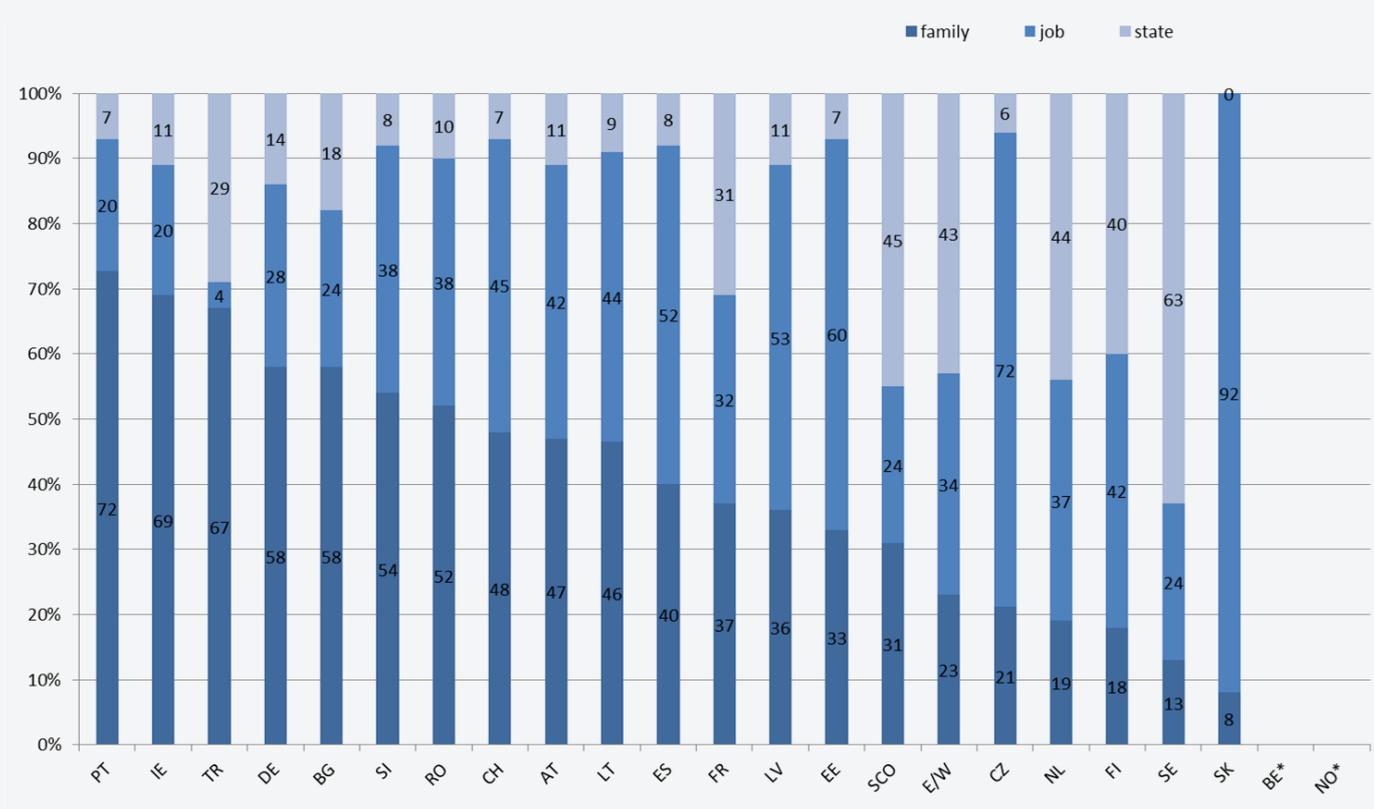


Figure 21: Composition of student income (students maintaining own households, by source in %

Source: Eurostudent III, own calculations; *) no data available.

6.4.1 Gender differences

Eurostudent data on income composition of male and female students shows that:

- For female students family support plays a more dominant role than for male students.
- For male students income from own earnings plays a more dominant role than for female students.

The following figures show the three main income sources by country and gender. For male students, the share of family contributions to total income is about 65% in Ireland and Turkey. The corresponding amount for female students in these countries is about 67% and 69%.

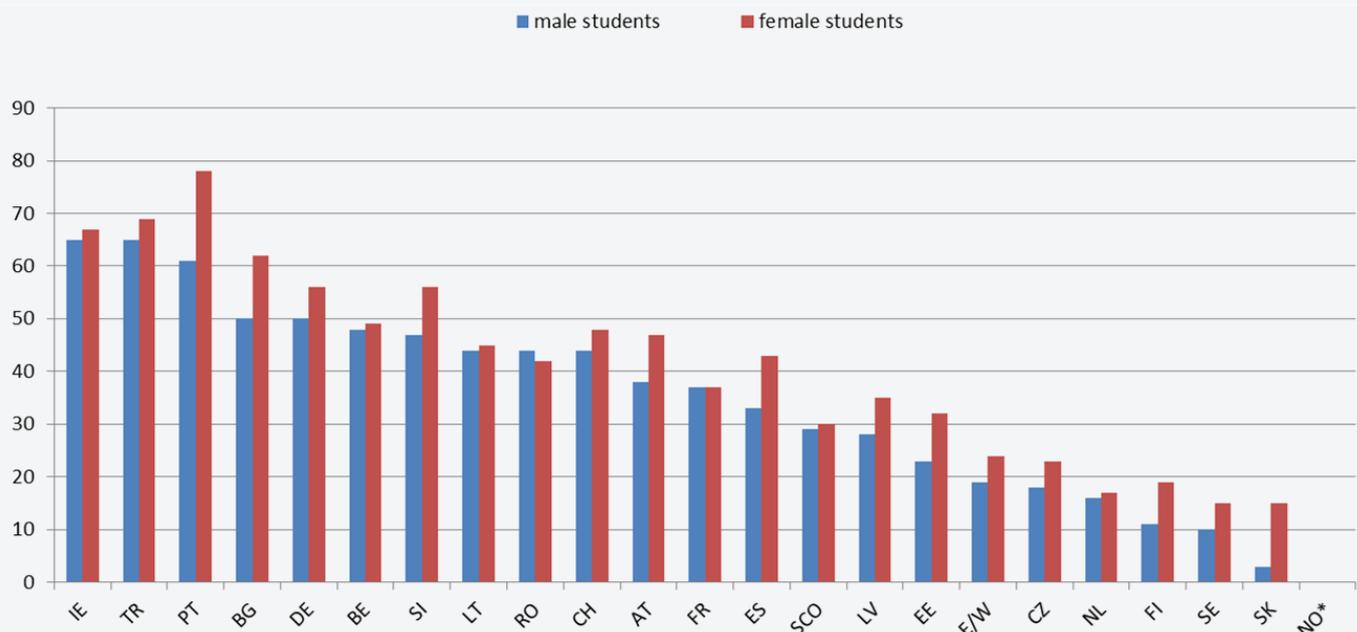


Figure 23: male and female students' income: source family in % (students maintaining own households)
 Source: Eurostudent III, own calculations; *) no data available.

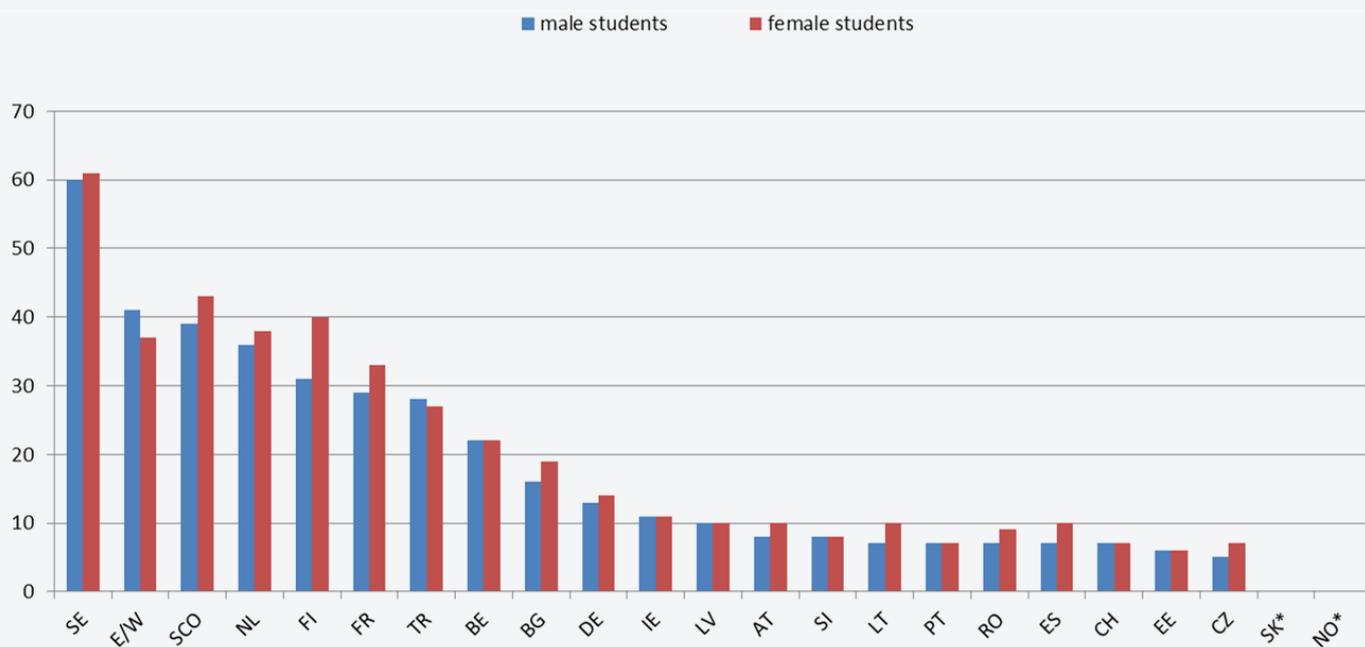


Figure 23: male and female students' income: source state in % (students maintaining own households)
 Source: Eurostudent III, own calculations; *) no data available.

Family support plays a marginal role for male students in Slovak Republic and Sweden with 3% and 10% of total income. The corresponding figures for female students are clearly higher with respectively 15%.

The figures indicate that for most countries no substantial differences in income composition exists between male and female students. Largely, the overall proportion of students' income remains the same irrespective of sex. Rather, the composition of students' income is far more strongly related to the country specific funding systems.

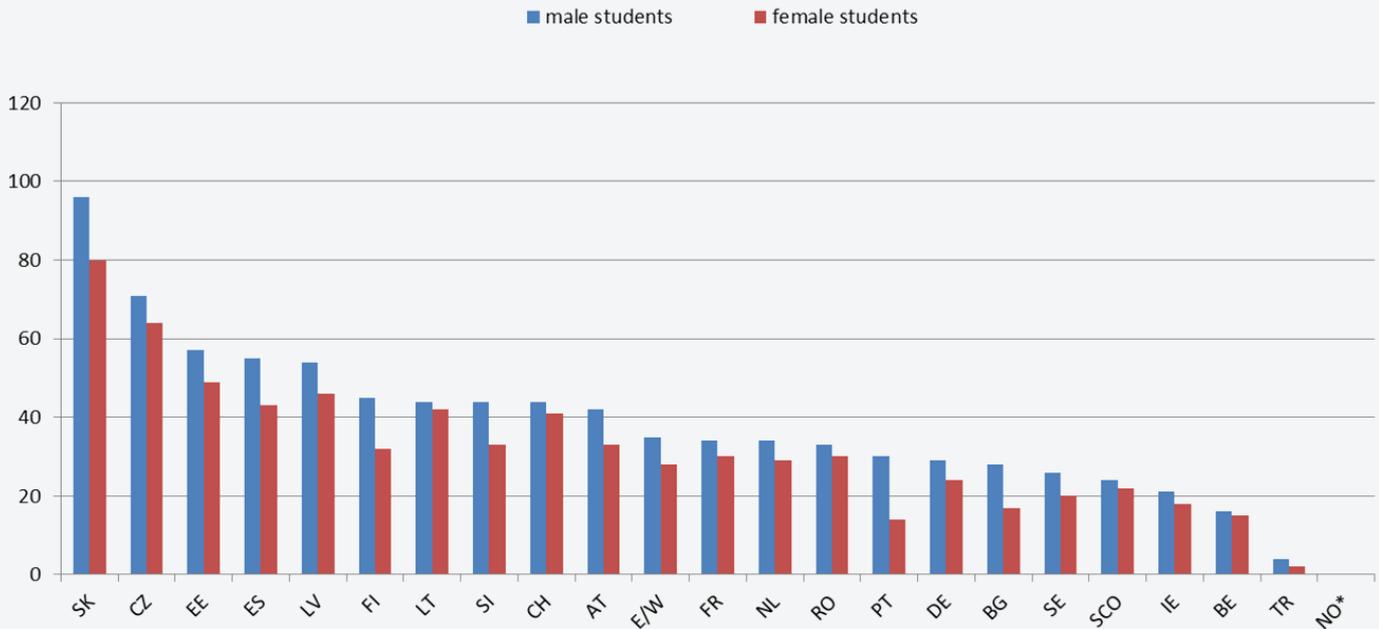


Figure 24: male and female students' income: source job in % (students maintaining own households)

Source: Eurostudent III, own calculations; *) no data available.

6.5 Income from state support

OECD countries spend on average 19% of their public budgets for tertiary education on subsidies to households and other private entities. In Denmark, the Netherlands, Norway, Sweden and the United Kingdom public subsidies make up for 25% of public spending on tertiary education, only the Czech Republic and Poland spend less than 5% (OECD, 2009).

An analysis of the European Commission shows that in the Bologna countries, a median of 15% of public expenditure on Higher Education was dedicated to financial support to students in 2005. This proportion ranged from less than 5% in Greece, Poland, and Switzerland to more than 20% in the Nordic countries (except Finland), Cyprus, the Netherlands, Slovenia and the United Kingdom (Commission of the European Communities, 2009). In 2005, grants and other scholarships to tertiary students accounted for more than 10% of public expenditure on Higher Education in half of the Bologna countries for which data are available. In 2005, 14 out of 28 Bologna countries subsidised loans. At EU-level, grants and subsidies accounted for around 14% of total public expenditure, while loans accounted for 7%. In some countries, such as Iceland, loans were the only form of public financial support, while in others, such as in the Netherlands, Sweden, the United Kingdom, Norway and Turkey (2004), they represented more than half of financial aid. Loans are less frequently offered or taken out by students in the French Community of Belgium, France, Italy and Lithuania. Considering other countries outside the Bologna Area, Australia, Japan and the United States differ considerably in the importance given to loans and grants: in Japan public financial aid comprised almost exclusively loans, whereas the opposite was observed in the United States. Cross-country differences are considerable, both in terms of grants and loans in total public support to tertiary students. As regards grants as a share of public expenditure in 2005, the highest share was observed in Denmark (26%), Cyprus (49%), Malta (30%, 2003 data) and Slovenia (24%), which is more than twice the Bologna median. By contrast, the share of grants in relation to public expenditure was less than half the Bologna median in Greece (1%), Poland (1%), Romania (6%) and Switzerland (2%). It must also be noted that grant levels varied from one year to the next in the Baltic countries and some Eastern countries. It is worth noting that, as a share of public expenditure on tertiary education, financial aid to students and their family were the highest in countries where access to Higher Education is free of charge (Denmark, Cyprus, Malta and Slovenia).

Public subsidies come in many forms: as means-based subsidies, as family allowances for all students, as tax allowances for students or their parents, or as other household transfers. There are essentially three categories of such support:

1. Direct cash support to students.
2. Non-cash support: This support has the effect of decreasing students' expenditure, e.g. subsidized accommodation (student halls), transport, health insurance for students, etc.
3. Indirect cash support: cash, prolonged child benefit and tax discounts which go to students' parents in the form of child support.

The composition of these three types of public support varies by country and students' SES level. Public financial support like grants, scholarships and loans are often targeted to students with a lower socioeconomic background and/or students in need of such support. Other common ways of targeting include giving support to all students and supporting the best students according to their effort.

Schwarzenberger's research shows the general tendency that the lower the SES, the higher the subsidy and that students living away from home profit to a larger extent from public subsidies than students living at home. In countries where the students are considered to be dependent on their parents (the Czech Republic, Germany and Spain

Box 11: Income contingent financing of student charges for Higher Education: the Higher Education Contribution Scheme in Australia

In 1989 Australia was the first country in the world to introduce a broad-based income contingent loan policy for the payment of HE charges, through the Higher Education contribution scheme (HECS), now replaced by HELP – Higher Education Loan Program. This system represents an innovation and an alternative with respect to traditional systems of financing of mass Higher Education, such as the free of charge system based on tax-payers' contribution or upfront tuition fees with different degree of support on the part of the government (i.e. government-assisted back loans to students with low family incomes).

The income contingent loan is a universal provision which is offered as an option to every prospective student, no matter his/her family background. Differently from traditional means-tested loans, no eligibility is required and repayment arrangement depends on the prospective student's capacity to pay once graduated, according to his/her income. Specifically in Australia, students can choose whether to pay HE charge as up-front tuition fees with a discount or to opt for an income contingent loan. In the latter case, they do not pay any upfront tuition fee while attending university, instead deferring it until after graduation when the charge is collected on an income-contingent basis through the tax system.

The system is designed in order to be progressive in a life time income, so that graduates with relatively high future incomes repay more than debtors with low lifetime incomes, with repayment starting over a certain threshold of income and suspended in low income periods. Each debtor receives interest rate subsidies equal to the real rate of interest for each year the debts remain unpaid. The consequence is that students who take the pay-later option will receive greater subsidies the longer it takes to repay the debts (that is, the lower their future income).

In an income contingent system, the considerable uncertainties associated with Higher Education investments are assumed by the lending agent, the government. This means that taxpayers share the risk of non-repayment, and subsequently the overall system requires for an effective engineering of debt collection to be sustainable.

An income contingent system like the Australian HECS results to be overall more progressive while overcoming the means-tested approach based on family income (and problems related with financial sharing within families). By binding repayment to future income it protect students from default and drop out due to inability to pay while studying. Furthermore, income contingent loans might also be designed to cover income support of students, beyond covering tuition fees.

More information:

<http://www.goingtouni.gov.au/Main/Quickfind/PayingForYourStudiesHELPLoans/HECSHELP.htm>

for example) family contributions play an essential role. In countries where students are considered to be independent individuals, loans account for an important share of students' income, like in England, the Netherlands and Norway (Schwarzenberger, 2008).

Public financial aid for students is provided with the aim of increasing equity in access to tertiary education. Whether financial student aid achieves this aim is an important question for public economics and in the policy debate.

Schwarzenberger (2008) divides public subsidies into direct subsidies that are granted to students and into indirect subsidies which are aimed at the students' parents. Both types of support can be cash (increasing income) or non-cash (decreasing expenditure).

- Direct cash support plays an important role especially in the Netherlands and Norway, where grants are the most important item of direct support. In England subsidies on loans play a more important role than grants (in terms of funding amounts).
- Non cash support (like subsidies for health insurance, facilities and transport) and indirect support, which goes to the students' parents (like child benefit and tax exemptions), plays an important role in Germany and the Czech Republic where students' are considered as dependent on their parents.

	Czech Republic	England	Germany	Netherlands	Norway	Spain
Teaching infrastructure	78,5	83,7	58,5	75,7	81,1	90,7
Direct support (cash)						
Grants	5,1	4,2	6,4	15,2	15,3	9,3
Tax exemptions	0,2	-	-	-	-	-
Subsidies on loans	-	8,5	1,2	1,4	2,9	-
Direct support (not cash)						
Subsidies for health insurance	5,1	-	10,6	-	-	-
Subsidies for facilities	3,3	-	4,0	-	0,6	-
Subsidies for transportation	-	-	0,8	7,0	-	-
Other direct non cash support	-	3,7	-	-	-	-
Indirect support (cash)						
Child-related payments	3,1	-	15,0	-	-	-
Tax exemptions	4,7	-	3,4	0,7	-	-
Indirect support (non cash)						
Not found in the six countries	-	-	-	-	-	-
Total	100	100	100	100	100	100

Table 4: Composition of public funding in %

Source: Schwarzenberger (2008).

The table above shows the predominance of direct cash support in Spain and Norway. In England and the Netherlands, there is a mix of direct cash and non-cash support and in Germany and the Czech Republic a mix of all support forms. Indirect cash support via parents and direct non-cash support in the form of infrastructure are particularly important components of state support to households in the Czech Republic and Germany. In Spain and Norway, particularly, state support is largely provided as direct cash support to students.

6.5.1 Support rate

The following Figure 25 shows the proportion of first year students who received state assistance like grants, scholarships or loans. Support for first year students is specifically important as regards access to Higher Education.

Almost all first year students in Turkey (94%) got state assistance, followed by 93% in Finland and 87% in the Netherlands and England. On the other hand only 7% of the first year students in Lithuania got state assistance, followed by Switzerland and Belgium with 15%.

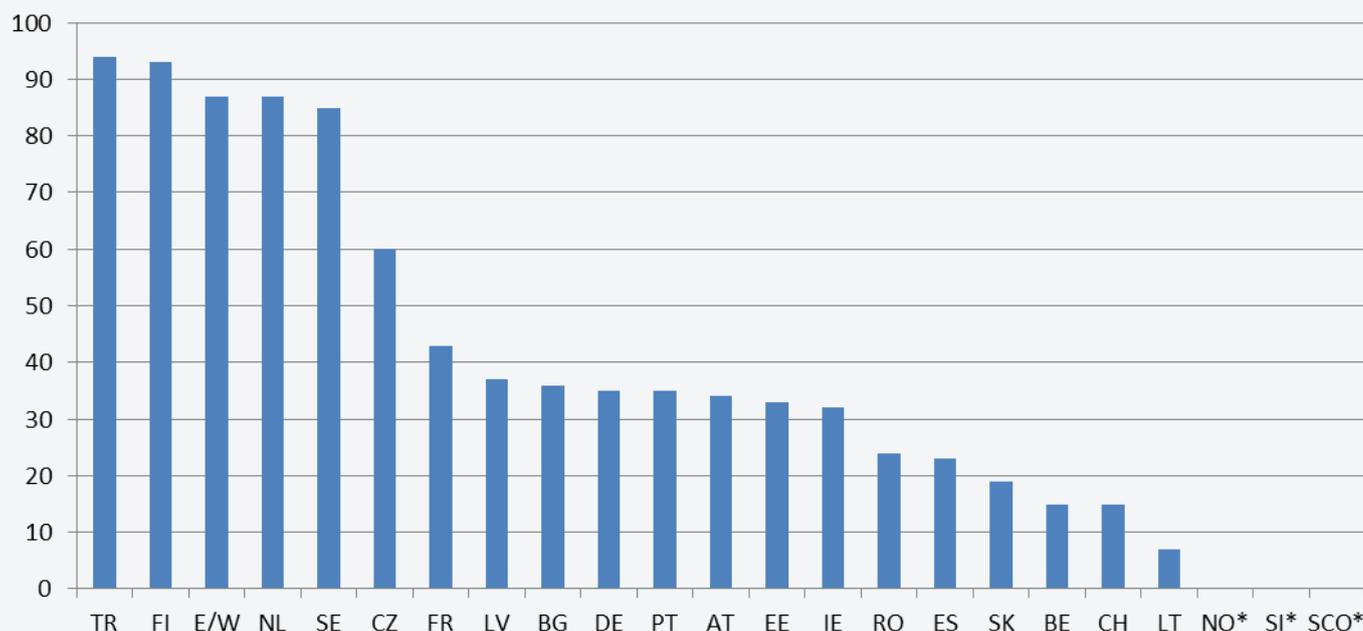


Figure 25: First year students who receive state assistance (grants, scholarships, loans) in %
Source: Eurostudent III, own calculations; *) no data available.

Figure 26 shows the significance of state support for all students with own households. They do not differ very much from the figures for first year students: 87% of all students in Sweden and England/Wales got state support, followed by 85% in Finland, 84% in Scotland and 83% in Turkey and the Netherlands. In this group of countries with high shares of students who got state assistance we see countries with no or low tuition fees like Sweden and Finland as well as countries with high level of tuition fees (> USD 1.500 per year) like England/Wales and the Netherlands.

On the other hand only 1% of students in the Slovak Republic got state assistance, followed by 16% in Switzerland, 28% in Austria and 29% in Germany.

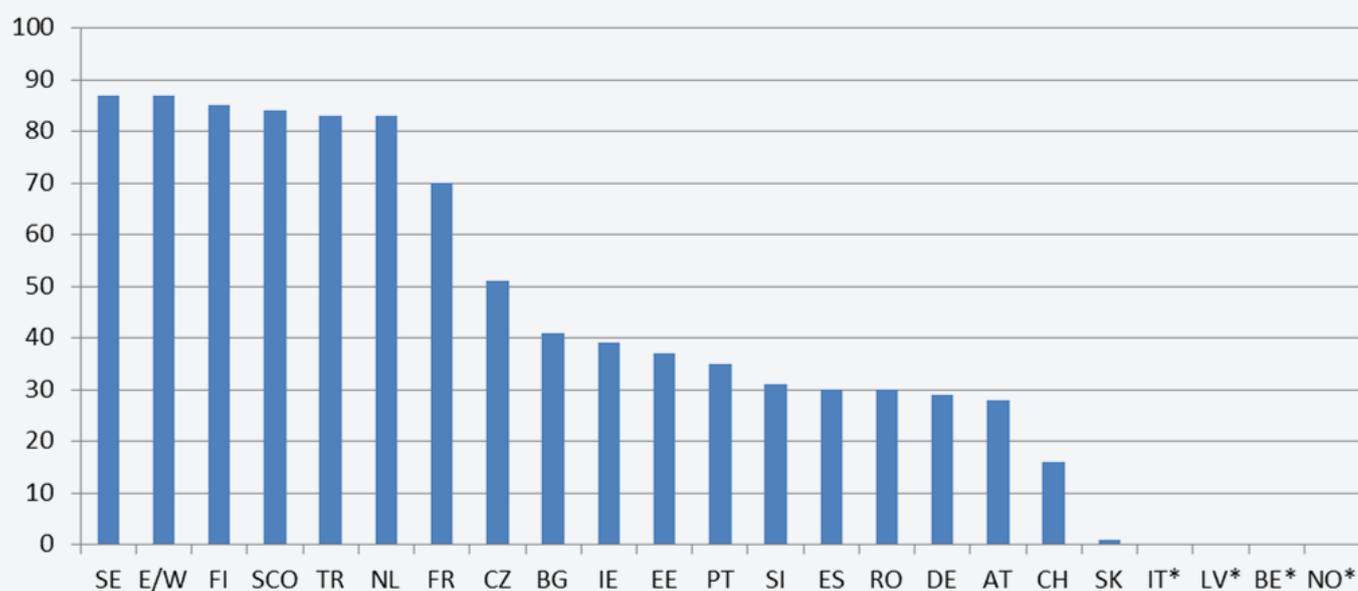


Figure 26: Share of all students with state support (students maintaining own households) in %
Source: Eurostudent III, own calculations; *) no data available.

Figure 27, shows the relative weight of state support in students' income where Sweden shows by far the highest proportion of public support.

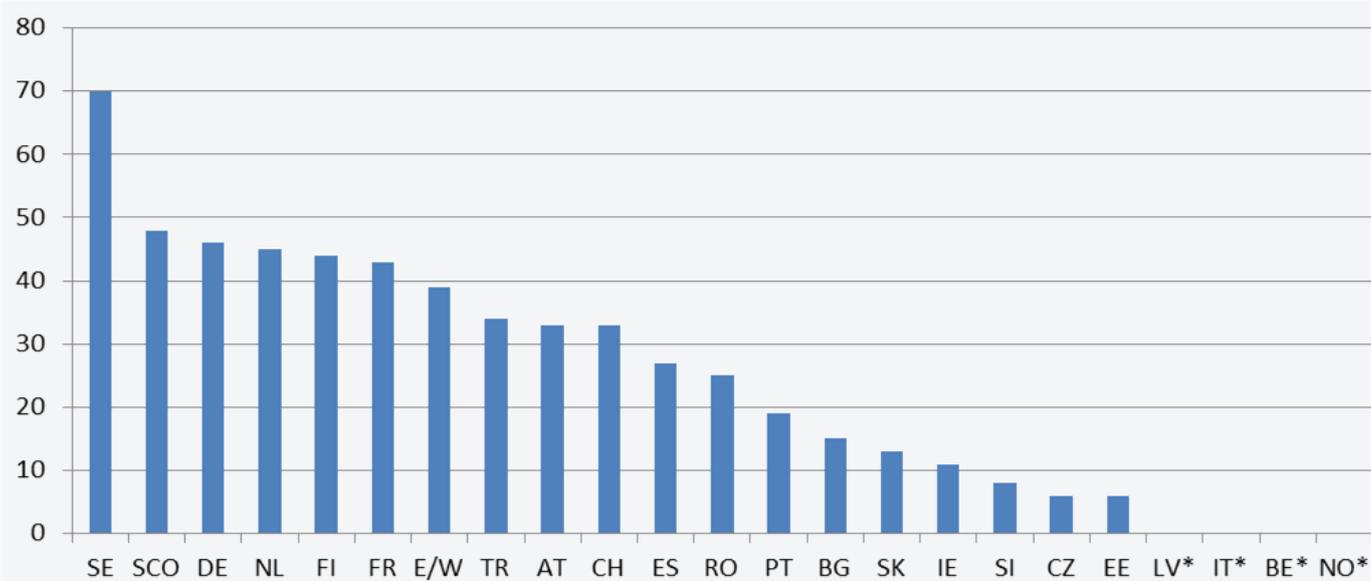


Figure 27: Relative contribution of state support to receivers' income (students maintaining own households) in %

Source: Eurostudent III, own calculations; *) no data available.

OECD data shows the distribution of financial aid to students in tertiary-type-A education in the academic year 2006/2007: The figures are restricted to European countries where data are available (OECD, 2010). It is indicated that e.g. in Austria only 19% of students' benefits from grants, 81% of the students do not benefit from public loans or grants.

On the other hand, only 5% of students in the Netherlands do not benefit from loans or grants, 65% benefit from grants, followed by Finland with 55% and Spain with 38%. The data shows a wide heterogeneity in public support concerning grants and loans. In the Netherlands and Sweden nearly all students benefit. 70% of Dutch students receive grants higher than the tuition fee. In Finland, Iceland, Norway and Hungary more than 50% of students benefit from public loans or grants. In Austria, Belgium, France, Italy, Spain, Switzerland and Slovenia only a minority receives public benefits.

Table 5: distribution of financial aid to students compared to amount of tuition fees charged in tertiary-type A education (academic year 2006/2007)

Source: (OECD, 2010)

	Distribution of financial aid to students: Percentage of students that:				Distribution of grants in support of tuition fees: Percentage of students that:			
	Benefit from public loans only	Benefit from grants only	Benefit from public loans AND grants	DO NOT Benefit from public loans OR grants	Receive grants that is higher than the tuition fee	Receive grants which is equivalent to the tuition fee	Receive grants that partially cover the tuition fee	DO NOT receive grants in support of tuition fees
Australia	76	-	4	20	-	-	4,8	95,2
Austria	-	19	-	81	18,4	-	1,2	80,4
Belgium (Fl.)	-	23	-	77	22,8	-	-	77,2
Finland	-	55	-	45	-	-	-	-
France	-	25	-	75	-	-	-	-
Hungary	14	34	9	43	-	-	-	-
Iceland	63	0	-	37	-	-	-	100
Italy	-	17	-	83	7,9	-	5,4	83,5
Japan	28	1	-	72	-	-	-	100
Netherlands	11	65	19	5	70,0	-	14,0	16,0
New Zealand	42	3	24	32	45,4	-	-	54,6
Norway	7	4	59	31	-	-	-	-
Spain	-	38	-	62	18,7	4,3	15,2	61,9
Sweden	-	25	75	0	-	-	-	-
Switzerland	2	11	-	87	-	-	-	-
Slovenia	-	33	-	67	-	-	-	-
United States	17	22	38	24	-	-	-	-

6.5.2 Grant and enrolment rate

Grants can be defined to include all forms of non-repayable assistance designed to lower the cost of education for a student. Grants increase students' purchasing power and reduce the costs of education. Grants increase the benefit-to-cost ratio of education by offsetting educational costs such as tuition fees or foregone income. In contrast to student loans only grants can change net price and affect cost-benefit ratios.

Many jurisdiction-level studies try to test the hypothesis that lower levels of net price lead to "better" access to post-secondary education, allowing more people to attend and providing better access to people from disadvantaged backgrounds.

Empirical research from Steiner and Wrohlich (2008) on the question how financial student aid influences the transition and enrolment rate to universities in Germany shows that the monthly state support amount (BAföG) has a positive and significant effect (at the 10 per cent level) on the transition rate to university.

This effect indicates that an increase of the monthly Bafög amount by 100 Euros would increase the transition rate to university by 3,3 percentage points. Another interesting result is that parental income has a positive and significant effect on the transition rate into university education, which is considerably smaller than the Bafög effect. The

empirical results show that a 100 Euro increase of monthly net equivalence income of the parents' household would increase the transition rate to university by 0,6 percentage points (effect significant at the 5 percent level). None of the other socioeconomic background variables used in the study of Steiner and Wrohlich, like education of the father, are statistically significant, except mothers' education: If the mother has a university degree, the transition rate to university increases by 9 percentage points. Other family background variables (e.g. number of siblings) do not have significant effects. This result, in particular the insignificance of the father's education, might seem surprising at first sight. Previous empirical studies for Germany show that the choice of secondary education and in particular upper secondary education is heavily influenced by the parents' educational background. The interpretation of this result is that, once individuals have made it up to the high-school degree, parental education does not play a role for the choice of tertiary education any more, in particular since parental income is also controlled for.

The findings of Steiner and Wrohlich show that an increase of BAföG by Euro 1000 per year for all high-school alumni increases the cumulated probability of transition to university, i.e. the enrolment rate after 5 years by 2 percentage points from 76,2% to 78,4%. An increase of annual parental income by Euro 1000 would increase the enrolment rate by about 0,5 percentage points (Steiner & Wrohlich, 2008).

Time period	Model prediction	BAföG is increased by 1000 Euro per year	Parents' income is increased by 1000 Euro per year
1	28,5	33,3	29,1
2	64,2	68,8	64,9
3	71,7	75,2	72,3
4	74,8	77,5	75,4
5	76,2	78,4	76,8

Table 6: Cumulated share (in %) of high-school alumni enrolling into university after an increase in BAföG or parents' income

Source: **Steiner & Wrohlich, 2008.**

In his literature review, Usher shows that grants and net price do indeed have an important impact on access. A key point, though, is that with the exception of Oberg (1997) all the studies find, that the significant effects of net price and grants *only* occur among low-income students. "Grants do in fact make a difference to access for low-income students" (Usher, 2006)

These studies shows that grants or reductions in net price are much more effective amongst low-income students than amongst middle or high income students. Leslie and Brinkman found that between 20 and 40 percent of total enrolments of low-income individuals were due to grants, while higher-income students were virtually price insensitive when it came to education, but changes in net costs had a relatively important effect on the poor (Leslie & Brinkman, 1987).

6.5.3 Loans

An important issue concerning student funding systems is the determination of the share of support which is given to the student as a non-repayable (grant or scholarship) and repayable sum (loan).

The maximum level of student loans is generally higher than that of grants. It often varies between PPS EUR 1.500 and 4.500 per year. Loans are usually made on favourable terms with respect to interest rates and repayment conditions. Repayment commences when students have finished their studies. In the majority of countries where loans are provided, debts may be cancelled or reduced under certain conditions.

The Eurostudent-report differentiated three country groups: 1. countries where the share of non-repayable support constitutes up to one third of the total support: Norway, Scotland, Turkey and England/Wales. 2. Countries where the non-repayable share is around one half: Sweden and Germany with 44% and 51%. 3. Countries with a non-repayable component higher than two-thirds of the total support: Austria, Spain, Ireland, Italy, Romania, France, Portugal, Slovenia, Finland, Switzerland, Lithuania, Slovak Republic and the Netherlands. (Eurostudent, 2008)

Loans are usual (> 50% of state support) in countries with no or low tuition fees like Norway, where 85% of state support is given by repayable loans as well as in countries with high level of tuition fees like England/Wales, where 67% of state support is given by repayable loans. (Eurostudent, 2008)

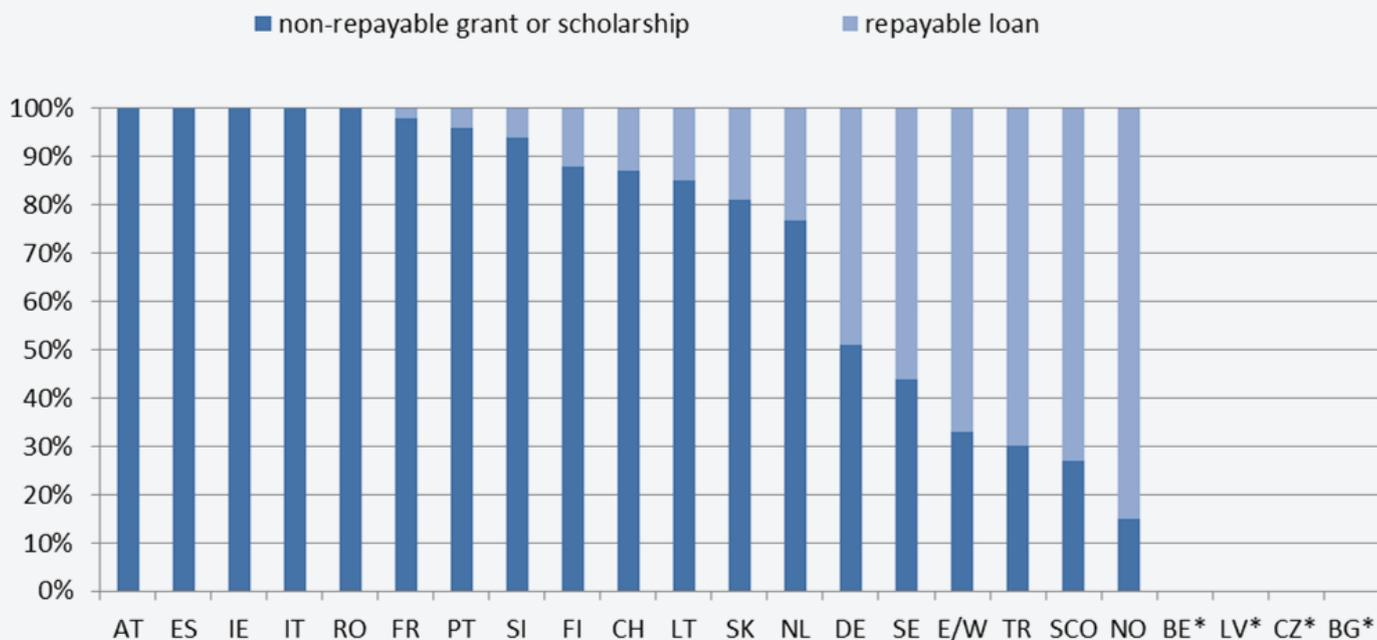


Figure 28: Make-up of state support – share of non-repayable support (all students) in %

Source: Eurostudent III, own calculations; *) no data available.

Figure 29 shows the importance of loans for bachelor students in 18 EU-countries. Loans only play a key role in England and Wales with 73% of bachelor students who receive public support by loans, followed by Turkey and Estonia with 58%.

Also, the conditions of repayment of student loans differ considerably between countries: In the Netherlands, Finland, Sweden, Turkey and France, where a majority of students receive state support, the repayment conditions are not related to income levels post-graduation, although the interest rates are lower than market rate. The UK is the only region in this group to offer interest on loans at a rate equal to inflation and to organise repayment on the basis of graduates’ income level.

In the other countries debt can be reduced or cancelled on formal grounds such as birth of a child, death, or exceptional merit in studies. (Eurostudent, 2008) Only Romania allocates loans at market rates, requires repayment during the study period and does not link repayment to income. (Eurydice network, 2009)

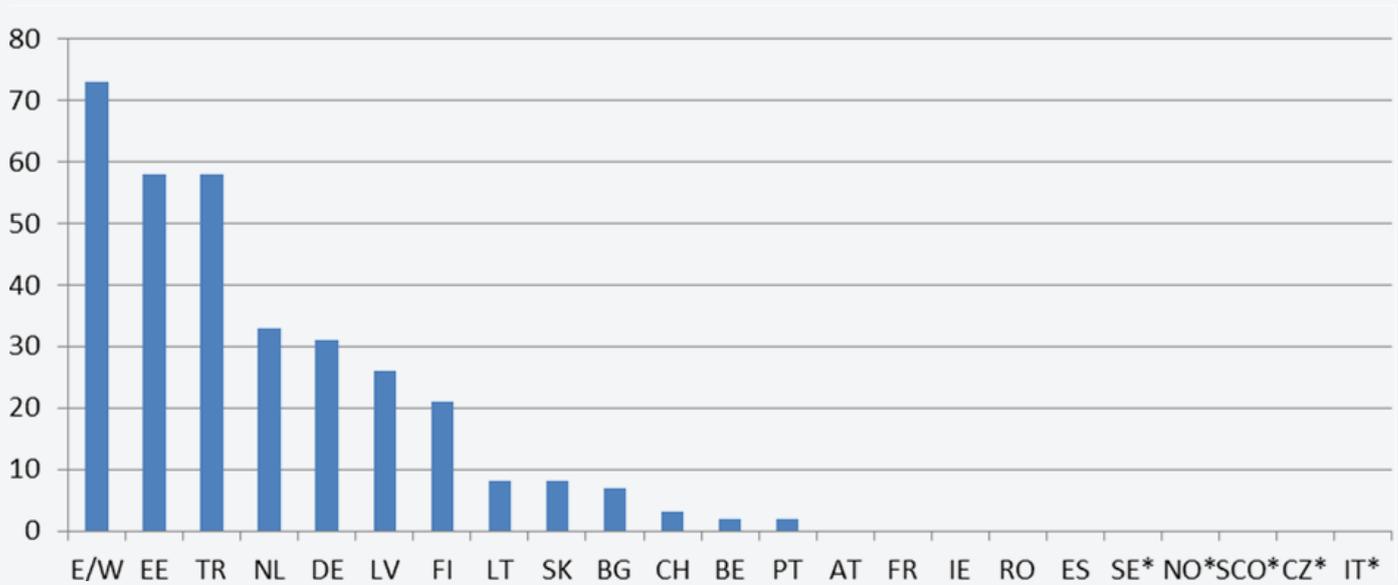


Figure 29: Bachelor students who receive state assistance by loans in %

Source: Eurostudent III, own calculations; *) no data available.

Table 7: Conditions of repayment of student loans to meet living costs of full-time students, selected countries. Source: Eurostudent

Rate of interest	Method of repayment	
	Proportional to income post-graduation	Not proportional to income post-graduation
At the market rate		RO
At a lower than market rate		NL, FI, SE, ES
At a rate equal to inflation	UK (E/W and SCO)	TR
No interest		DE, FR, SK

6.6 Students' expenditure

Research shows “that data on student expenditure is not as reliable as data on their income” (Schwarzenberger, 2008). Unsurprisingly, students have a fairly clear idea of the amounts they get from different sources each month, but find it harder to keep good track of what they spend. The fact that income sources do not change as much per month as expenditure for different categories would, plays a significant role in this phenomenon. Thus, all data on student expenditure needs to be interpreted with caution.

The contributions paid by students maintaining own households (irrespective of any public financial support) are shown in the following figure which reflects the impact of accommodation, tuition fees and transportation on the budget of students in relative terms.

Housing costs are students' biggest financial burden in the majority of countries. In most of the observed countries students spend about one third of their income on rent. The range runs from 46% in Sweden down to 11% in Bulgaria. Also the transportation costs are with around 10% a significant expense for students.

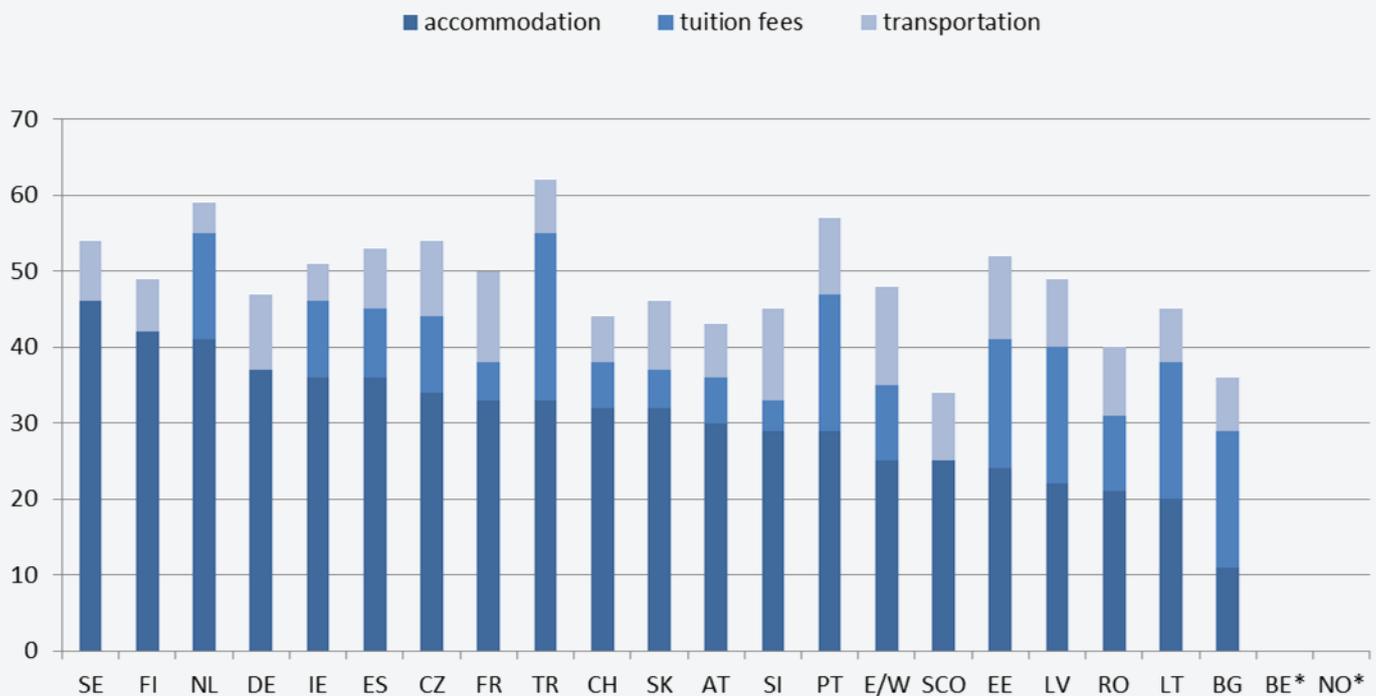


Figure 30: Main components of total expenditures for students maintaining own households

Source: Eurostudent III, own calculations; *) no data available.

6.6.1 Rent for accommodation

One of the major components of students' expenses is rent for accommodation. All students must cover the costs of accommodation unless they continue to live with their parents or relatives. These costs make a significant share of total living expenses. Living at one's parents' home is considered to be a significant indirect subsidy. However, this option is only available for those students whose parents' home is situated within acceptable distance to the university. By sharing the fixed costs of living among the family members, accommodation costs can be reduced to a certain degree. From a data collection perspective, it is difficult to calculate the real costs per student living with family or relatives.

An important relationship which influences the proportion of housing costs compared with the total budget of expenditures is age. The Eurostudent III data shows that in more than half of the observed countries, 21 year old students spend less money on housing than older students. This could be an indicator that aspiration level for living standards raises with age.

6.6.2 Tuition fees

Another part of students' expenditure is the contribution to institutions of Higher Education is in the form of administration or tuition fees. Students' average contributions to Higher Education vary substantially in absolute and relative terms.

Some students may have free places and others may pay a fee between a minimum and maximum level. Very often the fees are targeted at special groups of students (e. g. part-time students, students above the state admission quota, graduate students, ex-post fees for failing students).

There are large differences, a confusing variety and permanent changes of regulations among EU countries in the average tuition fees in the last years. Thus, for example tuition fees were abolished in Austria in 2009 and newly introduced in some parts in Germany in the same year.

In Finland, Germany, Scotland and Sweden nothing has to be contributed to the institutions. In Turkey nearly one quarter of an average students' budget has to be paid (Eurostudent, 2008).

Four tuition fee clusters are detected in EUROSTUDENT III report for the European Higher Education Area:

1. Austria, Sweden, Scotland, Finland and (in 2006) Germany with no tuition fees.
2. The Slovak Republic, Switzerland, France and Slovenia with very moderate rates (< 6% of students' budget).
3. The Netherlands, Romania, the Czech Republic, Ireland, Spain and England/Wales (2004) with moderate rates (7-15%).
4. Turkey, Bulgaria, Portugal, Lithuania and Estonia with high rates (16-22%). In this group the contribution is a real burden, around 20% of the budget is required to access Higher Education.

Some East European countries like Lithuania (max. 10000 Euro) or Estonia (max. 3500 Euro) show some of the highest fees in Europe. At the time of publication of this report, England was also in the process of raising tuition fees to a maximum of c.12.000 Euros per year.

One third of OECD countries have annual tuition fees for national students that exceed EUR 1000. Among the EU-OECD countries only Italy, the Netherlands, Portugal and the United Kingdom have annual tuition fees that exceed this level for full-time national students. The tuition fee systems by country differ substantially in size and criteria. Often the fees are defined by the institutions and targeted at special groups of students like part-time students, students above the state admission quota, graduate students and ex-post fees for failing students (OECD, 2010). The Eurydice-reports (2007 and 2009) show that tuition fees for ISCED 5A programmes often vary between PPS EUR 200 and 1000 a year. Differences between countries in the amounts required are substantial. They range from under PPS EUR 200 in some programmes in Belgium (French Community) and Turkey, to over PPS EUR 1000 in all programmes at ISCED level 5A in the Netherlands and the United Kingdom.

Table 8: Amounts of fees and other contributions in PPS EUR paid by full-time daytime students enrolled for a first qualification (ISCED 5A) in public sectors, 2005/06 and 2006/07.

Source: Education at a Glance, 2007 & 2009 (Eurydice)

	Amounts of (tuition) fees in PPS EUR/year, paid by full-time daytime students enrolled for a first qualification (ISCED 5A) in public sectors, 2005/06		Amounts of (tuition) fees in PPS EUR/ year, paid by full-time daytime students enrolled for a first qualification (ISCED 5A) in public sectors, 2006/07	
	Min.	Max.	Min.	Max.
AT	701	701	701	701 ²⁰
BE fr	307	705	742	742
BE nl	431	489	433	492
BG	264	458		
CZ	No tuition fees		No tuition fees	
DK	No tuition fees		No tuition fees	
DE	No tuition fees	Depends on region	No tuition fees	Depends on region
EE	No tuition fees		No tuition fees	
IE	No tuition fees		645	645
EL	No tuition fees		No tuition fees	
ES	516	1109	497	1060
FR	146	943	149	994
IT	171	Depends on Institution	167	Depends on Institution
LI	733	733	740	740
LV	997	6858	841	8601
LT	586	586	594	594
HU	No tuition fees		No tuition fees	
NL	1406	1406	1496	1496
PL	27	45	26	44
PT	583	1082	582	1079
SI	34	48	15	285
SK	19	85	19	73
FI	No tuition fees		No tuition fees	
SE	No tuition fees		No tuition fees	
UK-ENG/WLS/NIR	1579	1579	1548	3869 ²¹
UK-SCT	No tuition fees		No tuition fees	
NO	No tuition fees		No tuition fees	
TR	55	460	54	451

²⁰ Since 2009 tuition fees in Austria are abolished.

²¹ In October 2010, the UK Government announced plans to raise tuition fees up to EUR 10500

Chapter 7

Students in part-time studies

Authors

Andreas Bohonnek

Contributors

Daniela Proli



7.1 Introduction

The following chapter concentrates on the mode of studying. How important is studying as part of a students' life? How much time is spent for university, learning, employment and/or family responsibilities? What is the relationship between full-time and part-time students in the observed countries?

These questions are important because work and family responsibilities lower time for study related activities and may be important factors for study termination and failure. Research into reasons of study termination shows that study termination is often caused by workload: In the group of students who leave university before graduation, the share of students who spend more than 10 hours per week to work is about 60% and significantly higher than in the group who complete their studies.

58% of successful students working alongside studies spend only a maximum of 10 hours per week on own earnings. Job income by own earnings has an important effect on success of studies. The more time spend for job, the higher the risk of study termination. 27% of students having worked alongside studies refer to "financial problems" as a main reason for leaving university. In the group of not-working students only 7% end their studies because of financial problems (Heublein & Hutzch, 2009).

Part-time students are a very heterogeneous group with different needs: young students having to or wanting to work to increase income, older students coming back after years in employment, lifelong learners and parents with young children, for example. A common interest of this group is the compatibility of study and work and/or family responsibilities which means flexible arrangements and study plans which consider the special needs of this group. Part-time students cannot invest full working time in study progress which enlarges study time and risk of failure. Discrimination of part-time students by strict study schedules and time limitations should be avoided.

The variety of forms of part-time studies (distance learning, evening and weekend courses, programmes with official part-time status and de facto part-time status, etc.) and different underlying motivations (insufficient financial resources to afford full-time studies, need for

employed people to update their skills) may lead to difficulties in analysing the social dimension of part-time studies: Is a high share of part-time students an indicator for a lack of individual financial resources, a lack of access to Higher

Summary of findings

- A students' week consists of around 40 hours and amounts to over 50 hours in Lithuania, Latvia (with more than 25 hours work-related activities), Romania, Slovenia and Bulgaria.
- In the majority of countries students spend around 30 to 35 hours per week for study related activities like courses and personal study time.
- At EU-27 level the share of part-time students raised from 13,9 in 2000 to 18,2% in 2006. In the group of "older" students (30+) the corresponding share raised from 37,4% to 48,1%.
- Student employment is frequent in all countries and the rate is affected by age, field of study and social background. More than 50% of students in 11 of 22 European countries work alongside their studies.
- The employment rate of students with low SES is higher than among students with high SES.
- In 14 of 22 European countries the contribution of students' jobs reaches a substantial share of more than 40% of total income.
- The more time spend in job, the higher the risk of study failure.
- Even in countries where the state guarantees a basic salary to students like in the Netherlands, Germany and Finland the share of personal earnings remains above one third.
- 80% of all jobs have no close relationship to students' studies
- For German students with own home and high SES indirect support (child allowances, benefits paid to parents, tax exemptions...) is more than half of public support.
- The contribution to institutions of Higher Education as a proportion of total expenditures ranges from 22% in Turkey to 0% in Sweden, Scotland, Finland and Germany.

Education, or is the growing number of employed people updating their knowledge by tertiary education an indicator that access to Higher Education has been widened beyond traditional student population?

7.1.1 Empirical findings

A literature review shows that all studies of part-time students recognise that study is necessarily integrated with other activities, notably paid work and family responsibilities. These may conflict with the demands of study or provide support, or do both in a range of ways. Family demands and employment are the main reasons given for choosing part-time over full-time study, with domestic and caring responsibilities were cited as reasons for part-time study by 45% and 47% of respondents respectively. Furthermore, a characteristic of part-time students is that most are in employment, predominantly full-time but with a significant proportion of part-time. Very few students in part-time study were found to be unemployed per se though there were somewhat larger numbers who were not in employment, particularly women with caring responsibilities (Callender & Feldman, 2009).

A survey of graduates of part-time degrees found that the most common positive reasons for studying were interest in the subject, self-development and to gain a recognised qualification (over 80% for each reason). The authors found that enjoyment, progression, and personal development were more likely to be reported than finding a new job, improving their current job, and employment requirements (Feinstein et al., 2007).

The research of Callender & Feldman also investigated why students wanted to study part-time. The reasons for part-time study were overwhelmingly financial, 82% said they could not afford to give up their job. Family commitments were also very significant, especially for lone parents. Nearly two thirds of the sample found part-time studies “more convenient”, especially, where the respondents were distance learners, students over 40 and those with dependent children (Callender & Feldman, 2009).

Another study found with a sample of part- and full-time US College enrollers that age and contextual economic factors, especially the local unemployment rate rather than cost considerations per se, affected the choice of mode of study. Older students and those in areas with lower rates of unemployment were more likely to decide to study part-time.

7.1.2 Trends in studying part-time

The organisation and provision of part-time studies across the Bologna countries shows that the consequences of part-time studies differ between countries and some countries do not offer this form of studying.

Using the European Commission definition (See Definitions & measurement box), part-time students represent 19,3% of all students in the Bologna-Area and 18,2% for the EU-27. The share of part-time students ranges from 0 to 50% of the student population. The data trend demonstrates a clear growing tendency for Bologna and EU-27 Area: in the year 2000 the corresponding shares were only about 16,6 and 13,9% (Commission of the European Communities, 2009).

Definitions & measurement: part-time students

The European Commission defines a student as part-time *if the engagement is less than 75% of the study week or a student who is expected to be in the programme for less than the full academic year*. This definition is based on different measures, depending on specific national situations: academic value/progress, time commitment inside and outside the institutions where the programmes take place or time in classroom.

- Part-time students are less than 10% of the total student population in only three Bologna countries for which data are available: Czech Republic (4,2%), Denmark (7,9%) and Germany (4,0%). In five countries the share of part-timers is zero or negligible: Greece, France, Italy, Cyprus and Turkey.
- On the other hand, the share of part-time students account for more than 30% in Latvia (37,6%), Lithuania (40,4%), Hungary (46,3%), Poland (45,2%), Slo-

vakia (36,3%), Finland (38,4%), Russia (45,1%) and Ukraine (44,0%).

- In Sweden, just over half of students (50,5%) are part-timers, the highest share in the Bologna-Area. Also in Sweden we can observe with 36% the highest share of students with non-traditional routes to Higher Education (Eurostudent, 2008).
- In other European countries part-time students represent between 10% and 30% of those attending Higher Education.

At EU-27 level, around 18% of students in Higher Education (ISCED 5A) are studying part-time and the share of part-timers is about 48% among students older than 29. In half of the Bologna countries the proportion of part-time students is lower than 11% for students aged below 30. Half of the Bologna countries register more than 50% of part-time students among those aged over 30 (Commission of the European Communities, 2009). Also in the group of “older”, 30+ students, we can observe a clear tendency: The share of part-time students raises in the EU-27 countries from 37,4% in the year 2000 up to 48,1% in the year 2006. In the Bologna Area the corresponding share raises from 45,8% to 50,5%.

In all European countries the share of part-time students is at least three times higher in the age group 30+ than among the younger population, except in Finland and Sweden where it is around two times higher. The proportion of part-time students aged 30 and over is especially high in Bulgaria, Lithuania, Hungary, Slovenia, Slovakia and Croatia, where they represent more than 80%.

7.1.3 Formal and de facto part-time students

EUROSTUDENT provides another definition of part-time studies differentiating between students with a *formal* and a *de facto* part-time status. As regards formal part-time studies two groups of countries can be identified. In the first group almost ninety percent or more students have formal full-time status: Austria, Finland, Turkey, Latvia, Italy, Germany, Ireland, Estonia, Sweden, Switzerland, Bulgaria, Romania, Lithuania and the Netherlands. Within this group three countries report not having any students with official part-time status: Austria, Finland and Turkey. The second group consists of countries with a proportion of full time students ranging between 60% to 80%: Czech Republic, Portugal, Scotland, Spain, Slovenia, England/Wales and Slovak Republic.

Definitions & measurement: formal and *de facto* part-time students

The definition of formal part-time students, is based on a self-assessment by the students themselves made in the EUROSTUDENT questionnaire, in response to the question, “Which description best fits your current status as a student?”

As an, “objective” definition of part-time studies, the same survey determines full-time students who spend less than 21 hours a week on study-related activities as *de facto* part-time students.

England/Wales (30%) and the Slovak Republic (37%) have the biggest shares of students with official part-time status, followed by 21% in Scotland, 18% in Czech Republic, 15% in Slovenia and 14% in Spain and the Netherlands.

Country specific data shows a similar rate of students spending between 21 and 30 hours a week on study related activities (*de facto* part-time students) but not for those who spend less than 21 hours. In three countries: Finland, Slovakia and Estonia the share of full-time students with *de facto* part-time status is between 33 and 44% (Eurostudent, 2008).

Further exploration of the data shows that there is only one country, Slovakia, where the share of “regular” part-timers corresponds with the share of *de facto* part-timers (Eurostudent, 2008). In countries with a high share of *de facto* part-timers and a low share of students with official part-time status, the students should have the chance to take the official status. In most cases *de facto* part-time students are working alongside their studies, presumably to finance studying.

7.1.4 Types of part-time studies

There are four types of part-time studies:

1. Students enrolled in distance education. These students usually work and spend only part of their time for Higher Education studies.
2. Students attending evening and weekend courses at Higher Education institutions. These programmes are designed for students who work and therefore spend only part of their time on their studies, mainly outside working hours. These courses are offered by Higher Education institutions in addition to the courses for full-time students, mainly on evenings and weekends.
3. Students enrolled in 'normal' programmes, but with an official part-time status, which allow them to take less than 100% of credits per year compared with what is expected from full-time students. These students attend "normal" courses, but as a result of dedicating only part of their time to studies, the time until graduation would be expected to take longer than for full-time students.
4. Students who are enrolled as full-time students but spend only part of their time on study related activities.

One of the most significant differences between formal part-time and full-time students is that in some countries (England/Wales, the Netherlands and the Czech Republic) part-time students have to pay higher tuition fees and receive less state support for their studies. Other countries like Germany, the Netherlands and the Czech Republic have introduced special tuition fees for full-time students who take considerably longer to graduate than the expected duration (Eurostudent, 2008).

Part-time studies in Higher Education show a large variety: distance learning, weekend courses, programmes with official part-time status and de facto part-time status etc. and a broad variety of underlying reasons: insufficient financial resources to afford full-time studies or need for employed people to update their skills.

Frequency of part-time studying also depends on age: older students are more likely to study part-time to arrange their studies with financial independence and family duties. But there are also young students working for an increased income, older students coming back to university after years in employment, lifelong learners, young mothers etc.

7.2 Employment

Student employment is a main reason to study part-time and is common in all countries; the rate is affected by field of study, age and social background. Across Europe, more than 50% of all students work in half of the 22 observed countries.

In the Netherlands 75% of students are working during term, followed by 66% in Estonia, 65% in Slovenia and 65% in Germany. The minimum appropriate value for this group in Turkey is only 9%, followed by Portugal with 22% and Spain with 25%.

Definitions & measurement: employment rate

By the definition used in EUROSTUDENT, and quoted here, any student who works at least 1 hour per week is considered as employed.

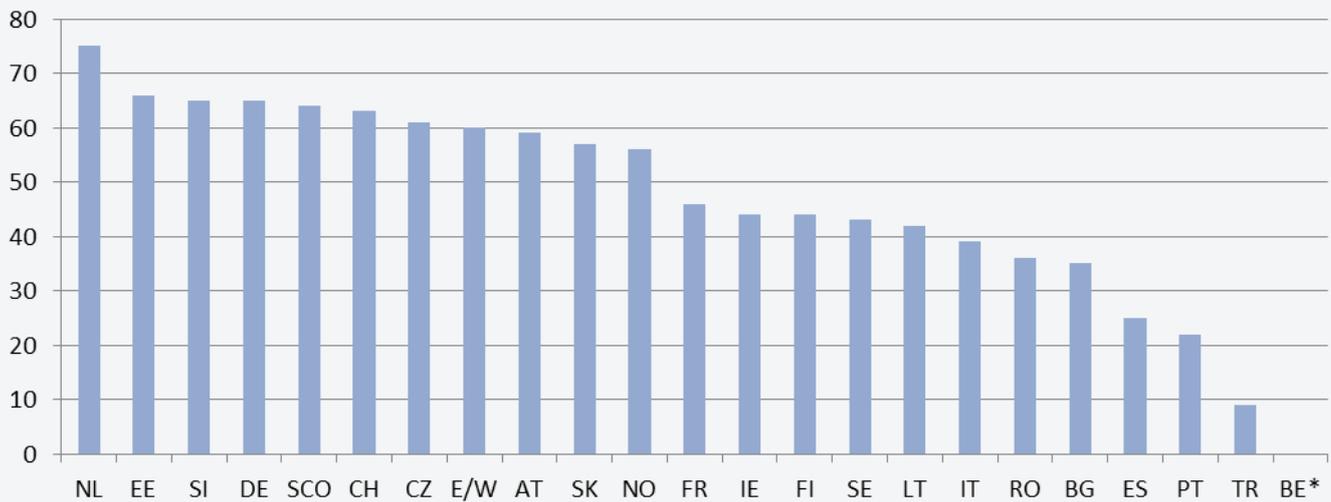


Figure 31: Employment rate during term, all students in %

Source: Eurostudent III, own calculations; *) no data available.

7.2.1 Importance of job income

The necessity of working alongside studies can be measured by the amount of job income to total income. The contribution of own earnings is very high in the Czech Republic, Spain and Slovakia, where more than two-thirds of working students' total income are covered by earnings.

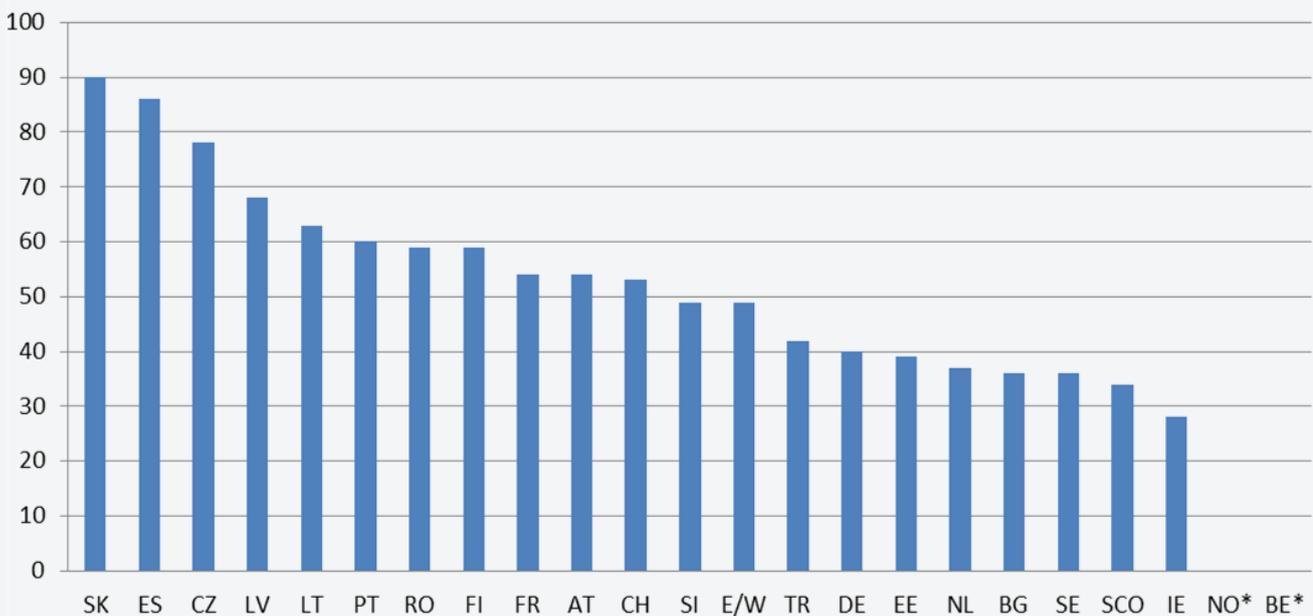


Figure 32: Contribution to working students' income made by gainful employment in % (students maintaining own households)

Source: Eurostudent III, own calculations; *) no data available.

In 14 of the observed 22 countries the contribution of students' jobs to their maintenance reaches a substantial share of more than 40% of their total income. Self-financing is a major source of student funding all over Europe, as far as students live outside of their family home. Even in countries where the state guarantees a basic salary or support to students like in the Netherlands, Germany and Finland, the share of personal earnings remains high, above one third.

The situation of older students (28+) shows that employment plays a more important role for this group. The prevalence of work is much higher in this group than for the average. The data shows that the numbers of countries in which over 70% of “older” students work at least one hour during the last week increases from three to 11. The highest employment rate in the group of “older” students with 95% in the Slovak Republic, followed by Estonia with 90%, Czech Republic with 88%, Slovenia with 86% and Finland with 85% (Eurostudent, 2008).

The analysis of employment rates by social background reflects the needs and expectations of different student groups, especially for those from a lower social background who are targeted in widening participation policies.

7.2.2 Employment rate and social status

Student employment rates differ by social origin in most countries. The employment rate of students with a low SES background is higher than among students with a high SES background (Schwarzenberger, 2008). Students from low SES are to a greater extent dependent on employment income during their studies. This difference occurs for data from all countries except Czech Republic, Turkey and Latvia. In Bulgaria, Portugal, Italy, Estonia and Spain the employment rate of students with low educational backgrounds is at least 1,4 higher than for students with high educational background (Eurostudent, 2008).

As employment is time consuming it competes with the amount of study-time which a student invests in his or her studies and may have negative consequences for effective study progression. When students from lower SES have to earn money and therefore work more to support themselves, they have less time left for studying than their peers from a higher SES, which could put them at a disadvantage; this would call for more public support to students from lower SES.

A students’ week consists of around or above 40 hours in all but one country (Ireland) and reaches over 50 hours in five countries: Lithuania, Latvia, Romania, Slovenia and Bulgaria. For Latvia and Lithuania the number of hours re-

Box 12: Building Higher Education around the learner and his/her life: the Open University in the UK

The Open University is the most famous distance-learning university, offering a wide set of programs to satisfy the different exigencies of a heterogeneous public of non-traditional HE students. Unlike traditional Higher Education institutions, which offer distance education and flexible routes as alternative options to mainstream provision, the OU is entirely based on open distance learning combined with a flexible approach which permits to build individual paths in Higher Education and conciliate studying with other commitments and daily activities. With this rationale, the Open University targets mostly non-traditional students with extra-study commitments, such as working adults, carers, and student parents. However, distance learning might be an option also for those who are willing to enrol in a Higher Education path but do not want/are able to leave home and move to a university town, either for financial or personal constraints.

Furthermore, the OU “open access policy” provides that no qualification is required for admission, while different form of access courses are offered to those who have been for long far away from education.

Education at OU is based on the so-called “supported open learning” model, a combination of distance education and continuous/close support on the part of a tutor, as well as different activities, including face to face meeting in the regional centres.

HE paths at the Open University are tailored on the individual student, according to his/her the specific preferences, who might choose to study part or full time and is offered the opportunity to schedule and re-schedule its study timetable and deadlines according to contingent necessities. Likewise, students can choose what to study on a course-by- course basis and decide when to catch up more workload and eventually aim at a diploma or degree, the OU being based on accumulation of credits from every single course. Students who works can also enjoy work-based-learning as part of a course; in this case activities that the student normally carries out in his/her daily work are used as a basis for learning, hereby lightening the study workload.

For more information:

Open University official website: <http://www3.open.ac.uk/>

ported result from a combination of both a high amount of study-related and work-related activities.

The average number of hours reported for study related activities (courses and personal study time) range between 25 hours per week in Estonia and Slovakia to up to 40 hours a week in Romania and Bulgaria (Eurostudent 2008: 121). In the majority of countries time spent on studies is around 30 to 35 hours per week.

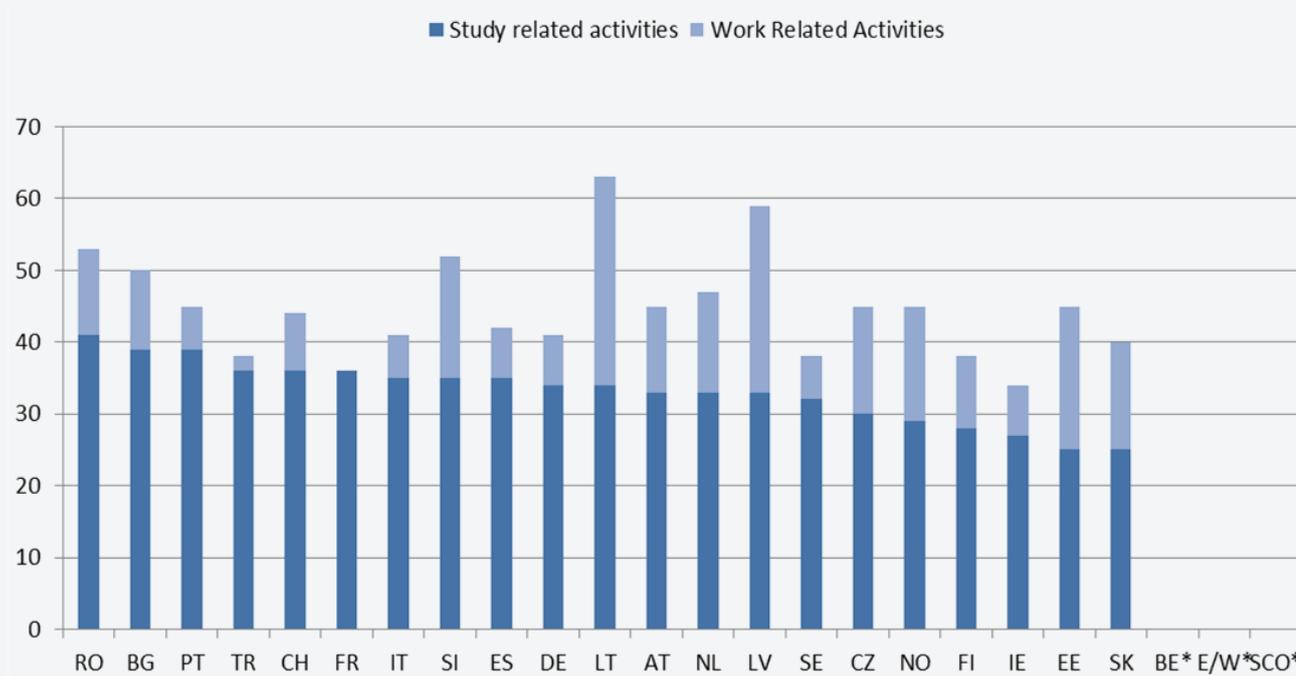


Figure 33: Time budget for study-related activities and for employment workload in hours/week

Source: Eurostudent III, own calculations; *) no data available.

Eurostudent (2008: 122f.) reports for nearly all countries investigated a clear negative relationship between time invested by students for employment during term and study related activities. The number of hours spent in courses and personal study decreases with the hours spent in work. However, employment may also have positive side effects: student jobs can be accompanied by learning effects which can support the whole learning process and help to find a job after graduation.

7.2.3 Relationship between work and study

Students' jobs range from simple activities that require no previous experience or academic knowledge to highly skilled work which requires knowledge gained during students' studies.

The EUROSTUDENT III dataset shows the extent to which students assess their jobs as relevant or related to their course of study. The data give an overall picture on the extent by which student jobs can be assessed as a positive contribution to career development, even if they reduce the time a student can directly invest in his/her studies. At least 20% of student jobs are closely related to studies. The data indicates that nearly 80% of all jobs have no close relationship to students' studies. The share of jobs closely related to studies ranges between 11% in Ireland and 38% in Norway, followed by 31% in Estonia, 29% in Austria, 27% in Czech Republic and 26% in Finland.

The correspondence between overall employment rates and the extent to which jobs are related to studies is also weak. Therefore, the extent of job-study-relation is not a quantitative question related to the availability of work in general (Eurydice network, 2009).

Chapter 8

Conclusions and recommendations

Authors

Anthony F. Camilleri

Contributors

Andreas Bohonnek, Dorit
Griga, Kai Mühleck, Dominic
Orr



8.1 Introduction

The aim of this first report of the EQUINET project, was in the first place to aggregate data from a number of sources, for the purposes of summarizing the status of access to Higher Education in Europe, and how it relates to equity, and secondly to understand the strengths and weaknesses of the current data gathering systems, so as to understand the first-hand, the issues faced with trying to measure, and eventually, trying to set out an indicator on equity in Higher Education.

In drawing conclusions for this report, we have tried to set the findings within the broader socioeconomic-political context in Europe at the moment, which is currently dominated by four factors, namely:

- Stated political imperatives to develop a high-skill, or ‘knowledge’, -based economy, to improve European competitiveness vis-à-vis the ‘tiger’ economies in East Asia and South America
- Austerity measures being undertaken by member states throughout the EU, and consequent severe limitations on public finances, particularly in light of the financial crisis of the last two years, and the ensuing slow-downs in economic growth throughout the European continent
- Continued European integration in the field of Higher Education, brought about by the continued expansion of the Bologna Process and the expanded powers of the Union after the Lisbon Treaty.
- Continued massification of European Higher Education, driven by explicit policies to expand Higher Education across the EU

The statistical findings of our report have already been summarized at the beginning of each chapter in the ‘Summary of Findings’ info box and are repeated hereunder for convenience. Following this, we outline our interpretation of the consequences of those findings, confirming them where possible by means of literature review, and we make recommendations as to how they can be leveraged to improve equitable access of Higher Education in Europe. In addition, we follow this with a short discussion as to the statistical barriers we have encountered in drawing up this report, and what this means for our goal of measuring equity in Higher Education in Europe by a set of appropriate indicators. We round up the chapter, with our recommendations on what is necessary for further research, some of which we will be taking up ourselves as a research team in the ensuing two years of the project.

8.2 Summary of findings

8.2.1 Entry into Higher Education

- On average 49% of the 16 to 34 year olds in Europe can expect to participate in Higher Education. Highest entry rates among the 16 to 34 year olds are found in Latvia (81%), Poland (73%) and Romania (69%). The lowest entry rates are reported for Cyprus (11%), Belgium (30%) and Germany (33%).
- Most European students enter Higher Education at the age of 19. Across Europe the typical age to enter Higher Education ranges from 18 to 21. In contrast, people aged 28 or above continue to have net entry rates below 5%. However, countries with high entry rates for this age group also tend to have high overall net entry rates.
- Regarding the policy aim of gender balance, across Europe young women meanwhile outnumber their male peers with respect to entry into Higher Education. Large gender gaps to the advantage of females are observed in Latvia (35%-points margin between male and female entries), Slovenia (25%), Iceland (24%), Denmark (23%), Norway (23%), Greece (21%) and Romania (20%).

- Correspondingly, underrepresentation of women has been bridged in five out of seven fields of education. Moreover, four out of the seven subject groups considered are already appropriately described as being “female-dominated”. However, science and engineering are still dominated by men.
- With respect to different routes to Higher Education across the European Union, on average 86% of secondary stage graduates of academic-profile school qualifications directly enter Higher Education. England and Wales, Sweden and Spain have relatively large share of students entering via alternative routes.

8.2.2 Access to Higher Education and socioeconomic background

- Students with a lower socioeconomic background, as measured by their parents’ occupational and educational status, have disproportionately low chances to access Higher Education in most European countries under investigation. The degree of socioeconomic inequity differs considerably across countries.
- Underrepresentation due to the socioeconomic background is lowest in Finland and in the Netherlands; representation of students with a disadvantaged occupational or educational background is also relatively good in Sweden and Ireland.
- In contrast, inequity caused by socioeconomic disadvantages are most pronounced in four Eastern European countries, namely Bulgaria, Latvia, Czech Republic, Slovakia, as well as in Germany.
- Countries with relatively low socioeconomic inequity show relatively high proportions of access to HE via alternative routes (e.g. adult education or recognition of prior learning).
- Socioeconomic differences are also visible with regard to qualitative aspects of Higher Education: On the one hand, young people with a high educational background prefer fields of study that award a particularly high status to those graduates or are financially most rewarding, such as law or health. On the other hand, they tend to study fields without a clearly defined vocational field, e.g. arts, social and behavioural science, or humanities.
- In contrast, students with a low educational background are more likely to study fields clearly leading to certain occupations. These fields of study constitute a ‘safe’ pathway to upward mobility and are often preferred by social climbers: business and administration, teacher training and education science as well as engineering and engineering trades.
- Another form of qualitative differentiation between the social strata is studying abroad. With the exception of Austria, students whose parents attained tertiary education, study abroad more frequently than their less privileged peers. This is specifically true Italy, Turkey, Slovenia, and the Czech Republic.
- Apparently, educational expansion has helped reducing inequity. At the European level, the chances of the educationally most underprivileged to graduate from Higher Education have increased over time. In the group aged 55-64 only 13% of all persons with a low educational background attained Higher Education. Among those aged 25-34 this share increases to 23%. Educational attainment of persons with a high educational background did not increase at the same pace.
- However, countries differ in that respect. Young people with a low educational background have benefited most in Spain, United Kingdom and France. Other countries where participation of underprivileged youths has increased, though to a lesser extent, are Cyprus, Luxemburg, Ireland, Poland, Greece, Sweden, Austria, and Denmark.
- In contrast, in five Eastern European countries participation rates have actually decreased in the groups of underprivileged young people. Those countries are Slovak Republic, Latvia, Estonia, Hungary and Lithuania.

8.2.3 Income and expenditure

- There are three sources of students' income: family, state and work.
- The cost sharing ratios differ considerably between country specific funding systems and social-economic status of students.
- In the Bologna Area, Higher Education institutions receive one fifth of their total resources from private funding.
- Students' income varies significantly by accommodation form. Family provision of accommodation is an indirect form of financial support.
- The parental contribution to students' income plays a key role for students with high SES (socioeconomic status); they receive significant more cash support from parents than students with low SES.
- For younger students (21-year-olds) direct family support is dominant in all but four countries where state support dominates.
- The percentage of first year students receiving state assistance (grants, scholarships, loans) varies widely by country, from 7% in Lithuania to 94% in Turkey.
- Working during studies is a significant income source. Its contribution to total income is over 20% in all countries, except Turkey.
- Student employment is frequent in all countries and the rate is affected by age and social background. More than 50% of students in 11 of 22 countries work alongside their studies. The employment rate of 21 years old students during term is about 43%.
- The financial significance of students' employment differs widely between countries. In the Czech Republic, Spain, and Slovakia more than three quarters of total income is derived from students' work.
- The share of paid work to students' income varies between 34% in the group living with parents and 18% who are living in own households.
- Accommodation is the most important cost for students maintaining own households. The range runs from more than 46% in Sweden down to 11% in Bulgaria, average at one third of total expenditure.
- For German students with own home and high SES indirect support (child allowances, benefits paid to parents, tax exemptions...) is more than half of public support.
- The contribution to institutions of Higher Education as a proportion of total expenditures ranges from 22% in Turkey to 0% in Sweden, Scotland, Finland and Germany.

8.2.4 Students in part-time studies

- A students' week consists of around 40 hours and amounts to over 50 hours in Lithuania, Latvia (with more than 25 hours work-related activities), Romania, Slovenia and Bulgaria.
- In the majority of countries students spend around 30 to 35 hours per week for study related activities like courses and personal study time.
- At EU-27 level the share of part-time students raised from 13,9 in 2000 to 18,2% in 2006. In the group of "older" students (30+) the corresponding share raised from 37,4% to 48,1%.
- Student employment is frequent in all countries and the rate is affected by age, field of study and social background. More than 50% of students in 11 of 22 European countries work alongside their studies.

- The employment rate of students with low SES is higher than among students with high SES.
- In 14 of 22 European countries the contribution of students' jobs reaches a substantial share of more than 40% of total income.
- The more time spend in job, the higher the risk of study failure.
- Even in countries where the state guarantees a basic salary to students like in the Netherlands, Germany and Finland the share of personal earnings remains above one third.
- 80% of all jobs have no close relationship to students' studies
- For German students with own home and high SES indirect support (child allowances, benefits paid to parents, tax exemptions...) is more than half of public support.
- The contribution to institutions of Higher Education as a proportion of total expenditures ranges from 22% in Turkey to 0% in Sweden, Scotland, Finland and Germany.

8.3 Interpretation of findings

Issue 1: The EU-27's Higher Education Area is not equitable

Taken as a whole, the EU-27 shows wide divergences in the level of equity of HE systems, a fact confirmed consistently by every indicator considered in this report. Figure 34 shows the differences between the highest and lowest performing country on a selection of indicators considered in this report. This report identified inequities in HE based on:

- Socioeconomic background (as defined by parents' educational and occupational background)
- Gender (both in terms of access, and more particularly in terms of qualitative access)
- Age (in terms of participation of adult learners in education)

In addition, the report finds significant differences in the income range of students attending Higher Education between countries. These findings are largely echoed by national governments in their stocktaking reports to the Bologna Process (Rauhvargers et al., 2009), as well as by the independent evaluation of the Bologna Process, which found 39 of 48 systems reporting inequalities in their student body. (Westerheiden et al., 2010)

Using the indicator of parents' educational and occupational background, it is found that the Netherlands, Finland, Sweden and Ireland have shown the most progress in bringing about an equitable system, while Bulgaria, Latvia, the Czech Republic, Slovakia and Germany have made least progress. A high correlation exists between overall funding levels of Higher Education and the level of equity/inequity. Thus, all four of the countries with the least inequity are also amongst the highest spenders on education, both in terms of % of GDP as well as on a EUR/capita basis. With the notable exception of Germany, those at the bottom of the list also show some of the lowest investments in Higher Education.

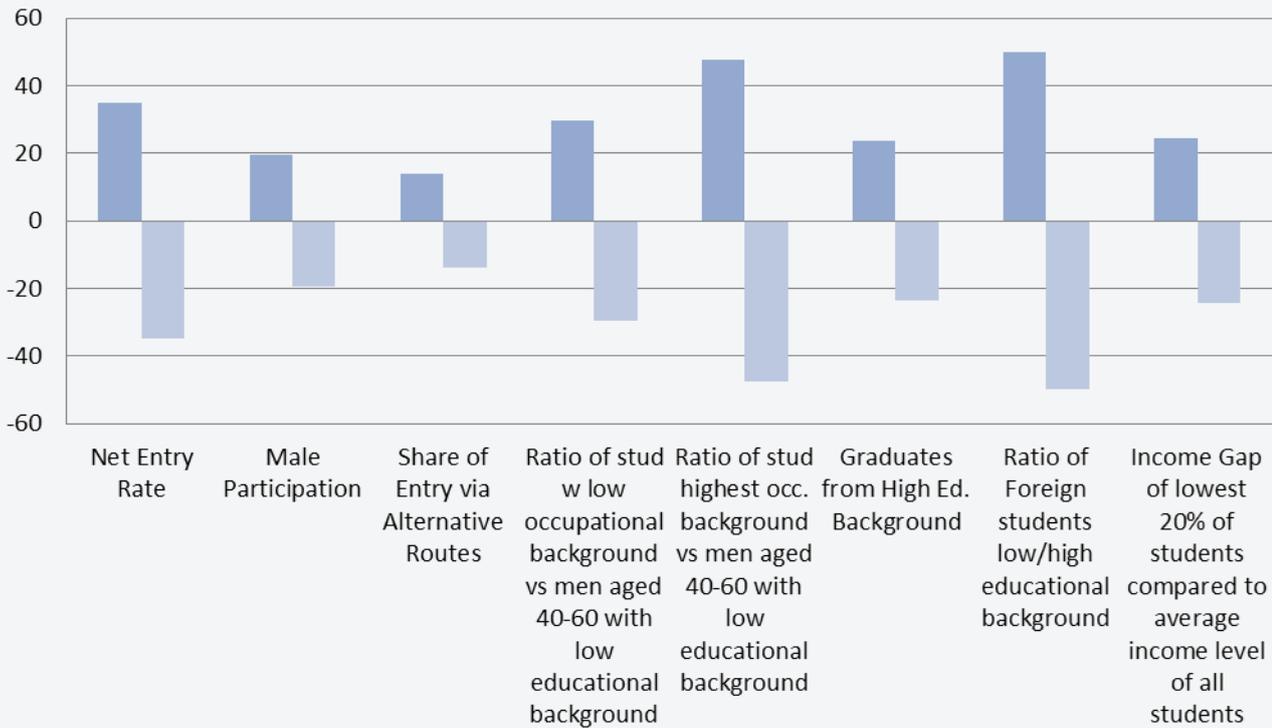


Figure 34: Percentage range from median between highest and lowest country for various indicators

Issue 2: EU Policies have been largely ineffective in addressing equity issues

Two recent studies commissioned by the European Commission found no link between Governance and Funding strategies promoted at EU level by means of the “Modernisation Strategy for Higher Education”²², and access to HE. (Jongbloed et al., 2010).

In the various policy documents linked to Higher Education issued by the European Commission in recent years, only two concrete proposals are made in relation to equity, namely that of generating higher investment in education through the introduction of tuition fees, and the offering of a more differentiated range of provision (Commission of the European Communities, 2006). The increase in the level of private funding is one of the elements of the modernisation strategy for education examined by the abovementioned studies, and, both when taken individually, as well as a part of the modernisation strategy as a whole, the study also finds no link between such a strategy and increase in access, let alone increases in equity.

Similarly, the “Independent Evaluation of the Bologna Process” finds that despite the fact that the first references to “Providing appropriate studying and living conditions for learners to overcome obstacles related to their social and economic background” (‘Bologna’ Conference of Ministers responsible for Higher Education, 2003) appeared in 2003, policy actions have been too late in coming to do any meaningful type of assessment on them. Similarly, it also finds that there is as of yet no evidence of access being widened, or increased inclusion of disadvantaged groups. (Westerheiden et al., 2010).

Current improvements in absolute numbers can be partially explained by the trend towards massification of Higher Education in recent years. With students from higher socioeconomic backgrounds already at higher levels of participation, it is natural for further growth to come from those with lower socioeconomic backgrounds. However, an increase in absolute numbers does not necessarily correspond with an increase in equity, as has been discussed in depth in Chapter 5 of this report. Additionally, a recent longitudinal study finds that, according to an equity index

²² An overview of these strategies is given in Chapter 1

based on the educational attainment and occupational status of both parents, equity in Higher Education has plateaued in the last decade (Koucký et al., 2010).

Our findings on the rate of development of equity, together with the above evidence, indicates that, insofar as they exist at all, policy directions at EU level have had little to no effect on equitable access to Higher Education, with developments in the field being exclusively due to the implementation on national policies. This also explains to some extent the regional clustering of trends as well as the large divergences between groups of countries in levels of equity and development of equitable policies.

Issue 3: Equitable access is increasing, but slowly

This report finds that the proportion of students from lower socioeconomic backgrounds accessing Higher Education has increased in absolute terms over the past decades. This said, this proportion has been increasing slowly, and assuming the current rate of progression continues, it would take c. 100 years for such students to reach the same participation rates as those from high socioeconomic backgrounds. This echoes the numbers found by other recent studies in the field (Koucký et al., 2010).

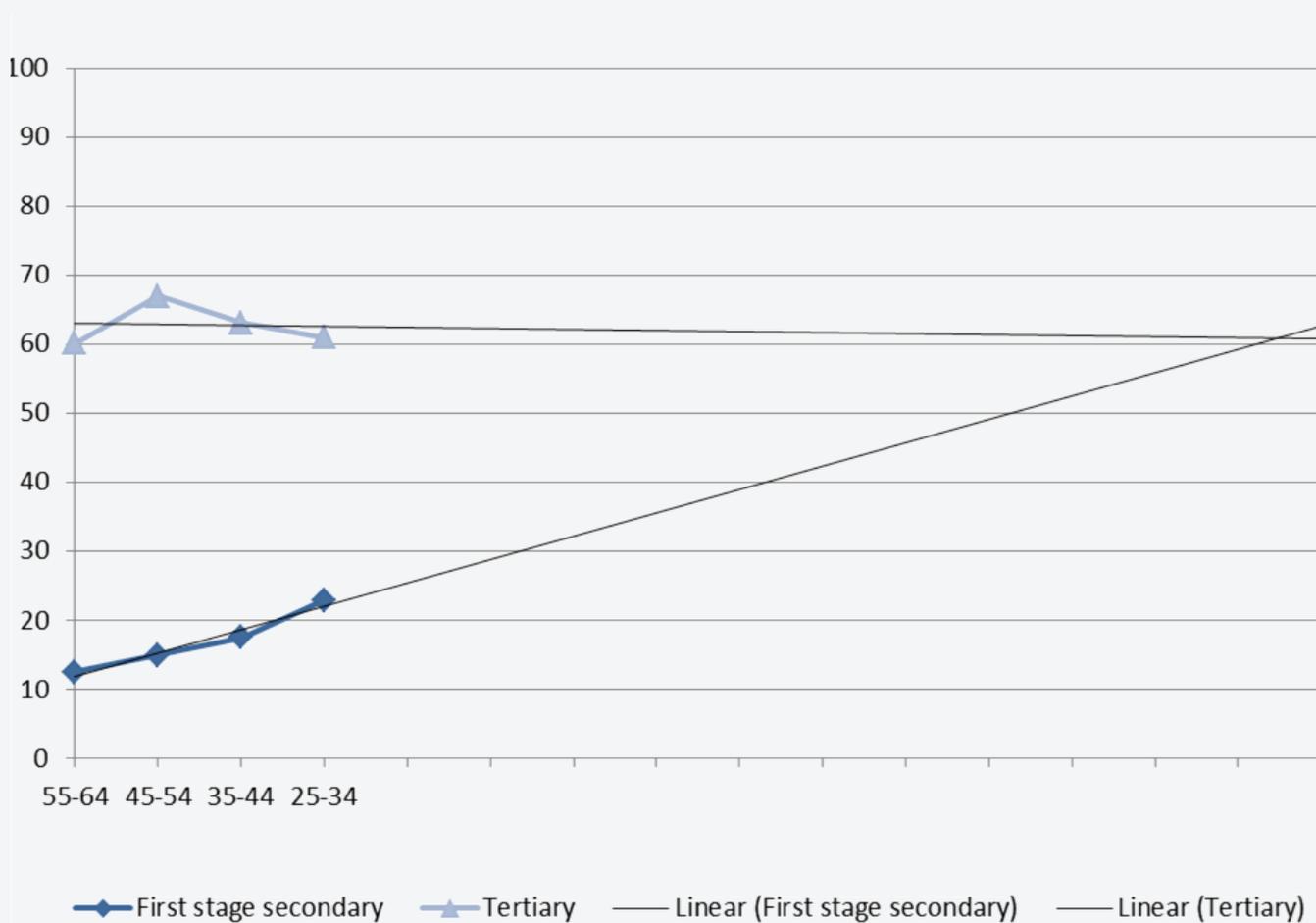


Figure 35: Percentage of individuals (aged 55-64, 45-54, 35-44, 25-34) in EU 27 countries having completed Higher Education, according to the educational background of their parents, 2005, and projection of growth rate into future in 10 year periods

Issue 4: Elites within Higher Education are a barrier to knowledge-economy growth

Skill-forecasts for the EU-27 show that the number of management-level in Europe until 2020 will more or less remain constant, with the main engine for growth will be for the jobs of ‘Professionals’ and ‘Technicians and Associate Professionals’, both of which are mainly composed of university-degree level jobs.

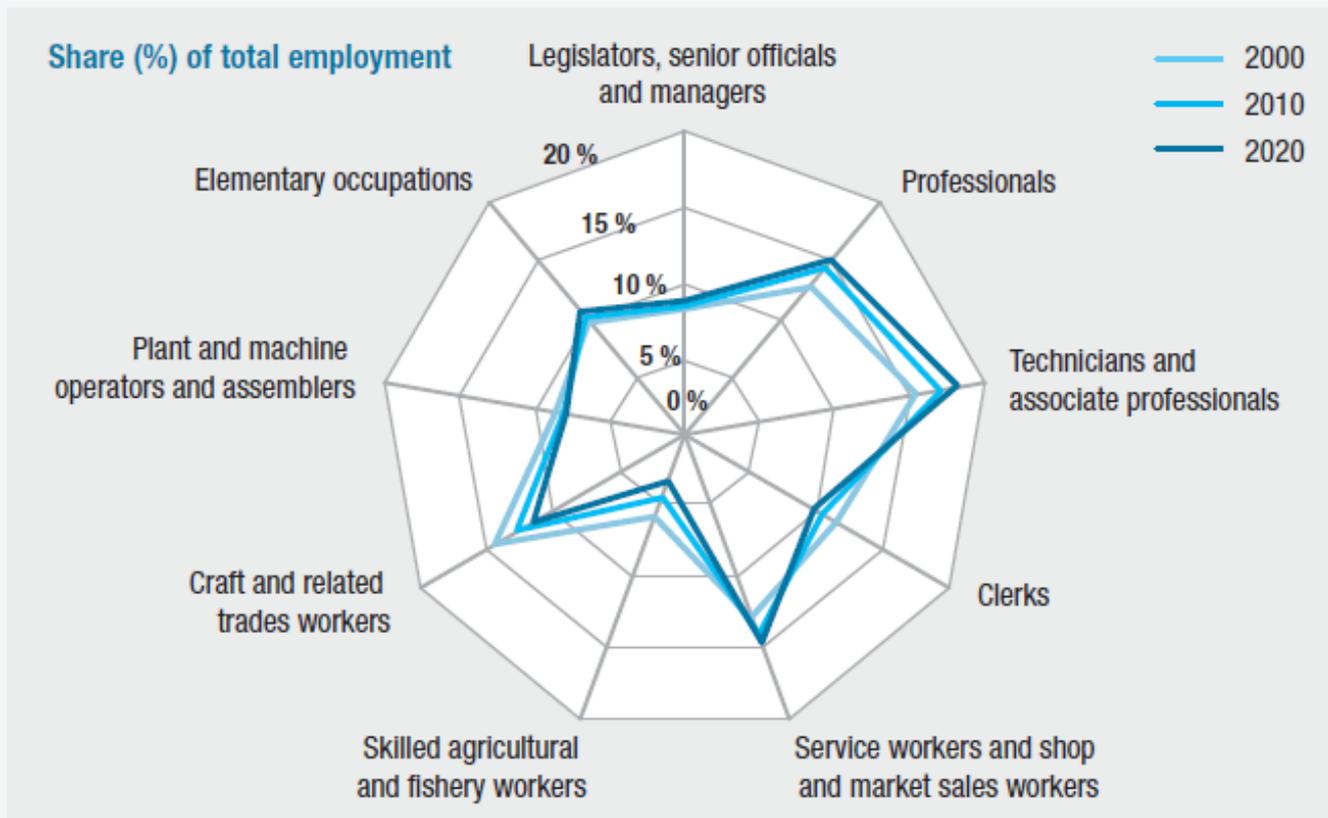


Figure 36: Forecast Share of % total employment for different profession classes, 2000 – 2020

Source: Cedefop. Note: Numbers in employment

Through the findings of our study, we note the following issues which are of importance in relation to these trends:

- The highest growth areas in terms of labour market participation, is in the field of ‘technicians and associate professionals’, which is ranked third out of nine in terms of occupational statuses. Since, the highest stratum (i.e. legislators, senior officials & managers) will experience next to no growth, and the second (i.e. technicians and associate professionals) only mild growth, equality of opportunities will require that the current attitudes towards subject and profession choice, especially amongst students from higher socioeconomic backgrounds, be changed. Without such reform, a barrier to entry to the highest level of professional status risks being created.
- It is widely recognised that prior job experience is particularly useful in the field of ‘Technicians and Associate Professionals’, whose studies often contain a strong vocational orientation (whether pursued at ISCED 5A or B). Currently, students from higher socioeconomic backgrounds chose to gain labour market experience during their studies much less frequently than their counterparts.
- The demand for high-level qualifications (defined as ISCED 5 and above) will increase significantly in the next 10 years. This will require an increased participation in Higher Education across the board, but cannot be achieved without significantly increasing the participation of under-represented groups

Issue 5: The STEM skill-gap is largely an issue of gender equity

This report shows an over-representation of females in teacher training, healthcare and the humanities while an underrepresentation of females in science, math and computing as well as in engineering. Europe’s skill gap is largely made up of a lack of graduates in the latter two fields. Thus, within this context, it emerges that the overall issue of skill mismatches is actually a matter of gender-related skill mismatch.

For example, an industry study shows that between 1999 and 2003, the EU-15 fell short in producing 200,000 graduates with e-skills per year, meaning an increase in the skill gap of over 800,000 graduates in 4 years (ICT Skills Monitoring Group, 2003). This figure is nearly equal to the over-supply of female graduates in the field of education & training.

Issue 6: Young persons from lower socioeconomic backgrounds are significantly disadvantaged

A student from a low socioeconomic background, in Europe is, when compared with his or her peers:

- Less likely to attend Higher Education
- Likely to choose different courses of study
- More likely to work during studies
- Far less likely to have a mobility experience

Consequently, they are more likely to become unemployed, more likely to earn less, and, assuming equity continues to increase at the historical pace, more likely to have children who also underperform.

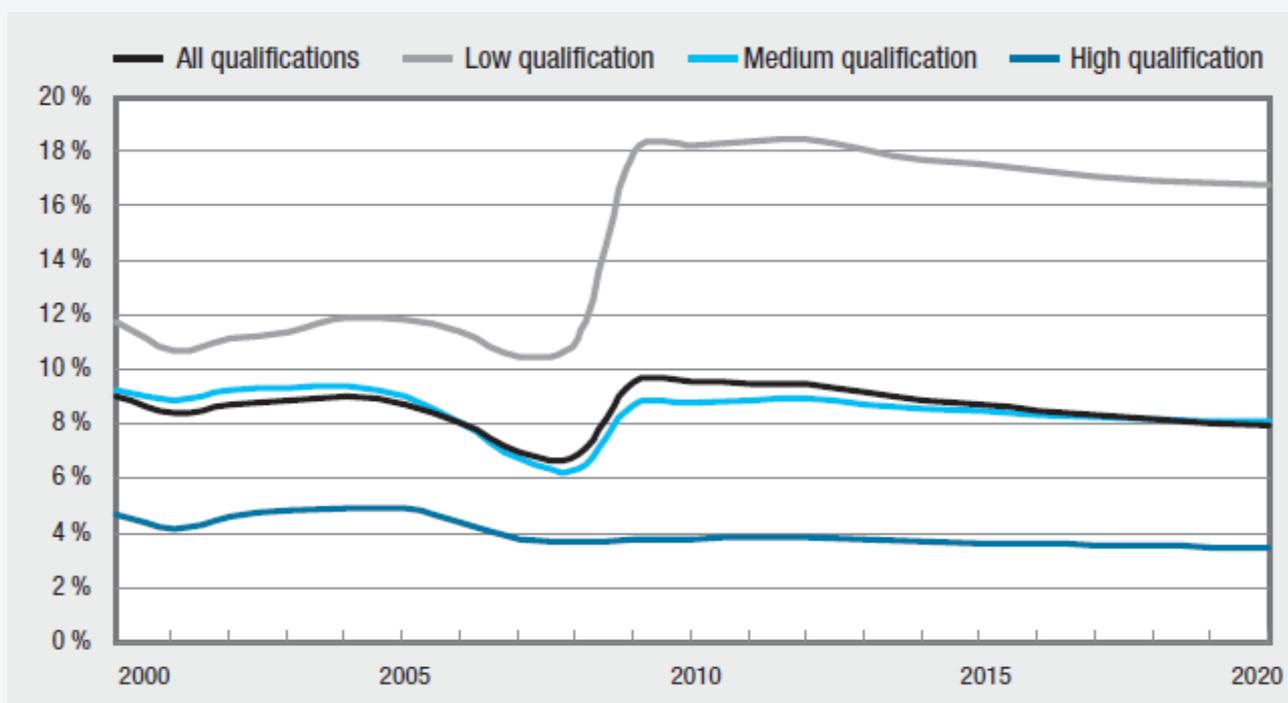


Figure 37: Projected unemployment by qualification level (Low = ISCED 1-3 Medium = ISCED 4, High = ISCED 5,6)
Source: Cedefop

Issue 7: Public funding decreases income disparities between students

Our report shows that the income disparities between students are lowest in Sweden, Scotland, Germany, the Netherlands, Finland, France and England/Wales. The countries which provide the largest levels of student support as share of student income are Sweden, Denmark, Switzerland, England/Wales the Netherlands, Austria and Finland. Statistically speaking, based on the entire Eurostudent dataset, these two variables show a correlation of -0,67 which is statistically significant.

While no empirical data can be uncovered as to the consequences of such a relation, it can be surmised that improved income equity amongst the student population also results in equity in a host of ‘learning environment’ factors related to student life, such as lodging, social life (including civic participation), access to educational

tools/materials (such as computers), mobility opportunities, etc, and thus presumably improving equity of opportunity amongst students.

Issue 8: Age-related inequity remains a barrier to workforce re-skilling

Despite the on-going roll out of systems for Recognition of Prior Learning and Informal Learning, this study shows that overall participation of adults, either as a first Higher Education experience, or as a return to education, while increasing, remains low (see Chapter 4.2.3). Taken against a backdrop of overall up-skilling of the workforce, together with violent drops in employment and predictions of sustained economic weakness in the short to medium term, this is of special concern.

While even within the context of lifelong learning, it is expected that the 18-25 age group would have by far the highest participation rate in Higher Education, we can deduce the presence of age-related inequity from the numbers of older persons who would stand to benefit from Higher Education and have the theoretical opportunity to do so, but do not choose to participate.

Issue 9: Cultural Attitudes significantly affect participation

Statistics for EU OECD members, show that for a person over a lifetime, the net gain of participation in Higher Education (after taxes, school fees etc.) is c. 90,000 EUR²³ (OECD, 2010). While it is clear that multiple entry barriers may exist for students with a lower socioeconomic status, including funding limitations, quality of primary and secondary schooling, at-home learning resources available etc., rational choice theory would seem to dictate that a higher percentage of students would overcome these barriers, than those which this report shows actually do, considering the significant and incontestable monetary benefits of Higher Education (not to mention the numerous other non-monetary benefits).

The uncontrolled-for variable here is that of 'cultural capital', which, judging by participation rates, seem to show very significantly affects access to Higher Education, as evidenced by variations in PISA scores based on elements of cultural capital. Within this context, cultural capital has been described as including patterns of communication between parents and children, family support for their children's learning, home resources related to educational activities, family wealth, 'cultural' possessions and activities, reading habits and more (Finnie & Mueller, 2010).

Closely related to this theory is that of 'social costs', whereby social background in and of itself can act as a barrier to Higher Education. This can manifest itself in phenomena such as peer pressure actively discouraging pursuit of education, the most extreme example of which might be within the street-gang subcultures present in most Western cities to varying degrees.

Issue 10: A High Net Entry rate does not necessarily indicate an equitable HE system

When comparing the best- and worst- performing countries, defined as a compound indicator of parents' occupational and educational status, (see Fig. 13 & 14) with the overall net entry rates, one finds little to no correlation, indicating that policies to increase overall participation, do not necessarily benefit the most disadvantaged groups. Fig. 38 below shows net entry rates across Europe, while the countries highlighted in green and red are a selection of the best-performing (green) and worst- performing (red) countries in terms of equity as above defined respectively (see Chapter 5 for how the country groups were formed).

²³ Calculated from dollar rate at Exchange of 1USD = 0.71 EUR

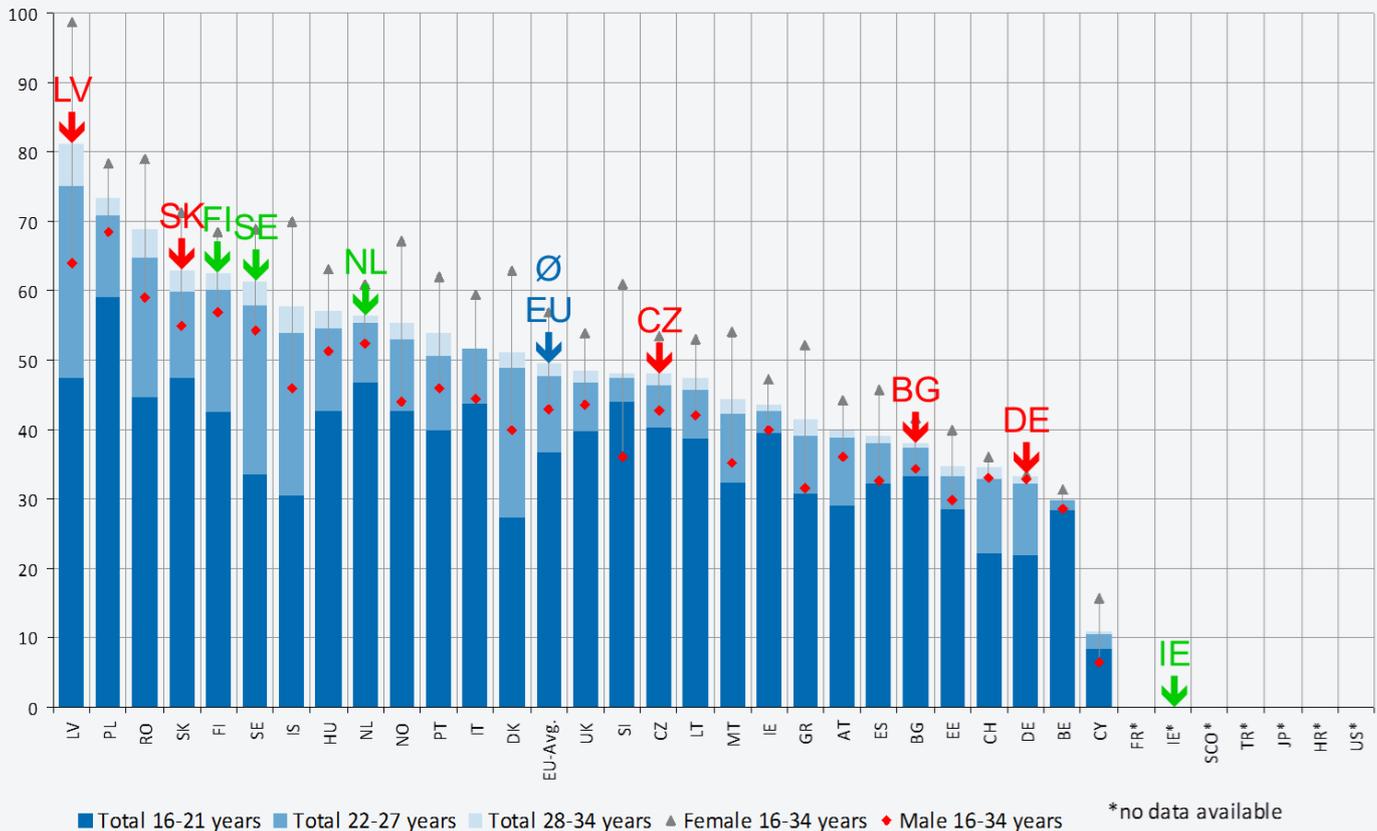


Figure 38: Net Entry Rates to Higher Education compared with best- and worst-performing countries on equity indicator.
Source: Eurostudent III, own calculations

Issue 11: Validation of Prior Learning Seems to Improve Equity in Higher Education Systems

Our data leads us to hypothesise a link between recognition of prior learning (RPL) and equity. Five of the worst-performing countries on our occupational/educational status equity indicator (Germany, Bulgaria, Czech Republic, Latvia, Slovakia) show practically no entries to Higher Education through this type of alternative route. Consequently, countries with developed RPL systems also perform better on the equity indicator. Data on RPL is not extensive enough to definitively confirm this hypothesis; however the data available does indicate a strong probability of its accuracy.

Issue 12: Economic recovery is to a large part an issue of educational equity

In the past few pages, using data from this report, we have shown that:

- Gender Equity issues are exacerbating skill mismatches by profession/subject in Europe
- Age-related Equity issues are preventing reskilling of the workforce
- Socioeconomic Background Equity issues, are choking the pipeline for graduates with high qualifications in Europe

While an element of Europe’s much vaunted ‘growth and jobs’ policies for the last several years, the demand for a shift in Europe’s skill base has grown sharper, due to the tectonic shifts in the global economy thanks to the financial crisis, and especially due to a drastically changed employment landscape owing to the mass lay-offs that ensued from the crisis. Taken in this light, it becomes clear that Europe’s skill challenge and the aim of reaching an equitable Higher Education system are intrinsically linked, and need to be dealt with in concert.

8.4 Comments on data collection

8.4.1 Lack of data

In preparing this report, we have been struck by the surprising lack of data about students in general throughout the European Higher Education Area, which is described in detail in Chapter 3.3.1. This lack of data has been echoed by the Bologna Process Stocktaking Report, where it deals with Stocktaking of National Strategies for the Social Dimension (Rauhvargers, Deane, & Pauwels, 2009). At the current time, we identified four main international data sources for measuring equitable access to higher education, namely Eurostat, Eurostudent, OECD and the National Stocktaking Reports on the Social Dimension (as part of the Bologna Process). Of these, the last two are of little use in comparative research, since the OECD report on equity was only issued in 2007, while the National Stocktaking Reports are so general as to be impossible to compare empirically in any useful manner.

Reflecting the definition of equity as “the student body entering, participating in and completing Higher Education should reflect the diversity of our populations” (‘Bologna’ Conference of Ministers responsible for Higher Education, 2007) seems to indicate that a successful measuring strategy for access would at very least at its base contain qualitative data as to the nature of the student body entering Higher Education.

Unfortunately, the main international data providers only provide aggregate data as to students’ sex and age related to parents’ occupational and social status, and to some extent, origin. Thus, interpretations of diversity which include ethnicity, race, colour, disability, family conditions, family income etc. are all impossible due to a lack of data in the main sources. On the other hand, micro-level data does exist for outcomes of education, in terms of professions, subjects studied, as well as detailed information as to participation in the labour force.

Thus, while current statistics cover the ‘majority’ disadvantaged groups, i.e. by gender and by socioeconomic status, we can glean no information on the state of minority access and participation to Higher Education, except through select studies involving primary research by individual researchers or Non-Governmental Organisations (which were outside the scope of this report).

8.4.2 Lack of definition as to the concept of a higher education qualification

Practically all statistical systems use the ISCED system for classification of education to define educational levels statistically. However, the rise of ‘advanced’ vocational education, and the increased blurring of the difference between ‘vocational’ and ‘higher’ programmes within the education system is leading to distortions in the statistics. The problem, lies at a number of levels:

ISCED 3A and 4A

ISCED 3A is broadly defined as ‘secondary programmes designed to give access to level 5A (with level 5 being tertiary studies), while ISCED 4A is broadly defined as ‘post-secondary, non-tertiary programmes designed to give access to level 5A’. However, the streaming system into vocational and upper secondary schooling has in recent years evolved with the creation of several alternative routes to Higher Education across most of Europe. Thus, statistics looking at entry into 5A as a percentage of 3A and 4A (see Figure 7) find that 12 countries (RO, SI, LV, CH, PT, IS, NO, MT, DK, ES, AT, NL) have entry rates higher than 100%, thus limiting the use of this statistic.

ISCED 5

The ISCED 5 (tertiary) level, shows many of the same problems. Higher Education is generally equated with 5A, while VET is equated with 5B. The Table below shows the differences between the two:

ISCED 5A	ISCED 5B
<ul style="list-style-type: none"> • It involves a minimum cumulative theoretical duration (at tertiary) of three years' full-time equivalent, although typically it is of 4 or more years. If a degree has 3 years' full-time equivalent duration, it is usually preceded by at least 13 years of previous schooling (see paragraph 35). For systems in which degrees are awarded by credit accumulation, a comparable amount of time and intensity would be required; • it typically requires that the faculty have advanced research credentials; • it may involve completion of a research project or thesis; • it provides the level of education required for entry into a profession with high skills requirements (see paragraph 84) or an advanced research programme 	<ul style="list-style-type: none"> • it is more practically oriented and occupationally specific than programmes at ISCED 5A, and does not provide direct access to advanced research programmes; • it has a minimum of two years' full-time equivalent duration but generally is of 2 or 3 years. For systems in which qualifications are awarded by credit accumulation, a comparable amount of time and intensity would be required; • the entry requirement may require the mastery of specific subject areas at ISCED 3B or 4A; and • it provides access to an occupation.

Table 9: Comparison of ISCED 5A vs. ISCED 5B

In practice, it is unclear how to classify a number of qualifications, such as advanced computing courses offered within vocational institutions, or short cycle degrees offered within Higher Education Institutions. The confusion has led some organisations, such as CEDEFOP to do away with 5A and 5B entirely, and just term 'higher qualifications' as ISCED 5 and 6 together, which while more accurate, decreases the specificity significantly. The two clearest examples of such deviations in our data are in the numbers for Cyprus and for Germany. In the former case, overall participation seems to be lower than it is due to advanced degrees being offered within VET institutions, while in the latter case, the qualifications by fathers' occupational and educational backgrounds are likely to be off, due to the advanced degrees being offered by VET institutions.

Mis-collection of data

While data on the exact collection method isn't available by country, many countries still term their institutions in terms of Vocational and Higher Institutions. For statistical purposes, all students following degrees within the first type of institution are termed 5B and all students within the latter are termed 5A. Alternatively, any qualification called a degree is classed 5A, while all other qualifications are termed 5B if awarded at tertiary level. ISCED was designed to be applied on a programme not on an institution or qualification level, however interpretation of statistics indicate that this is often not the case.

8.4.3 Evidence of good practice is limited

While some correlations, such as e.g. between overall level of funding and equity can be made, generally speaking the EU-wide statistics offer few direct examples of good practice in increasing equity. Division of statistics by region or by type of educational system can be helpful in increasing specificity, however even these categorisations offer significant exceptions and deviations, due to the sheer variety of educational systems within the EU. Due to this, qualitative data is needed on the effects of particular policies on access at national or regional levels, which can then be compared with similar initiatives from different countries and tested in pilots. At the moment, most of this data is

available in individual publications from academic authors, or from the 10 country studies (of which 6 are in Europe) done as part of OECD's thematic review into equity in education. The best potential source in the long run will be the stocktaking reports of the Bologna Process, which as of the last edition, asked for information about practices in the countries, but which received answers which were too abbreviated and general to be of any analytical use.

8.5 Policy recommendations

Recommendation 1: Implement the open method of coordination in achieving equity in Higher Education

This report has consistently shown that access to Higher Education in Europe is currently not equitable, and furthermore that the policy framework currently in existence is too lightweight to be effective. Thus, for reasons of social justice as well as economic necessity, we recommend that a policy initiative on equity in education be introduced, within the framework of the Open Method of Coordination, using a firm set of *indicators* and *benchmarks* to set targets, monitor and assess progress.

Such a policy framework could be built on the valuable work done within the Bologna Process on the social dimension (Rauhvargers et al., 2009), as well as from the Council Conclusions on the Social Dimension of Education and Training (Anon., 2010).

Recommendation 2: Clearly position equity in Higher Education as a topic within the European Commission's peer learning clusters

The lack of clear links between European-level policy priorities and the progress of equity, makes the discovery and sharing of good practice of paramount importance. The highest level of such good practice sharing occurs within the so-called 'Peer Learning Clusters', set up as a support tool to the Strategic Framework for European Cooperation in Education and Training. Bringing together high-level government representatives, the peer-learning clusters have operated under the E&T 2010 programme, with two clusters which might have dealt with sharing best practice on equity in HE, namely a cluster on 'Access and Social Inclusion' and another one on 'Modernisation of Higher Education'. During this initial period of action, neither cluster dealt with equity issues in Higher Education except in the most marginal of ways²⁴. Our recommendation is therefore to either create an explicit role for equity within the new Modernisation of Higher Education grouping (as part of the ET2020 support), or, preferably to create a specific grouping dealing with Strategic Objective 3 of the ET2020 programme – 'Promoting equity, social cohesion and active citizenship' (Anon., 2009).

Recommendation 3: Increase supply of places in Higher Education for under-represented groups

Research has shown that one of the key determining factors for entry into Higher Education of underprivileged groups is that of supply of study-places (Field et al., 2007). Legislation mandating increases in the amount of study-places offered for students from underprivileged groups, for example through mandated minimums in numbers of students from such groups, or financial incentives for institutions enrolling them, could be extremely helpful in upping student numbers. While, in specific cases, this might lead to policy complications due to over-subscription compared to labour-market needs, skill forecasts show that overall, there is currently an under-supply of graduates

²⁴ Minutes of the cluster meetings are not publicly available. Information based on case studies made available as part of the Knowledge System for Lifelong Learning Portal at <http://www.kslll.net>

which needs to be addressed. This means that, for the time-being, such policies can be implemented without jeopardising places/access for the groups currently accessing Higher Education.

Recommendation 4: Improve social support for adult learners

This report shows an acute case of (likely passive) age-related discrimination in terms of equity. Case studies from around Europe show a mixture of policies, ranging from special incentives for adult learners on the one side to cost-related disincentives not present for traditional students on the other side. We therefore recommend a three-level support package be introduced for adult learners who are taking their first tertiary qualification, or who are re-skilling due to labour market exigencies (the latter within the frame of a programme offered by the employment services):

- Equivalent financial conditions (in terms of fees and support) as those of traditional students
- Family support equivalent to that offered to unemployed persons, where the student has dependents
- Government-backed preferential loans as necessary

Recommendation 5: Urgently meet the 2% GDP-expenditure target on Higher Education through public funding

This report has demonstrated that the goal of achieving equity benefits from increased investment in Higher Education. While equity in access, through increased participation of under-represented groups, is improving, at the current-rate, it will take nearly a century for students from lower socioeconomic backgrounds to catch-up (See Issue 3). Apart from the obvious questions of social justice, in the meantime skill shortages and mismatches are limiting economic growth rates across the EU, especially when compared to developing economies.

Using data from OECD, one can estimate an average rate of return of 300-400% for the public purse on investments made into the education of a student in Higher Education, with lifetime net profit for the state reaching on average €60,000²⁵ (OECD, 2010).

While we acknowledge that, in financial terms, private returns on Higher Education are also extremely significant, we believe that the current economic climate and the demands of equity, demand a significant public investment now for the following pragmatic reasons:

- Skill forecasts show that continued economic growth in Europe requires urgently increasingly numbers of graduates in the short-term. Only public funding can be mobilised in sufficient quantities and with the required urgency to make the desired effect in time
- Europe shows a significant equity gap between persons from lower and higher social backgrounds. The promise of higher private returns has not to this point been sufficient to overcome the barriers imposed by cultural capital for persons from lower social backgrounds
- In a climate of public deficit reduction and quests for efficiency, education generally, and Higher Education more specifically, guarantees a particularly high rate of return on investment for the public purse

Recommendation 6: Optimise EU-funding programmes for equity related expenditures

Several EU Funding schemes are currently used for investments into education, most notably the Lifelong Learning Programme, and the European Regional Development Fund, as well as, to a certain extent, European Structural

²⁵ Statistic converted from USD at rate of 1 USD = 0.71 EUR

Funds. All these funds should be optimised to prioritise equity-related developments. While the European Council has encouraged member states to make use of these funds for equity related issues already, (Anon., 2010), specific priorities within each of the programmes would reserve some of the funding for equity issues, and increase the importance of equity amongst policy priorities for funding amongst those applying for the same.

Recommendation 7: Improve effectiveness of student guidance & counselling services at all levels of education

Using data from throughout this report, this chapter has made the case that:

- The issue of labour-market skill mismatches is closely linked to equity
- Cultural Capital plays an important role in life-decisions regarding education
- Private returns from Higher Education are likely often under-appreciated

Overcoming these issues requires an investment in improving student guidance services to the end of:

- Having sufficient guidance capacity to individually mentor students
- Formulating guidance strategy with stakeholders so as to be able to adequately reflect career prospects in advice
- Training guidance counsellors to clearly articulate the benefits of Higher Education, and on offering assistance at overcoming barriers

We further suggest that such improvement in guidance and counselling services is only achievable through close cooperation between such services at primary, secondary and tertiary levels of education.

Recommendation 8: Empower civil society in the enrichment of cultural capital

The authors of this report postulate that a minor's cultural capital comes essentially comes from four sources, namely parents, school, civil society and peers. Public policy can only have limited effect on the attitudes of parents and peers, while the influence of school can be properly modulated through effective guidance and counselling services. We recommend, that in addition to this, considering the significant transformative potential they have on a minor's cultural capital, that **governments formally rally civil society around goals of equity in education**. There are numerous techniques which can be used for this purpose, including coalitions, themed years, funding schemes, NGO-government campaigns in school, volunteering schemes etc.

Recommendation 9: Investigate the appropriateness of the EQF as a measure for the measurement of educational level in Europe

The European Qualifications Framework was developed in the last few years by the European Commission as a meta-framework to accurately describe the level of every qualification in Europe, in terms of knowledge, skills and competences, and by extension, every educational programme in terms of the EQF level it gives access to. By using this system it does away with the distinction between VET and Higher Education altogether, and instead embraces a concept of equivalence of qualifications in terms of what could be best described as 'level of expertise'.

Each country with the EU is currently in the process of mapping its qualifications to the EQF, so that, by 2012, every qualification and course in Europe will be mapped to a qualification level. In light of the current on-going reform of the ISCED, we would recommend that the possibility of mapping the EQF to the ISCED for comparative education studies in Europe be investigated.

Recommendation 10: Increase specificity of data collection on the social dimension within Europe

In light of the large data gaps in trying to measure equity in Europe at the moment, we would suggest the following reforms be made to the large European data-collection mechanisms:

- Eurostat should ensure that numbers on entry into Higher Education indeed include all 5A programmes (not institutions or qualifications) and issue guidelines to standardise interpretation of the level of programmes
- Eurostat should further begin to produce crosses of educational entry, participation and completion for the largest of the cross-European minority groups into Higher Education
- The Eurostudent survey might collect more data on the nature of respondents to the survey, in terms of criteria such as race, ethnicity, disability, rural/urban etc.
- The Stocktaking Report on the Social dimension should attempt to (a) standardise data gathering much more tightly, to allow better comparability of reports, (b) emphasise collection of detailed best practice in terms of empirical evidence of policy successes for sharing of knowledge

8.6 Conclusions for further research

Based on the initial findings of this study, and our attempts to formulate an indicator on equity, we suggest that the following research is needed in the field of equity in Higher Education:

- An investigation into the elements of cultural capital, and how different groups' cultural capital affect entry into Higher Education. While some initial work on this area has been done using PISA data, very little to nothing exists for the EU as a whole, across a range of disciplines and social groups
- A survey of policy trends in equity in Higher Education, gauging the attitudes of policymakers towards the topic in light of financial austerity measures.
- Comparative Qualitative Research into the practices implemented to improve equity within all EU member states, for the purpose of identified good and bad practices, as well as elements of transferability across the European Union
- Statistical Surveys on access for a select number of minority groups, or rather, increased differentiation of the currently available statistics by a predefined set of groups, determined to be reflective of the 'diversity of our society'
- Further investigation into the link between skills shortages and equity issues.

This report also suggests a number of specific research questions which merit further investigation, based on our data. These include:

- Whether the provision of more routes to enter Higher Education via 'alternative' routes improves overall access to Higher Education in quantitative terms.
- Whether multi-track education systems (i.e. those which involve several changes from one stage to another) pose higher access barriers than systems with fewer tracks
- The nature of the link between high levels of part-time work during studies (10h+ per week) and dropouts

Future EQUINET reports will focus on some of these issues, with the second report putting a particular emphasis on access levels for various minority groups to enter Higher Education.

Appendices

Annex 1: Bibliography

Annex 2: Net entry rates by age and sex

Annex 3: Indices of figures, boxes, and tables

Annex 4: Authors' biographies



Annex 1: Bibliography

- Altbach, P.G. & Davis, T.M., 2004. Global Challenge and National Response: Notes for an International Dialogue on Higher Education. In Ballantine, J. & Spade, J. *Schools and Society. A Sociological Approach to Education*. Thomson Wadsworth.
- Anon., 2009. Council conclusions of 12 May 2009 on a strategic framework for European cooperation in education and training ('ET 2020'). *Official Journal of the European Union*, (C119), pp.2-10.
- Anon., 2010. Council conclusions of 11 May 2010 on the social dimension of education and training. *Official Journal of the European Union*, (C135), pp.2-7.
- Archer, L., 2007. Diversity, equality and higher education: a critical reflection on the ab/uses of equity discourse within widening participation. *Teaching in Higher Education*, 12(5-6), pp.653-53.
- Arum, R., Gamoran, A. & Shavit, Y., 2007. More Inclusion than Diversion: Expansion, Differentiation, and Market Structure in Higher Education. In Arum, R., Gamoran, A. & Shavit, Y. *Stratification in Higher Education: A Comparative Study*. Stanford: Stanford University Press.
- Becker, R., 2000. Klassenlage und Bildungsentscheidungen, eine empirische Anwendung der Wert-Erwartungstheorie. *Kölner Zeitschrift für Soziologie und Sozialpsychologie*, 52(3), pp.450-74.
- Becker, R. & Lauterbach, W., 2004. *Bildung als Privileg? Erklärungen und Befunde zu den Ursachen der Bildungsungleichheit*. Wiesbaden.
- Blau, F.D. & Kahn, L.M., 1995. The Gender Earnings Gap: Some International Evidence. In Katz, L. & Freeman, R. *Differences and Changes in Wage Structures*. Chicago: University of Chicago Press. pp.105-43.
- Blossfeld, H. & Shavit, Y., 1993. Zur Veränderung des Einflusses der sozialen Herkunft auf die Bildungschancen in dreizehn industrialisierten Ländern. *Zeitschrift für Pädagogik*, (39), pp.25-52.
- 'Bologna' Conference of Ministers responsible for Higher Education, 2003. *Realising the European Higher Education Area*. Prague.
- 'Bologna' Conference of Ministers responsible for Higher Education, 2005. *The European Higher Education Area - Achieving the Goals*. Bergen.
- 'Bologna' Conference of Ministers responsible for Higher Education, 2007. *Towards the European Higher Education Area : Responding to challenges in a globalised world*. London.
- Boudon, R., 1974. *Education, Opportunity and Social Inequality: Changing Prospects in Western Society*. New York.
- Bourdieu, P., 1974. The School as a Conservative Force: Scholastic and Cultural Inequalities. In Egelston, J. *Contemporary Research in the Sociology of Education*. pp.32-46.
- Bourdieu, P., 1979. *Distinction: A Social Critique of the Judgement of Taste*. Harvard: Routledge & Kegan, Harvard University Press.
- Bourdieu, P., 1983. Ökonomisches Kapital, kulturelles Kapital, soziales Kapital. In Kreckel, R. *Soziale Ungleichheiten*. 2nd ed. Göttingen. pp.183-99.
- Bourdieu, P., 1996 [1989]. *The State Nobility: Elite Schools in the Field of Power*. Cambridge: Polity Press.
- Bourdieu, P. & Passerson, J., 1977 [1970]. *Reproduction in Education, Society and Culture*. London, New Delhi: Sage Publications, Thousand Oaks.

- Breen, R., Luijkx, R., Müller, W. & Pollak, R., 2009. Long term trends in educational inequality Europe: inequalities and gender difference. *European Sociological Review*, Advance Access.
- Breen, R., Luijkx, R., Müller, W. & Pollak, R., 2009. Non-persistent inequality in educational attainment: evidence from eight European countries. *American Journal of Sociology*, 114(5), pp.1475-521.
- Buchmann, C., DiPrete, T.A. & McDaniel, A., 2008. Gender Inequalities in Education. *Annual Review of Sociology*, pp.319-37.
- Callender, C. & Feldman, R., 2009. *Part-time undergraduates in higher education: a literature review. Prepared for HECSU to inform Futuretrack: Part-time students*. Birckbeck: University of London.
- CEDEFOP, 2008. *Validation of non-formal and informal learning in Europe. A snapshot 2007*. Luxembourg: Office for Official Publications of the European Communities.
- CEDEFOP, 2010. *Skills Supply and Demand in Europe: Medium-Term Forecast up to 2020*. Luxembourg: Publications Office of the European Union.
- Clancy, P. & Goastellec, , 2007. Exploring Access and Equity in Higher Education: Policy and Performance in a Comparative Perspective. *Higher Education Quarterly*, 61(2), pp.136-54.
- Collins, R., 1971. Functional and Conflict Theories of Educational Stratification. *American Sociological Review*, 36, pp.1002-19.
- Commission of the European Communities, 2006. *Communication to the Council and to the European Parliament: Efficiency and Equity in European Education and Training Systems*. Brussels: Commission of the European Communities.
- Commission of the European Communities, 2009. *Flash Eurobarometer Series No. 260, Students and Higher Education Reform, Survey among students in higher education institutions, in the EU Member states, Croatia, Iceland, Norway and Turkey*. Luxembourg: Office for Official Publications of the European Communities.
- Davies, S. & Guppy, N., 1997. Fields of study, college selectivity and student inequalities in Higher Education. *Social Forces*, (75), pp.1417-38.
- de Welde, K., Laursen, S. & Thiry, H., 2007. *Women in Science, Technology, Engineering and Math (STEM)*. Sociologists for Women in Society.
- DiPrete, T.A. & Legewie, J., 2009. Family Determinants of the Changing Gender Gap in Educational Attainment: A Comparison of the U.S. and Germany. *Schmollers Jahrbuch*, 129(2), pp.169-80.
- Dyer, S.K., 2004. *Under the Microscope: A Decade of Gender Equity Projects in the Sciences*. Washington DC: American Association of University Women Educational Foundation.
- Erikson, R. & Jonsson, J., 1993. *Ursprung och Utbildning. Social Snedrekrytering till Högre Utbildning*. Stockholm: Fritzes.
- Erikson, R. & Jonsson, J., 1996. *Can Education Be Equalized? The Swedish Case in Comparative Perspective*. Boulder, CO: Westview Press.
- European Group for Research on Equity in Educational Systems, 2005. Equity in European educational systems: a set of indicators. Part I Devising indicators of equity in educational systems: why and how? *European Educational Research Journal*, 4(2).

- European Research Associates, 2006. *Key education indicators on social inclusion and efficiency*. Commission of the European Communities.
- Eurostat & HIS, 2009. *The Bologna Process in Higher Education in Europe. Key indicators on the social dimension*. Luxembourg: Office for Official Publications of the European Communities.
- Eurostudent, 2002. *Social and Economic Conditions of Student Life in Europe 2000*. wbv: Bielefeld.
- Eurostudent, 2005. *Social and Economic Conditions of Student Life in Europe 2005*. Hannover: HIS-Hochschul-Informationen-System GmbH.
- Eurostudent, 2008. *Social and Economic Conditions of Student Life in Europe*. Bielefeld: wbv.
- Eurydice Network, 2007. *Key Data on Higher Education in Europe 2007*. Brussels: Education, Audiovisual and Culture Executive Agency.
- Eurydice network, 2009. *Key Data on Education in Europe 2009*. Brussels: Education, Audiovisual and Culture Executive Agency.
- Feinstein, L. et al., 2007. *The Social and Economic Benefits of part-time, mature study at Birkbeck College and the Open University*. Milton Keynes: Birkbeck College, Open University.
- Field, S., Kuczera, M. & Pont, B., 2007. *No More Failures: Ten Steps to Equity in Education*. Paris: OECD Publishing.
- Finnie, R. & Mueller, R.E., 2010. Family Background, Cultural Capital and Access to Higher Education in Canada.
- Frenette, M., 2005. *Is Post-secondary Access More Equitable in Canada or the United States?* Statistics Canada.
- Gamoran, A. & Mare, R.D., 1989. Secondary-School Tracking and Educational-Inequality – Compensation Reinforcement, or Neutrality. *American Journal of Sociology*, (94), pp.1146-83.
- Goldthorpe, J. & Jackson, M., 2008. Education Based Meritocracy: The Barriers to its Realisation. In Laureau, A. & Conley, D. *Social class: how does it work*. New York : Russell Sage Foundation.
- Hall, R.M. & Sandler, B.R., 1982. *The Classroom Climate: A Chilly One for Women*. Washington, DC: Project on the Status and Education of Women, Association of American Colleges.
- Hansen, M.N., 1996. Social and Economic Inequality in the Educational Career: Do the Effects of Social Background Characteristics Decline? *European Sociological Review*, 13(3), pp.305-21.
- Heinze, C. & Quast, H., 2009. Studienberechtigte 2008, Studien- und Ausbildungswahl ein halbes Jahr nach Schulabgang. *HIS Projektbericht*, November.
- Heine, C. & Lörz, M., 2007. Studierbereitschaft in Brandenburg. Eine empirische Analyse ihrer Einflussfaktoren. *HIS Forum Hochschule*.
- Henz, U. & Maas, I., 1995. Chancengleichheit durch die Bildungsexpansion. *Kölner Zeitschrift für Soziologie und Sozialpsychologie*, (47), pp.605-33.
- Heublein, U. & Hutzsch, C., 2009. Ursachen des Studienabbruchs in Bachelor- und in herkömmlichen Studiengängen. *HIS Projektbericht*, December.
- Huber, P., Huemer, U., Kratena, K. & Mahringer, H., 2006. Mittelfristige Beschäftigungsprognose für Österreich bis 2010. *AMS Info 82*.
- ICT Skills Monitoring Group, 2003. *E-Business and ICT Skills in Europe*. Brussels: Commission of the European Communities.

- Isserstedt, W., Middendorff, E., Fabian, G. & Wolter, A., 2007. *Die wirtschaftliche und soziale Lage der Studierenden in der Bundesrepublik Deutschland 2006*. Bonn/Berlin: HIS.
- James, R., 2007. *Social equity in a mass, globalised higher education environment: the unresolved issue of widening access to university*. Melbourne: Faculty of Education, University of Melbourne.
- Jongbloed, B., de Boer, H., Enders, J. & File, J., 2010. *Progress in Higher Education Reform Across Europe: Funding Reform*. Twente: Centre for Higher Education Policy Studies.
- Jongbloed, B., de Boer, H., Enders, J. & File, J., 2010. *Progress in Higher Education Reform Across Europe: Governance Reform*. Twente: Centre for Higher Education Policy Studies.
- Kailis, E. & Pilos, S., 2005. Lifelong Learning in Europe. *Statistics in Focus*.
- Koucký, J., Bartušek, A. & Kovařovic, J., 2010. *Who gets a degree? Access to tertiary education in Europe 1950-2009*. Prague.
- Lasnigg, L. & Unger, M., 2006. Soziale Aspekte des Hochschulzugangs und Durchlässigkeit des Bildungssystems. *HIS Projektbericht*.
- Leathwood, C., 2006. Accessing Higher Education: Policy, Practice and Equity in Widening Participation in England. In Mc Nay, I. *Beyond Mass Higher Education*. Milton on Keynes: Open University Press.
- Leathwood, C. & O'Connell, P., 2003. It's a struggle: the construction of a 'new student' in higher education. *Journal of Education Policy*, 18(6), pp.597-615.
- Leslie, L. & Brinkman, P., 1987. Student price response in higher education. *Journal of Higher Education*, 58(2).
- Leslie, L. & Brinkman, P., 1988. *The Economic Value of Higher Education*. New York: American Council on Education; Macmillan.
- Lindbekk, T., 1998. The Education Backlash Hypothesis: The Norwegian Experience 1960-92. *Acta Sociologica*, (41), pp.151-62.
- Maani, S., 2005. *Parental Income and the Choice of Participation in University or Polytechnic*. Auckland: Department of Economics, University of Auckland.
- Mayer, K., Müller, W. & Pollak, R., 2007. Institutional change and inequalities of access in higher education. In Shavit, Y., Arum, R., Gamoran, A. & Menachem, G. *Stratification in Higher Education. A Comparative Study*. Stanford: Stanford University Press. pp.240-65.
- McNay, I., 2006. Delivering Mass Higher Education – The Reality of Policy in Practice. In McNay, I. *Beyond Mass Higher Education*. Milton on Keynes: Open University Press.
- Müller, W. & Haun, D., 1994. Bildungsgleichheit im Sozialen Wandel. *Kölner Zeitschrift für Soziologie und Sozialpsychologie*, pp.1-42.
- Müller, W. & Haun, D., 2010. Education. In S. Immerfall & G. Therbom, eds. *Handbook of European Societies: Social Transformations in the 21st Century*. New York: Springer. pp.217-89.
- Naidoo, R. & Jamieson, I., 2005. Knowledge in the Marketplace: The Global Commodification of Teaching and Learning in Higher Education. In Innes, P. & Hellstein, M. *Internationalizing Higher Education_ Critical Perspectives for Critical Times*. Springer Netherlands.
- Neave, G., 2000. Diversity, differentiation and the market: the debate we never had but which we ought to have done. *Higher Education Policy*, (13), pp.7-21.

- Nokkala, T., 2005. Knowledge society/knowledge economy discourse in internationalisation of higher education – A case study in governmentality. In *Knowledge and Politics Conference, 18-20 May 2005*. Bergen, 2005.
- Nokkala, T., 2007. *Constructing the Ideal University – The internationalisation of higher education in the comparative knowledge society*. Tampere: Tampere University Press.
- Oberg, J., 1997. Finding Evidence of the Student Grant Effect in a Natural Experiment. *Journal of Student Financial Aid*.
- OECD, 2007. *Recognition of non-formal and informal learning in Denmark*. Paris: OECD.
- OECD, 2008. *Education at a Glance 2008*. Paris: OECD Publishing.
- OECD, 2008. *OECD Science, Technology and Industry Outlook*. Paris: OECD Publishing.
- OECD, 2009. *Education at a Glance 2009*. Paris: OECD Publishing.
- OECD, 2010. *Education at a Glance 2010*. Paris: OECD Publishing.
- Orr, D. & Riechers, 2010. *Organisation des Hochschulzugangs in sieben europäischen Ländern – eine vergleichende Betrachtung*. Hannover: Hochschul-Informationssystem.
- Osborne, M., 2003. Increasing or Widening Participation in Higher Education? - a European perspective. *European Journal of Education*, 38(1).
- Raferty, A. & Hout, M., 1993. Maximally maintained inequality: expansion, reform, and opportunity in Irish education, 1921-1975. *Sociology of Education*, (66), pp.41-62.
- Rauhvargers, A., Deane, C. & Pauwels, W., 2009. *Bologna Process Stocktaking Report 2009*. Leuven/Louvain-la-Neuve: Bologna Follow Up Group.
- Reimer, D. & Pollak, R., 2010. Educational Expansion and Its Consequences for Vertical and Horizontal Inequalities in Access to Higher Education in West Germ. *European Sociological Review*, 4(26), pp.415-30.
- Robertson, S., 2005. Re-imagining and rescripting the future of education: global knowledge economy discourses and the challenge to education systems. *Comparative Education*, 41(3).
- Sadovnik, A.R., 2004. Theories in the Sociology of Education. In Ballantine, J.H. & Spade, J.Z. *Schools and Society. A Sociological Approach to Education*. Wadsworth: Thomson Wadsworth. pp.7-26.
- Santiago, P., Tremblay, K., Basri, E. & Arnal, E., 2008. *Tertiary Education for the Knowledge Society, Volume 1*. Paris: OECD Publishing.
- Schuetz, G., 2005. Education Policy and Equality of Opportunity. *CESifo Working Papers*.
- Schwarzenberger, A., 2008. *Public / private funding of higher education: a social balance*. Hannover: Hochschul-Informationssystem GmbH.
- Schwarz-Hahn, S. & Rehburg, M., 2002. Studienkosten und Studienfinanzierung in Europa.
- Schwarz-Hahn, S. & Rehburg, M., 2004. Wie wird das Thema „Chancengleichheit junger Bürger“ für 16 Länder des europäischen Hochschulraumes verwirklicht. Eine empirische Vergleichsstudie. *Das Hochschulwesen. Forum für Hochschulforschung, -praxis und -politik*, (4).
- Shavit, Y., 1984. Tracking and ethnicity in Israeli secondary education. *American Sociological Review*, (49), pp.210-20.

- Shavit, Y. & Blossfeld, H., 1993. *Persistent inequality: Changing educational attainment in thirteen countries*. Boulder, CO: Westview Press.
- Shavit, Y., Yossi & Westerbeek, K., 1998. Educational Stratification in Italy – Reforms, Expansion, and Equality of Opportunity. *European Sociological Review*, (66), pp.33-47.
- Sieben, I., Huinik, J. & de Graaf, P., 2001. Family Background and Sibling Resemblance in Educational Attainment. Trends in the Former FRG, the Former GDR and the Netherlands. *European Sociological Review*, 17(4), pp.401-30.
- Steiner, V. & Wrohlich, K., 2008. Financial Aid and Enrollment into Higher Education: New Evidence from Germany. *IZA Discussion Papers*, July.
- Stratton, L.D., O'Toole, D. & Wetzel, J., 2004. Factors affecting initial enrollment intensity: part-time versus full-time enrollment. *Economics of Education Review*, 23(2), pp.167-75.
- Tieben, N., 2009. *Transitions, Tracks and Transformations, Social inequality in transitions into, through and out of secondary education in the Netherlands for cohorts born between 1914 and 1985*.
- Tomusk, V., 2003. The War of Institutions, Episode I: The Rise, and the Fall of Private Higher Education in Eastern Europe. *Higher Education Policy*, (16).
- Trow, M., 2005. *Reflections on the Transition from Elite to Mass to Universal Access: Forms and Phases of Higher Education in Modern Societies since WWII*. Berkley: University College Berkley: Institute of Governmental Studies.
- UNESCO, 2009. Communiqué from the World Conference on Higher Education. In *The New Dynamics of Higher Education and Research For Societal Change and Development*. Paris, 2009.
- United Nations General Assembly, 1948. *The Universal Declaration of Human Rights*. Resolution 217A(III).
- United Nations General Assembly, 1966. *International Covenant on Economic, Social and Cultural Rights*. Resolution 2200A.
- Usher, A., 2005. *Much Ado About a Very Small Idea: Straight Talk on Income-Contingent Loans*. Higher Education Report Series. Toronto, ON: Educational Policy Institute.
- Usher, A., 2006. *Grants for Students: What They Do, Why They Work*. Toronto, ON: Educational Policy Institute.
- Usher, A. & Cervenán, A., 2005. *Global Higher Education Rankings 2005*. Toronto, ON: Educational Policy Institute.
- Vallet, L.-A., n.d. The Dynamics of Inequality of Educational Opportunity in France: Change in the Association Between Social Background and Education in Thirteen Five-Year Birth Cohorts (1908-1972). In *meeting of RC28*. New York.
- van de Werfhorst, H., Sullivan, A. & Cheung, S.Y., 2003. Social Class, Ability and Choice of Subject in Secondary and Tertiary Education in Britain. *British Educational Research Journal*, 29(1), pp.41-62.
- van der Wende, M.C., 2002. Higher Education Globally: Towards New Frameworks for Research and Policy. In *The CHEPs Inaugurals*. Twente: University of Twente: Centre for Higher Education Policy Studies.
- Vukasovic, M., 2009. *Financing Higher Education in South Eastern Europe*. Belgrade: Center for Education Policy.
- Wallerstein, I., 2006. *Uvod v analizo svetovnih-sistemov*. Ljubljana.
- Westerheiden, D.F. et al., 2010. *The Bologna Process Independent Assessment: The First Decade of Working on the European Higher Education Area*. Twente: Centre for Higher Education Policy Studies.

Wößmann, L., 2004. How Equal Are Educational Opportunities? Family Background and Student Achievement in Europe and the United States. *IZA Discussion Papers*, September.

Wößmann, L., 2007. Fundamental Determinants of School Efficiency and Equity: German States as a Microcosm for OECD Countries. *IZA Discussion Papers*, June.

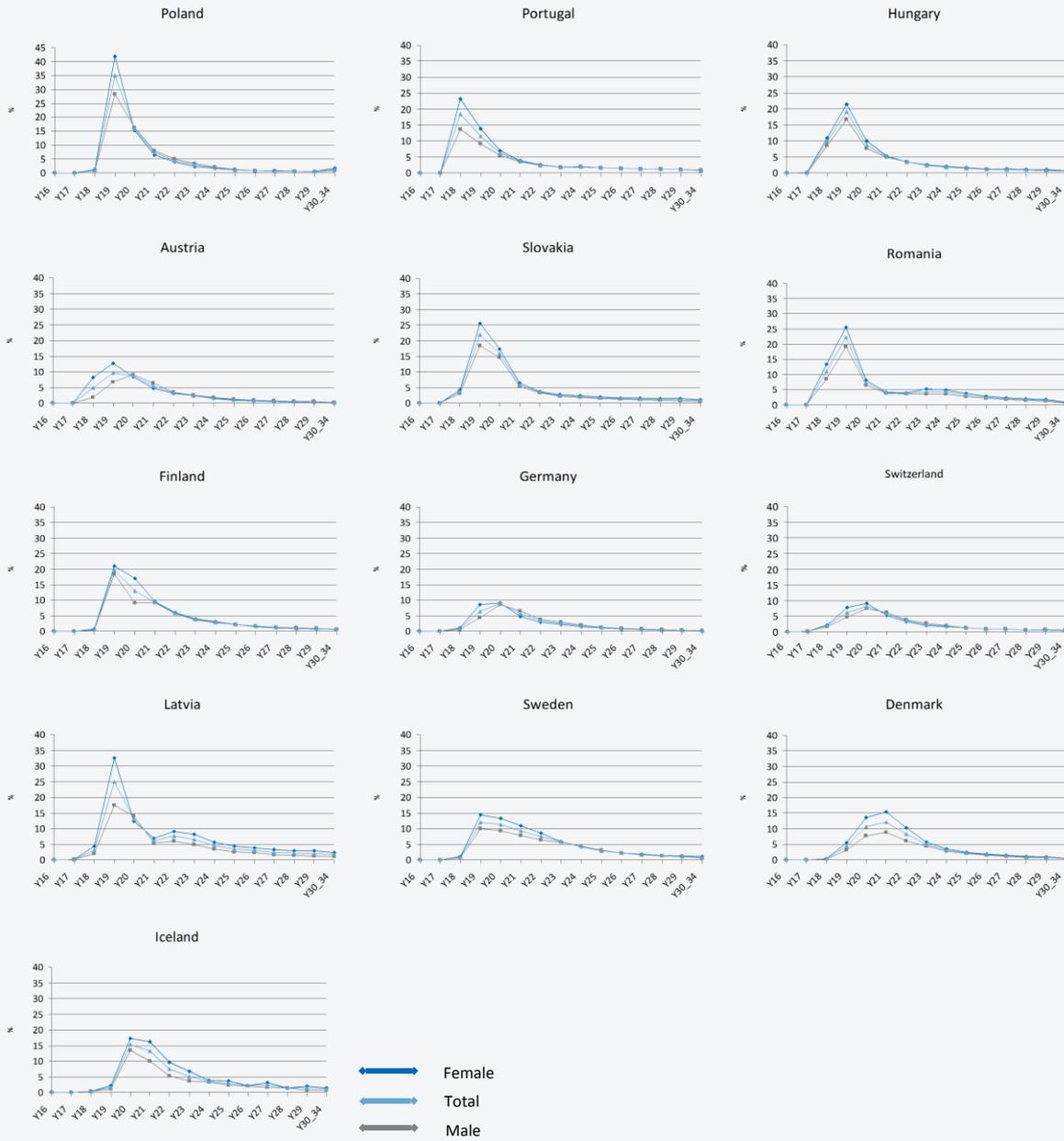
Wößmann, L., 2008. Mehrgliedrigkeit des Schulsystems und Chancengleichheit im internationalen Vergleich. *Erziehung und Unterricht*, 7-8.

Wößmann, L. & Schütz, G., 2006. *Efficiency and Equity in European Education and Training Systems*. Brussels: Network on Economics of Education and Education Policy in Europe (EEPEE).

Annex 2: Net entry rates by age and sex

Figure 39: Net entry rate, ISCED 5A – 2007, by age and sex (country order according to average age of entry starting with lowest)





Source: Eurostat, own calculations.

Annex 3: Indices of figures, boxes and tables

Index of tables

Table 1: Countries' Methods of Data Collection in Eurostudent.....	22
Table 2: Graduates from Higher Education institutions (1999/2000) with a high educational background by field of subject and country	56
Table 3: Micro level: Students' Income & Expenditure	68
Table 4: Composition of public funding in %.....	76
Table 5: distribution of financial aid to students compared to amount of tuition fees charged in tertiary-type A education (academic year 2006/2007).....	79
Table 6: Cumulated share (in %) of high-school alumni enrolling into university after an increase in BAfoeG or parents' income	80
Table 7: Conditions of repayment of student loans to meet living costs of full-time students, selected countries. Source: Eurostudent.....	82
Table 8: Amounts of fees and other contributions in PPS EUR paid by full-time daytime students enrolled for a first qualification (ISCED 5A) in public sectors, 2005/06 and 2006/07.....	85
Table 9: Comparison of ISCED 5A vs ISCED 5B.....	107

Index of figures

Figure 1: Net entry rate for Europe and regional clusters (16-34 years), ISCED 5A – 2000-2007.....	31
Figure 2: Net entry rates, ISCED 5A – 2007 by age group and sex Source: Eurostat, own calculations.....	32
Figure 3: Net entry rate, ISCED 5A – 2007, by age and sex for the EU Region	33
Figure 4: Net entry rate, ISCED 5A – 2007, by age and sex for selected countries	34
Figure 5: Net entry rate, ISCED 5A – 2007, by age group and overall value	35
Figure 6: Percentage of female vs male students by subjects for Europe and regional clusters, ISCED 5A - 2007	37
Figure 7: Entrants at ISCED 5A as a percentage of qualifying graduates of secondary schooling (ISCED 3A and 4A) the previous year -2007	40
Figure 8: Share of all students with alternative routes to Higher Education (in %), 2007	41
Figure 9: Ratio of students' fathers with manual-labour occupational status to manual-labour workers in the general population, 2005	48
Figure 10: Ratio of students' fathers with manual-labour occupational status to manual-labour workers in the general population, 2005	49
Figure 11: Ratio of highest educational attainment of students' fathers compared to the general population, 2005 (men 40-60 yrs., %).....	50
Figure 12: Ratio of highest educational attainment of students' mothers compared to the general population, 2005 (women 40-60 yrs., %).....	51
Figure 13: Representation of students with low occupational and educational status of the father, 2005.....	52
Figure 14: Representation of students with low occupational and educational status of the mother, 2005	53
Figure 15: Graduates from Higher Education institutions (1999/2000) with a high educational background by field of subject	55
Figure 16: Percentages and ratios of foreign enrolment by parents' education	57
Figure 17: Percentage of individuals (EU-25) having completed tertiary education (ISCED 5-6), according to the educational background of their parents – 2005.....	58
Figure 18 Percentage of individuals (aged 55-64, 45-54, 35-44, 25-34) having completed higher education	60
Figure 19: comparison of monthly income between students maintaining own households and students living with family using maintaining own households as a reference value in %.....	70

Figure 20: deviation from average income level from all students (median) in %.....	71
Figure 21: Composition of student income (students maintaining own households, by source in %	72
Figure 23: male and female students' income: source state in % (students maintaining own households	73
Figure 23: male and female students' income: source family in % (students maintaining own households)	73
Figure 24: male and female students' income: source job in % (students maintaining own households).....	74
Figure 25: First year students who receive state assistance (grants, scholarships, loans) in %.....	77
Figure 26: Share of all students with state support (students maintaining own households) in %.....	77
Figure 27: Relative contribution of state support to receivers' income (students maintaining own households) in %	78
Figure 28: Make-up of state support – share of non-repayable support (all students) in %	81
Figure 29: Bachelor students who receive state assistance by loans in %.....	82
Figure 30: Main components of total expenditures for students maintaining own households.....	83
Figure 31: Employment rate during term, all students in %.....	92
Figure 32: Contribution to working students' income made by gainful employment in % (students maintaining own households)	92
Figure 33: Time budget for study-related activities and for employment workload in hours/week.....	94
Figure 34: Percentage range from median between highest and lowest country for various indicators.....	100
Figure 35: Percentage of individuals (aged 55-64, 45-54, 35-44, 25-34) in EU 27 countries having completed Higher Education, according to the educational background of their parents, 2005, and projection of growth rate into future in 10 year periods.....	101
Figure 36: Forecast Share of % total employment for different profession classes, 2000 – 2020.....	102
Figure 37: Projected unemployment by qualification level	103
Figure 38: Net Entry Rates to Higher Education compared with best- and worst- performing countries on equity indicator.	105
Figure 39: Net entry rate, ISCED 5A – 2007, by age and sex (country order according to average age of entry starting with lowest)	120

Index of boxes

Box 1: Mentions of Higher Education Equity in EU Policies	4
Box 2: Access courses as a gateway to Higher Education for mature students: examples from UK and Ireland	36
Box 3: STEM-subjects and the gender gap	38
Box 4: Promoting women participation in STEM subject. Out-reach strategies to make girls feel attracted with sciences: examples from Germany and the US	38
Box 5: Supporting VET students transfer to Higher Education: examples from the Netherlands.	39
Box 6: Investing in a lifelong learning framework to “ <i>mainstream non-traditional routes</i> ” in HE: the Scottish credits and qualification framework	42
Box 7: Validation of non-formal and informal learning in Denmark	43
Box 8: In-reach strategy: establishing quotas for the disadvantaged: the HEAR “Higher Education access route” programme in Ireland.....	51
Box 9: Outreach strategies to attract pupils from lower socioeconomic backgrounds into Higher Education. The Aim Higher initiative in the UK and the WHAP programme in Scotland	61
Box 10: Supporting students with children or adult dependants: student finance “extra help” in the UK	69
Box 11: Income contingent financing of student charges for Higher Education: the Higher Education Contribution Scheme in Australia.....	75
Box 12: Building Higher Education around the learner and his/her life: the Open University in the UK.....	93

Annex 4: Authors' biographies



Kai Mühleck studied political science, economics, and sociology at the Universities of Heidelberg (DE) and Manchester (UK). In 2001 he graduated at the University of Heidelberg. 2001-08 he worked as researcher and lecturer at Humboldt-University of Berlin (DE), since 2005 co-leading the German working group of the ISJP (International Social Justice Project). He received a doctorate in sociology at Humboldt-University in 2007.

Since 2008 Kai Mühleck is senior researcher at the Hanover-based HIS-Institute for Research on Higher Education (DE). At HIS he works for national as well as international projects, amongst others leading the project teams of EQUINET and TRACKIT. Moreover he is responsible for the acquisition of international projects and the institute's contact person for international research collaborations.



Anthony F. Camilleri studied law at the University of Malta, where he also chaired the national students' union KSU and served on the University Senate. He spent six years as a student representative, specialising in economic aspects of education, particularly student financing, alternative sourcing of funds and entrepreneurship. He has also acted as a Quality Assurance reviewer on different occasions on behalf of ENQA, ESU and EFQUEL.

Since 2007, he has been actively involved in multi-national EU funded research projects in the fields of social inclusion and innovation in educational pedagogies, and acts as project manager for EQUINET on behalf of SCIENTER.



Andreas Bohonnek studied economics and sociology at the University of Vienna (AT). Final degree in Sociology. He worked as tutor and project assistant at the Institute of Sociology at University of Vienna, since 1996 at the "Institute of Social- and Health Psychology" (Vienna) as empirical researcher in the field of health behavior.

He worked as empirical researcher in Styria at the "Education Centre Fohnsdorf" (SZF) in the field of qualification and education research and in other research institutions like "L&R social research" and "European Centre for Social Welfare Policy and Research" (EC) in the fields of health-, youth- and family sociology and qualification-, evaluation- and labour market research.

At ZSI he is participating since Nov. 2009 at the EQUINET project and works also for other projects. Special interest and experience with quantitative methods, development and testing of survey-tools, sample construction, descriptive und multivariate methods (factor-, cluster- and regression-analyses, structural equation modelling with LISREL, AMOS und M+)



Dorit Griga studied political science, economics and communication science at Freie Universität Berlin (DE) and Universidad Autónoma de Madrid (ES). From 2004 to 2007 she worked as student research assistant in the department for labour market policy and employment at Social Science Research Center Berlin (WZB). After graduating at Freie Universität Berlin (M.A.) in 2007 she started working for the European lifelong learning project at Bertelsmann-Stiftung. Then, from 2008 to 2010 Dorit Griga worked as researcher at HIS – Institut for Research on Higher Education. At HIS Dorit Griga conducted research within the EQUINET-project as well as other projects dealing with the issue of tuition fees and their impacts on equity and quality within higher education. In

September 2010 Dorit Griga started working as researcher at University of Bern (CH). There, she is currently preparing her Ph.D. thesis which will focus the issue of migrant specific inequalities in higher education within the European Union.



Dr. Dominic Orr is currently the international project leader for EUROSTUDENT IV and was recently co-editor of the Eurostat/EUROSTUDENT publication "The Bologna Process in Higher Education in Europe". He works as a senior researcher at the German higher education policy institute HIS-Institute for Research on Higher Education, in Hanover. His specialist areas of interest are comparative studies on higher education, funding and quality assurance, and social dimensions of European higher education reform. His undergraduate studies were completed at Southbank University in London and he graduated from the Technical University Dresden with a doctorate in comparative education.



Daniela Proli (1984) got her Master Degree in Political Sciences from the University of Bologna in 2008. She then focused on social policy and welfare studies at European level, and also spent a period at the Utrecht University in order to broaden her knowledge in the field. In Scienler she is part of the Observatory area since 2008, contributing to several research and studies in the field of lifelong learning policy and of evolving scenarios of education and training in the knowledge society. Her main interest area concerns the development of the lifelong learning discourse and policy in the post-industrial society and its impact at social, political and institutional level.

Klemen Miklavič is a full time researcher at Centre for Educational Policy Studies, University of Ljubljana. He obtained the university diploma, followed by the research degree in Social Sciences, both at the University of Ljubljana. His work has been dedicated to the field of higher education policy for more than seven years, dating back to student activism. After graduation he continued to work as consultant, expert or freelance researcher for a number of NGOs, intergovernmental organizations and research centres such as European Students' Union, Spark, Council of Europe, Centre for Education Policy in Belgrade etc. During 2008 – 2009 he was employed at the OSCE Mission in Kosovo as a Senior Adviser responsible for Higher Education and ethnic minority issues. Ever since, he has continued to nurture his interests in the role of higher education in the (post)conflict settings.



EQUNET is a 3-year project researching the state of equity in Higher Education in Europe. The project aims to create an evidence-based policy advocacy network, so as to promote its conclusions as a way to promote better-informed policy making on equity issues in Europe.

This is the first of three annual reports, and gives a general overview of the access to Higher Education in Europe, including entry into Higher Education, equity as defined by socioeconomic background, income and expenditure of students in HE and the effect of work on studies.

The report also uses this data to make insights on perceptions of equity from European policymakers, consider the validity of different ways of measuring equity and the validity of current policy-initiatives.

www.equnet.info

