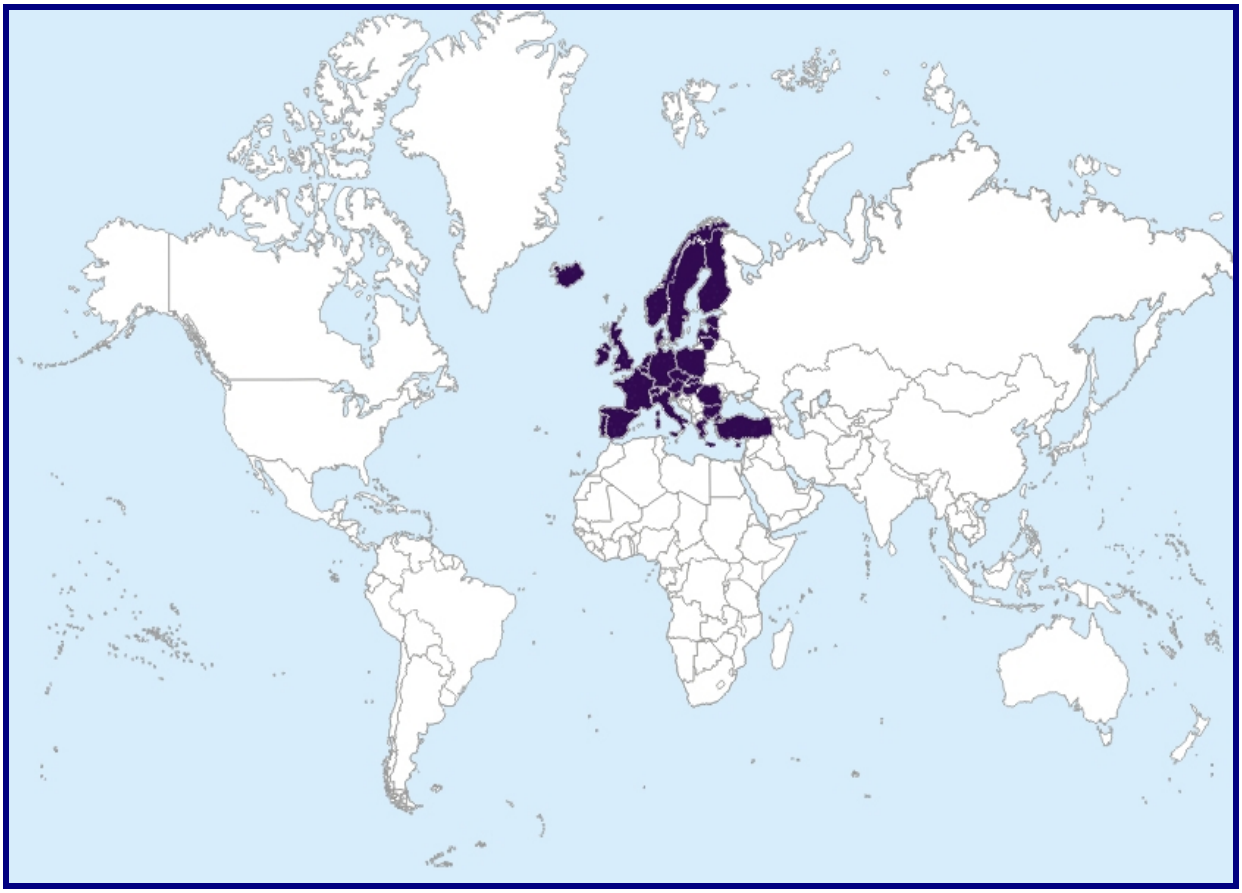

Mapping mobility in European higher education

Volume I: Overview and trends

Eds. Ulrich Teichler, Irina Ferencz and Bernd Wächter

A study produced for the Directorate General for Education and Culture (DG EAC), of the European Commission

Mapping mobility in European higher education
Volume I: Overview and trends

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i Executive summary (English)

This study was produced for the Directorate General for Education and Culture (DG EAC) of the European Commission by a consortium of organisations and individuals led by the Academic Cooperation Association (ACA) between October 2009 and June 2011. Overall responsibility for the study was with Ulrich Teichler (INCHER), Irina Ferencz and Bernd Wächter (both ACA).

The theme of this study is student and, to a lesser extent, staff mobility in Europe. It pursues two main aims. First, it analyses both present levels and patterns and the historical evolution over a decade of student – and to a lesser extent – staff mobility into, out of and between 32 European countries (EU-27, EFTA-4 and Turkey, also called the 'Europe 32 area'). Second, it explores issues around the availability, quality, and depth of information and data on student and staff mobility, i.e. it assesses the adequacy or otherwise of the international data collection in the field of student and staff mobility. Based on these two major lines of analysis, it makes recommendations both for future improvement in mobility statistics and for measures to raise present levels of mobility.

The study consists of two volumes. Volume I – the present one – relates to mobility levels and mobility developments in the Europe 32 area as a whole. Volume II consists of country-based in-depth analyses of student mobility. The 11 countries covered are Austria, Cyprus, Estonia, Belgium (Dutch-speaking Community), Germany, France, Italy, Romania, Spain, Sweden, and the United Kingdom. Both volumes address incoming and outgoing mobility as well as diploma (or degree) mobility and credit (or temporary) mobility. This executive summary relates only to Volume I.

Diploma (degree) mobility in the Europe 32 Area (Chapter I)

There are three overarching findings with regard to degree mobility. First, and despite important progress in data collection, our knowledge base on 'genuine mobility' is still incomplete. Consequently, we must therefore base our analysis mainly on statistics on the study of foreign nationals (and own nationals abroad), which is an inadequate proxy for 'genuine mobility' for the purpose of study. Second, average mobility levels in the Europe 32 region are high in a global comparison and have considerably risen in the past decade. Third, and perhaps most important, the mobility levels and evolutions differ dramatically between single countries. The single most marked commonality between countries is difference.

Foreign students and incoming mobile students

In 2006/07, there were over 1.5 million *foreign students* enrolled in the Europe 32 area. This translated into a Europe 32 share of the 'global student market' of 50.9%, an impressive achievement for an area with less than 10% of the world population. More amazing still is the following: in the face of growing competition worldwide, the Europe 32 countries even marginally increased their share in the 9 years since 1998/99. But almost two thirds of all foreign students in the Europe 32 zone were enrolled in three countries only: the United Kingdom, Germany and France. Since mobility levels in these countries are well above average, this also means that mobility levels in other countries of the Europe 32 region are considerably lower.

The number of foreign students in the Europe 32 region grew very fast between 1998/99 and 2006/07. Taking into consideration only those countries for which data for both years were

available, growth was about 50%. Taking all countries into the calculation, growth even stood at 82.3%. We estimate that the real increase was closer to the upper than the lower percentage.

Total enrolment (i.e. numbers of foreign *and* own-nationality students combined) also increased in the 9-year reference period, but much less so. As a result, the share of foreign nationals of total enrolment grew, from 4.5% in 1998/99 to 6.9% in 2006/07.

The strong growth in foreign enrolment over the 9-year span was fuelled mainly by foreign students with a non-Europe 32 nationality. They represented 58% of all foreign students in 2006/07 (38.2% were nationals of Europe-32 countries, in the case of 3.8%, the nationality was unknown). In absolute numbers: of the roughly 1.5 million foreign-nationality students in the Europe-32 area in 2006/07, some 870 000 had a non-Europe 32 nationality. The share of non-Europe 32 nationals grew over time, and that of Europe 32 nationals decreased.

The totals for *genuine incoming mobility* (by the indicators of country of prior / permanent residence or country of prior education) are about one quarter below those for foreign nationality (in the countries for which we have data on both). In other words, the statistics on foreign students overstate the true numbers of incoming students by about a quarter.

As already remarked, Europe 32 averages say little about the situation in each country, due to the heavy concentration of foreign students in the UK, Germany and France. There is a similar, though not quite as heavy, concentration of incoming mobility on these large 'importers'.

Study abroad and outgoing mobility

The numbers of Europe 32 nationals enrolled outside their country of nationality (*study abroad*) are considerably lower than those of foreign nationals studying in the Europe 32 zone. The total number of study abroad students in 2006/07 was 673 000, which is less than half the number of foreign nationals studying in the Europe 32 countries during the same period (1 507 000). Nonetheless, study abroad has also grown between 1998/99 and 2006/07, but, at 37.1%, considerably less than the study of foreign nationals in the Europe 32 zone.

The ratio of study abroad students to resident home nationals stood at 0.033 in 2006/07. In other words, for every 1 000 students enrolled in their country of nationality, there were 33 nationals of this country enrolled abroad. However, this average hides very important differences between countries. The extremes are Cyprus, where the majority of its citizens are enrolled abroad (1 380 abroad for every 1 000 at home in Cyprus), and the UK (12 abroad for every 1 000 at home in the UK), where study abroad is an extremely rare phenomenon.

The vast majority of study abroad students from the Europe 32 region study in a country of this same region (85.5%). Study abroad outside of the region is very rare. The share of study abroad students studying in the Europe 32 area has even increased since 1998/99, from 82.2% to 85.5%.

Due to the recording practices in receiving countries, it is difficult to exactly assess the relationship between study abroad and outgoing mobility. We are sure that study abroad numbers overstate the levels of genuine outgoing mobility. We estimate that the overcount is below 20%, and possibly considerably less.

Temporary mobility in the framework of ERASMUS (Chapter II)

Unlike for degree mobility, there is no comprehensive international dataset on temporary mobility. We employ, however, mobility data for the ERASMUS Programme. The share of this programme of all temporary mobility is ultimately unclear, or, to put it another way, we can only guess the extent of credit mobility outside of ERASMUS. This means that we are unable to assess the real extent of temporary mobility and have to restrict our analysis to ERASMUS.

Numbers of ERASMUS mobile students display a very strong growth; they more than doubled in the 11-year period from 1998/99 to 2008/09, to close to 200 000. However, ERASMUS students still represent a very small share of total enrolment, of less than 1% on average in the Europe 32 region in 2008/09 on an annual basis (translating into about 4% when taking account of the duration of studies).

Mobility numbers in ERASMUS are – understandably – lower than degree mobility numbers, but this does not at all mean that they are negligible. In the academic year 2006/07, ERASMUS incoming students accounted for approximately one-tenth of all foreign students (from anywhere in the world) in the Europe 32 region. Moreover, they represented one quarter of all study abroad students from the Europe 32 region studying in another Europe 32 country.

Below the level of the Europe-wide averages, however, there are many important differences amongst the Europe 32 countries. Countries such as Spain, Finland, Malta, Poland, Portugal and Slovakia appear to be more 'attractive' for ERASMUS stays than degree-type studies. All of these countries hosted more ERASMUS students than foreign-nationality (degree) students of other Europe 32 countries in 2006/07. In another set of countries – amongst them the United Kingdom, Bulgaria, Cyprus and Romania – the ERASMUS Programme plays, in relative terms, only a marginal role in supporting student inflows.

There are interesting similarities between the profiles of Europe 32 countries in degree and ERASMUS mobility. 21 of the 32 countries covered by this study were either net exporters (particularly the Eastern European countries) or net importers (particularly countries from Western and Northern Europe) in both types of mobility. In contrast, only 10 countries had, in 2006/07, systems showing what we chose to term more mature mobility patterns; these countries were net import countries of degree-seeking students, while they were net exporters of ERASMUS students. Countries with such systems were main student destinations like Germany and France, but also the Czech Republic and Hungary in Eastern Europe.

In terms of subject area distribution, our analysis shows that – in comparison to total enrolment – students in the Humanities and arts, Social sciences, business and law and Engineering, manufacturing and construction more often embark on ERASMUS than students in the other five subject areas (Teacher training and education science, Science, mathematics and computing, Agriculture and veterinary, Health and welfare and Services). In addition, we cannot make a comparison for the distribution of students in terms of levels of study because the available data on levels are problematic in both datasets.

Staff mobility (Chapter III)

The information base on the international mobility of academic staff and researchers is far less clear and uniform than that on student mobility. This reflects the diversity of the labour market for scholars, the conditions and variety of purposes for mobility, the varying role of mobility over stages in a career, as well as the increasingly twofold responsibilities (i.e. research and administrative work) of scholars in higher education. Some experts even regard the data on the foreign citizenship of persons awarded a doctoral degree as the only trustworthy source for international comparison in this domain. As a result of the lack of true comparable data, this chapter concentrates on a discussion of types of scholars, and of types of mobility, as a preparatory step for a future collection of internationally comparable data.

Statistics on scholars' mobility can be improved only if agreement can be reached on a common definition of the "population" (i.e. who should be included as academic staff, researchers, etc.?), relevant sub-divisions (e.g. sectors of employment and career stages) and the functions of mobility (e.g. short-terms visits, mobility periods for research and teaching, migration, etc.). In order to

satisfy the major demands for improved data on mobility in this domain, four different types of data collection will be necessary for covering four types of mobility:

- a new comprehensive statistical information system on currently mobile scholars;
- an improvement of available educational statistics on doctoral awards;
- a reporting system on visits, exchanges and sabbaticals to be newly established with the help of data gathered by higher education and research institutions; and
- surveys retrospectively identifying international academic mobility in the course of major career stages or the career as a whole.

Student mobility data issues (Chapter IV)

Statistical data on international student mobility (the UOE data collection) were characterised by major weaknesses in the past. Recently, substantial efforts for improvement have been made. The number of European countries providing data on *genuine student mobility*, i.e. on the crossing of country borders for the purpose of study, in contrast to data on the *nationality of students* (the traditional, yet faulty descriptor for student mobility), almost tripled from 2002/03 to 2006/07. The two criteria for measuring genuine student mobility – country of prior education and country of (prior) residence – are thus gradually replacing nationality as the measure for international student mobility. The corrective effect of this methodological evolution is significant; the number of incoming students, i.e. the real number of internationally-mobile students, is about one quarter lower than that of foreign students.

In addition to the transition to genuine mobility data in most Europe 32 countries, the body of knowledge on this phenomenon has been further enriched through the recent availability of UOE data on foreign and mobile graduates, and through the increasing number of mostly national-level student and graduate surveys. The latter provide information on the occurrence (event) of mobility in the course of study and on additional mobility aspects not covered by regular mobility statistics.

Despite the impressive progress registered in a short interval, a number of limitations of current data collections remain, and need to be consequently addressed.

- Primarily, although the international UOE statistics were to include *diploma mobility* of students only, i.e. for the whole study period, a number of countries disregard UOE regulations and report all or some *incoming credit mobile students* (temporary mobility), making the UOE dataset *unclean*. As no international statistics are separately provided on *credit mobility* – the form of mobility currently with the strongest *currency* in the intra-European context and policy discourse – action is urgent in this direction. The authors propose to fill this gap by either setting an additional credit mobility component in the regular international statistics and/or by launching a Europe 32-wide student or graduate survey, to collect information on the occurrence of study abroad in the course of study.
- Overall, and despite impressive progress, further streamlining is needed in the collection of data on genuine mobility. Particularly, a consensus is necessary on the operationalisation of both the criterion of country of prior education and of country of (prior) residence, which are so far interpreted differently in a number of countries.
- Further, no distinction is made in the UOE dataset for inter-cycle mobile students. The ISCED 97 classification continues to lump together students in bachelor, master and single-cycle ‘long’ degrees in the ISCED 5A level. As a result, the impact of the most comprehensive European structural reform in decades – the introduction of the Bologna Process degree architecture – cannot be currently assessed. There are indications that this limitation might be abated through the revision of the ISCED 97 classification.

- In addition, data coverage is incomplete in the ISCED 5B (short-cycle, sub-bachelor) segment of tertiary education, as well as on doctoral candidates and students in other forms of advanced studies (ISCED 6). Improvements, in this respect, will require comprehensive national-level adjustments, which will most likely not be possible in the near future.
- Additionally, international statistics should also cover, as some national ones do, incoming students with home nationality, i.e. the returners, as they represent a sizeable group in several Europe 32 countries.

National mobility policies (Chapter V)

Given the high importance that most national governments attribute to student and staff mobility in public statements, it is remarkable how very few have developed comprehensive and systematic and mobility policies. With few exceptions, countries vaguely endorse mobility as a desirable activity and adopt a 'the more the merrier' approach. The focus of policy statements is either on outgoing temporary mobility (19 countries), or on incoming diploma mobility (18). Outgoing degree mobility and incoming credit mobility play no role at all.

Though the setting of quantitative targets is becoming more widespread, numerical targets are often still a little-understood concept, and indicators are rarely precisely defined. Levels of mobility ambition vary strongly. In terms of regional orientation, the EU / EEA is deemed the highest priority for most countries (especially those with a focus on temporary outgoing mobility). Neighboring regions and parts of the world with old ties are also often mentioned, as are increasingly BRIC-type countries. Graduate students are the favoured target group in incoming diploma mobility. For outgoing mobility, the policies remain vague in terms of level of study.

A wide range of measures are mentioned to facilitate and boost mobility, e.g. scholarship programmes, English-taught programmes, information and encouragement measures, marketing and promotion, recognition procedures and student services. Most countries remain somewhat vague as to rationales, i.e. on their reasons for wanting mobility. Those with more palpable motivations mention an increase of the quality of education and of the employability of graduates for outgoing mobility. For incoming degree mobility, 'knowledge gains' (and, related, economic ones) figure high. Skilled migration, internationalisation at home (through more foreign students), development aid and foreign cultural policy are further rationales.

Mobility obstacles and incentives (Chapter VI)

We conducted a review of literature on the topics of obstacles to mobility and incentives for mobility that was available from institutional, governmental, non-governmental, supra-national and academic sources. We found that eight key clusters of issues – none of them recently discovered – are regularly identified as among the most central obstacles to mobility: (1) a lack of information on mobility opportunities; (2) low motivation levels or little interest in being mobile; (3) inadequate financial support; (4) foreign language skills deficiencies; (5) insufficient time or opportunity for international studies within the framework of an established curriculum or programme of study; (6) concerns about the quality of mobility experiences; (7) legal barriers (particularly relating to visas, immigration regulations, and work permits); and (8) problems in gaining recognition for academic work completed abroad. We also identified three main types of incentives: (1) financial support (mostly in the form of more money for individuals and/or mobility programmes); (2) curricular support through a variety of technical mechanisms (such as the implementation of the Diploma Supplement and ECTS) and innovative programming (including "mobility windows"); and (3) personal support, especially in the form of guidance and counseling, in order to more effectively

convince a wider range of individuals to take part and more consistently ensure a high quality mobility experience from start to finish.

The literature review illustrates that making good sense of mobility obstacles and incentives is challenging on a variety of fronts. For a start, there are many gaps in the data about the factors that motivate and discourage participation. Where there are data, significant differences can be seen in the effects of incentives or the applicability of obstacles when comparing, for example, students or academics from different countries, in different fields of study or at different degree levels. This can make it especially difficult to craft European-level policies that serve to lower barriers to mobility or, conversely, incentivise it. Furthermore, obstacles and incentives vary and differ by mobility mode (e.g. credit mobility versus diploma mobility), which requires policymakers to clearly understand and appreciate the distinctions between various types of 'mobilities'.

Conclusions and recommendations (Chapter VII)

Our recommendations relate both to data collection and to substantive measures to increase academic mobility.

The collection of data on the international mobility of students has seen major improvements in past years, but the quality and differentiation of these data still leave much to be desired. In order to further improve student mobility data, we propose to

- increase the number of countries that provide to the UOE data collection data on genuine mobility and data on nationality;
- clearly separate in the UOE data collection degree/diploma mobility from credit/temporary mobility, by creating a separate collection for the latter;
- base mobility data collection on 4 study levels (short-cycle, bachelor, master and PhD);
- secure uniform operationalisation of the concept of prior education/residence, by defining it as the country of education/residence *immediately* prior to the current level of study; and
- collect information on the event (occurrence) of mobility in the course of study by means of graduate and/or student surveys.

In the area of statistics on staff mobility, more 'groundwork' needs to be undertaken before one can hope to even obtain a set of basic data. We recommend

- to establish a comprehensive data collection system on academic staff, going far beyond, but also comprising foreign nationality of staff and staff mobility;
- to keep in place, but improve, the current system of measuring mobility at the first academic career level (PhD), by focusing on doctoral awards rather than PhD enrolment;
- to create a completely new system of data collection on 'temporary staff mobility', comprising activities such as visits, exchanges and sabbaticals spent abroad; and
- to establish a Europe-wide system on international academic mobility in the course of the career, based on regular surveys.

With a view to measures aimed at increasing present mobility levels, we differentiate incoming degree mobility and outgoing temporary mobility and make separate recommendations for these very different forms of mobility. This study, having been commissioned by the European Commission, focuses our proposals on action to be taken at the European level. Nevertheless, we point out that – given the very different aims of member states in mobility and the very different mobility levels and patterns in single countries – the main arena for intervention is the national level. For incoming degree mobility we recommend:

- a renewed commitment to the world-wide promotion and marketing of European higher education, for example in the form of a re-launch of the Global Promotion Project;
- initiatives aimed at increasing the offer of programmes taught in foreign languages (such as English), to reduce barriers to incoming degree mobility mainly in countries with less-often-spoken languages;
- to attract high-achieving post-graduate students, especially in critical subject and skills areas from outside of Europe by further strengthening the ERASMUS MUNDUS programme; and
- to set a European-level target of 10% for incoming degree students, but to also set differentiated country growth targets. These growth targets would be higher for countries with currently low shares of incoming students, and lower for destinations with already high shares.

In the area of temporary (and mainly intra-European) student mobility, we recommend

- to continue the present ERASMUS Programme relatively unchanged – by keeping it inclusive / open to all subject areas and levels of study and keeping the emphasis on temporary mobility – and further strengthen it and adequately resource it;
- to prioritise, through ERASMUS and other funding / steering instruments, the creation of mobility windows and the application of robust recognition procedures;
- to set a quantitative target for outgoing temporary mobility in line with the Bologna target (in order not to create confusion), but to insist that the definition of mobility applied reflects serious minimum standards as to duration and activity abroad, and to avoid counting degree mobility towards the target (separate count, if deemed desirable); and
- to strengthen existing and possibly create additional instruments to support degree and temporary study of European students at selected high-class institutions in selected non-European countries, of the BRIC type.

i Résumé (français)

Cette étude a été réalisée entre octobre 2009 et juin 2011 par un groupement d'organisations et de personnes qui ont travaillé sous la supervision de l'Academic Cooperation Association (ACA), pour le compte de la Direction Générale de l'Education et de la Culture (DG EAC) de la Commission Européenne. Ulrich Teichler (INCHER), Irina Ferencz (ACA) et Bernd Wächter (ACA) étaient les responsables du projet.

L'étude se penche sur la mobilité des étudiants et, dans une moindre mesure, sur celle de l'*academic staff* en Europe. Elle se fixe deux objectifs, dont le premier consiste à analyser l'ampleur et les modalités actuelles de la mobilité internationale des étudiants et de l'*academic staff*, aussi que l'évolution du phénomène sur une décennie, à l'intérieur et à l'extérieur de 32 pays européens (UE-27, AELE-4 et Turquie, ce que l'on appelle aussi la 'zone Europe 32'). L'étude a pour second objectif l'examen des problèmes de disponibilité, de qualité et de précision des informations et données relatives à la mobilité des étudiants et de l'*academic staff*. Elle évalue donc la pertinence de la collecte internationale de ces données. Ces deux champs d'investigation lui permettent de formuler des recommandations quant à l'amélioration future des statistiques de mobilité et de proposer des mesures visant à augmenter la mobilité actuelle.

L'étude comporte deux volumes. Le présent Volume I aborde les niveaux de mobilité et les évolutions dans ce domaine sur l'ensemble de la zone Europe 32. Le Volume II propose en revanche une analyse détaillée de la mobilité des étudiants dans chacun des 11 pays suivants: l'Allemagne, l'Autriche, la Belgique (Communauté néerlandophone), Chypre, l'Espagne, l'Estonie, la France, l'Italie, la Roumanie, le Royaume-Uni et la Suède. Les deux volumes prennent en compte la mobilité entrante (*incoming*) et sortante (*outgoing*) ainsi que la *degree (diploma) mobility* et la *credit (temporary) mobility*. La présente synthèse ne couvre que le Volume I.

La degree (diploma) mobility *dans la zone Europe 32 (Chapitre I)*

Trois constats majeurs se dégagent de l'analyse de la *degree mobility*. Premièrement, notre connaissance de la mobilité 'réelle' reste incomplète, malgré le progrès considérable accompli dans la collecte d'informations. Nous devons dès lors fonder notre analyse essentiellement sur des statistiques de mobilité de *foreign students (*et de *study-abroad students)*, ce qui restitue une image peu fiable de la mobilité réelle des étudiants. Deuxièmement, le niveau moyen de la mobilité dans la zone Europe 32 est élevé si on le compare au reste du monde – et il a augmenté considérablement au cours de la décennie écoulée. Troisièmement, et peut-être le plus important, les niveaux de mobilité et les évolutions varient très fortement d'un pays à l'autre. Donc ce qui caractérise principalement les pays de la zone Europe 32, c'est leur disparité.

Foreign students et incoming students

La zone Europe 32 comptait en 2006/07 1.5 million de *foreign students*, soit une part du 'marché mondial des étudiants' de 50.9%. Cette performance est remarquable pour une région qui représente moins de 10% de la population mondiale. Plus étonnant encore dans un contexte de concurrence croissante à l'échelle planétaire, les pays de la zone Europe 32 ont légèrement augmenté leur part entre 1998 et 2007. Précisons toutefois que près de deux tiers des *foreign students* de la zone Europe 32 se concentrent sur trois pays: le Royaume-Uni, l'Allemagne et la

France. Le niveau de mobilité y est très supérieur à la moyenne, ce qui signifie aussi qu'il est nettement plus faible dans les autres pays de la zone Europe 32.

Le nombre de *foreign students* dans la zone Europe 32 a progressé rapidement entre 1998/99 et 2006/07. La croissance est de l'ordre de 50% si on prend uniquement en considération les pays pour lesquels des données étaient disponibles à ces deux périodes. A l'échelle de l'ensemble de tous les pays, cette croissance atteint même 82.3%. Nous estimons que la croissance réelle est plus proche du pourcentage supérieur que de l'inférieur.

Le *total enrolment* (le nombre total d'inscriptions, étudiants étrangers et nationaux confondus), a augmenté également au cours de ces 9 ans, fût-ce dans des proportions moindres. Il s'ensuit que la part de *foreign students* dans le nombre total des inscriptions a augmenté à son tour, progressant de 4.5% en 1998/99 à 6.9% en 2006/07.

La forte croissance du *foreign enrolment* pendant ces 9 ans résulte principalement d'étudiants originaires de l'extérieur de la zone Europe 32. Ils représentaient, en 2006/07, 58% de l'ensemble des *foreign students*. Le solde se répartissait en 38.2% de citoyens de la zone Europe 32 et 3.8% d'étudiants de nationalité inconnue. Cela signifie, en chiffres absolus, que des quelque 1.5 million de *foreign students* dans la zone Europe 32 en 2006/07, 870 000 avaient une nationalité extérieure à la zone Europe 32. Avec le temps, la part des étudiants non originaires de la zone Europe 32 qui étudient dans cette zone a augmenté, au détriment de celle de leurs homologues européens.

Les totaux de la *genuine incoming mobility* (selon les indicateurs *country of prior education* et *country of prior/permanent residence)* sont inférieurs d'environ un quart à ceux des *foreign students* (dans les pays pour lesquels nous disposons de données pour les deux paramètres). Cela revient à dire que les statistiques des *foreign students* gonflent d'environ un quart les chiffres réels des *incoming students*.

Comme mentionné précédemment, les moyennes de la zone Europe 32 sont peu représentatives de la situation dans chaque pays, en raison de la forte concentration de *foreign students* au Royaume-Uni, en Allemagne et en France. Il existe un niveau similaire, bien que moins élevé, d'*incoming mobility* dans ces grands pays 'importateurs'.

Study abroad et outgoing mobility

Le nombre d'étudiants citoyens de la zone Europe 32 qui poursuivent leurs études hors de leur pays d'origine - les *study abroad students* - est largement inférieur à celui des *foreign nationals* dans la zone Europe 32. Les *study abroad students* étaient 673 000 en 2006/07, soit moins de la moitié des 1 507 000 *foreign students* dans la zone des 32 pays durant cette année. Ceci dit, le nombre des *study abroad students* a augmenté également entre 1998/99 et 2006/07, mais à hauteur de 37.1%, ce qui est bien moins que les chiffres avancés par l'étude des *foreign nationals* dans la zone Europe 32.

La proportion de *study abroad students* par rapport aux étudiants restant au pays d'origine était de 0.033 en 2006/07. Pour 1 000 étudiants inscrits dans leur pays d'origine, il y avait donc 33 étudiants originaires de ce pays inscrits à l'étranger. Cette moyenne dissimule pourtant des disparités considérables entre pays. Les deux extrêmes sont Chypre, dont la majorité des étudiants s'inscrivent à l'étranger (1 380 étudiants à l'étranger pour 1 000 à Chypre) et le Royaume-Uni, où il n'est pas commun de faire des études à l'étranger (12 étudiants à l'étranger pour 1 000 au Royaume-Uni).

L'écrasante majorité des *study abroad students* de la zone Europe 32 optent pour un pays de la même région (85.5%). Les séjours d'études effectués hors de cette zone sont très rares. La part des *study abroad students* qui poursuivent leurs études dans un autre pays de la zone Europe 32 a augmenté de 82.2% à 85.5% depuis 1998/99.

Les modalités d'enregistrement dans les pays de destination empêchent de définir avec précision la relation entre les *study abroad students* et l'*outgoing mobility*. Nous sommes convaincus que le nombre des *study abroad students* surpasse celui des *outgoing students*. Nous estimons que cette différence n'excède pas 20% et se situe éventuellement bien en dessous.

La credit mobility *dans le cadre d'ERASMUS (Chapitre II)*

Contrairement à ce qui s'est fait pour la *degree mobility*, il n'existe pas de corpus de données international exhaustif sur la *credit (temporary) mobility*. Nous utilisons toutefois des données de mobilité pour le Programme ERASMUS. La part que ce programme détient dans l'ensemble de la mobilité temporaire reste floue, ce qui revient à dire que nous sommes réduits à estimer l'ampleur de la *credit mobility* en dehors du programme ERASMUS. Notre incapacité à évaluer la portée réelle de la *credit mobility* nous contraint à restreindre notre analyse au programme ERASMUS.

Quoi qu'il en soit, le nombre d'étudiants ERASMUS a connu également une croissance vigoureuse. Ce chiffre a plus que doublé en 11 ans, entre 1998/99 et 2008/09, pour approcher les 200 000. Malgré cela, les étudiants ERASMUS ne représentent qu'une petite partie du nombre total d'inscriptions: moins de 1% en 2008/09 dans la zone Europe 32 et sur une base annuelle. Ce pourcentage atteint 4% quand on prend en compte la durée totale des études.

Les chiffres de la mobilité ERASMUS sont – en toute logique – inférieurs à ceux de la *degree mobility*, ce qui ne les rend pas négligeables pour autant. Les étudiants ERASMUS de l'année académique 2006/07 représentaient près d'un dixième de tous les *foreign students* (en provenance du monde entier) au sein de la zone Europe 32. Ils représentaient même un quart des *study abroad students* issus de la zone Europe 32 qui étudiaient dans un autre pays de cette zone.

Les moyennes européennes cachent pourtant des disparités importantes entre les pays de la zone Europe 32. Des états tels que l'Espagne, la Finlande, Malte, la Pologne, le Portugal et la Slovaquie semblent plus 'attrayants' pour les séjours ERASMUS que pour de *degree mobility*. Tous ces pays ont accueilli davantage d'étudiants ERASMUS que de *foreign students* d'autres pays de la zone Europe 32, venus y poursuivre des études en 2006/07. Dans d'autres pays en revanche, notamment le Royaume-Uni, la Bulgarie, Chypre et la Roumanie, le programme ERASMUS reste, en termes relatifs, marginal dans le flux des *incoming students*.

Il existe des similarités intéressantes entre les profils de pays de la zone Europe 32 sur le plan de la *degree mobility* et de son homologue ERASMUS. 21 des 32 pays analysés dans cette étude sont clairement soit 'exportateurs' (surtout les pays de l'Europe de l'Est) soit 'importateurs' (principalement les pays de l'Europe de l'Ouest et du Nord) de ces deux types de mobilité. A l'inverse, seuls 10 pays avaient en 2006/07 des modalités de mobilité que nous qualifions de 'plus mûres'. Ces pays étaient clairement importateurs de *degree mobile students* alors qu'ils exportaient bon nombre d'étudiants ERASMUS. Citons, parmi les pays disposant de modalités de ce type, des destinations très prisées des étudiants: l'Allemagne et la France, mais aussi la République Tchèque et la Hongrie, en Europe de l'Est.

En termes de répartition en fonction des matières enseignées, notre analyse démontre que les étudiants en Philosophie et Lettres, Sciences sociales, Economie, Droit, Ingénierie, Techniques industrielles et Architecture/Bâtiment optent, en termes de nombre total d'inscriptions, plus souvent pour une mobilité ERASMUS que les étudiants de cinq autres disciplines (Enseignement et Sciences de l'éducation, Sciences, Mathématique, Informatique, Sciences agro-alimentaires, Médecine vétérinaire, Sciences de la santé et du bien-être, Services). Par ailleurs, nous ne sommes pas en mesure de procéder à une comparaison de la répartition des étudiants en fonction de leur niveau d'études, car les données disponibles posent problème dans les deux cas.

*Mobilité de l'*Academic staff *(Chapitre III)*

Les informations relatives à la mobilité internationale de l'*academic staff* et des chercheurs sont nettement moins claires et moins cohérentes que celles qui traitent de la mobilité des étudiants. Ceci reflète la disparité des facteurs en jeu : la diversité du marché du travail pour le personnel académique, les conditions et les motifs multiples des déplacements, le rôle changeant de la mobilité au cours d'une carrière ou encore la polarisation croissante entre les tâches administratives et la recherche. Certains experts estiment même que les données sur la nationalité étrangère des personnes qui obtiennent un doctorat constituent la seule base fiable d'études comparatives internationales dans ce domaine. Vu la pénurie de données susceptibles d'être comparées, ce chapitre aborde les divers types de membres du personnel académique et les types de mobilité, dans la perspective d'une collecte future de données internationales pouvant alimenter une analyse comparative valable.

Il ne sera possible d'affiner les statistiques de mobilité de l'*academic staff* qu'en parvenant à des définitions communes (1) de la 'population' concernée (qui appartient au personnel académique ?, qui est chercheur ?, etc.), (2) des sous-divisions pertinentes (telles que les secteurs d'emploi ou les étapes de carrière) et (3) des motifs de mobilité (visites de courte durée, déplacements à des fins de recherche ou d'enseignement, migration, etc.). Répondre aux grandes exigences d'amélioration des données de mobilité dans ce domaine nécessitera quatre types de collectes de données, une pour chaque type de mobilité :

- Un nouveau système statistique complet sur les personnels académiques et chercheurs mobiles actuellement;
- Une amélioration des statistiques disponibles sur les doctorats;
- Un système de comptes rendus des visites, échanges et congés sabbatiques, à mettre en place à l'aide de données collectées par les institutions d'enseignement supérieur et les organes de recherche; et
- Des études qui identifient rétrospectivement la mobilité académique internationale au cours d'étapes majeures de la carrière ou au fil de la carrière dans sa totalité.

Les problèmes que posent les données de mobilité des étudiants (Chapitre IV)

Par le passé, les données statistiques de la mobilité internationale des étudiants (la collecte des données UOE) présentaient de grandes lacunes. Des efforts d'amélioration considérables ont été consentis récemment. Nous constatons entre 2002/03 et 2006/07 un quasi triplement du nombre de pays européens qui fournissent des données sur la *genuine student mobility* (le fait de traverser une frontière pour faire ses études), au détriment des données sur la *nationalité des étudiants* (l'indicateur traditionnel, bien qu'erroné, de la mobilité des étudiants). Les deux critères de mesure de la mobilité réelle des étudiants (le *country of prior education* et le *country of prior residence*) remplacent donc graduellement la *nationalité* dans l'évaluation de la mobilité internationale. L'évolution de la méthode corrige sensiblement les résultats obtenus. Le nombre d'*incoming students* – le nombre réel d'étudiants mobiles – est inférieur de près d'un quart à celui des *foreign students*.

Outre la transition vers des données de mobilité réelle dans la plupart des pays de la zone Europe 32, la connaissance du phénomène s'est enrichie par la récente mise à disposition des données de l'UOE sur les *foreign nationality graduates* et les *mobile graduates*. S'y ajoutent un nombre croissant d'études sur les étudiants et diplômés au niveau national. Ces dernières fournissent des informations sur les faits de mobilité aux cours des études et sur certaines facettes additionnelles de la mobilité, non couvertes par les statistiques de mobilité classiques.

Bien que de progrès substantiel ait été accompli en peu de temps, il subsiste encore des faiblesses dans la collecte internationale de données, et il faut en tenir compte.

- Les statistiques internationales de l'UOE doivent se limiter à la *degree mobility* des étudiants sur toute la durée des études, mais certains pays n'ont pas tenu compte des réglementations de l'UOE. Ils y ont inclus tous ou partie des *incoming credit mobile students*, faussant ainsi la banque de données de l'UOE. Vu l'absence de statistiques internationales distinctes sur la *credit mobility* (la forme de mobilité la plus courante actuellement dans un contexte intra-européen et dans le discours politique), il est urgent d'agir. Les auteurs proposent de compenser cette lacune soit en instaurant une composante additionnelle de *credit mobility* dans les statistiques internationales classiques, soit en lançant un *survey* auprès des étudiants et diplômés (*graduates*) sur l'ensemble de la zone Europe 32 pour collecter des informations sur la fréquence des études à l'étranger lors du parcours dans l'enseignement supérieur.
- Il faut, en règle générale, et malgré des progrès impressionnants, harmoniser davantage la collecte des données de *genuine mobility*. Il importe plus spécifiquement d'arriver à un consensus quant à la mise en œuvre des critères de *country of prior education* et de *country of prior/permanent residence*. Ces critères sont actuellement interprétés de manière divergente dans certains pays.
- Les données de l'UOE ne différencient pas les cycles dans lesquels les étudiants se trouvent. Le classement ISCED 97 traite en vrac les étudiants des niveaux Bachelier et Master ainsi que ceux qui suivent une formation supérieure de type long (à cycle unique), au niveau ISCED 5A. Il s'ensuit que l'impact de la réforme structurelle la plus importante depuis des décennies en Europe (la mise en place du Processus de Bologne) ne peut pas être encore évalué. Certains éléments indiquent quand même que cette restriction sera levée par le remaniement du classement ISCED 97 cette année.
- En outre, les données sont incomplètes dans le classement ISCED 5B (*short-cycle*, *sub-bachelor*) de l'enseignement supérieur, ainsi que pour les doctorants et étudiants dans d'autres formes d'enseignement avancé (ISCED 6). Des avancées dans ce domaine nécessiteraient des ajustements importants aux niveaux nationaux, ce qui semble irréaliste à brève échéance.
- Enfin, les statistiques internationales devraient également prendre en compte (comme le font déjà certaines statistiques nationales) les *incoming students* qui ont la nationalité du pays qui collecte les données, c'est-à-dire les *returners (incoming students with home nationality)*, qui représentent un groupe non négligeable dans certains pays de la zone Europe 32.

Les politiques de mobilité nationales (Chapitre V)

Vu l'importance que la plupart des gouvernements nationaux accordent à la mobilité des étudiants et du personnel académique dans leur communication externe, il est surprenant que si peu d'entre eux aient réellement mis en place des politiques ambitieuses et systématiques de mobilité pour les étudiants. À quelques exceptions près, les pays affirment évasivement que la mobilité est souhaitable et que 'plus il y en a, mieux cela vaut'. Les déclarations politiques insistent soit sur l'*outgoing credit mobility* (19 pays), soit sur l'*incoming degree mobility* (18 pays). L'*outgoing degree mobility* et l'*incoming credit mobility* ne jouent presque aucun rôle.

Bien que les objectifs quantitatifs aient tendance à se généraliser, les objectifs chiffrés restent souvent mal compris et les indicateurs sont fréquemment mal définis. Les ambitions varient très fort en matière de mobilité. La plupart des pays (principalement ceux qui mettent l'accent sur l'*outgoing credit mobility*) accordent la priorité absolue à l'UE/l'EEE dans le choix des destinations.

Ils mentionnent régulièrement les régions frontalières, les parties du monde avec lesquelles ils entretiennent des liens historiques ou encore des pays BRIC ou analogues. Les étudiants au niveau Master et Doctorat sont le groupe-cible le plus prisé en matière d'*incoming degree mobility*. En ce qui concerne l'*outgoing mobility*, les politiques restent vagues quant aux niveaux d'études.

Un large éventail de mesures facilite et stimule la mobilité. Citons notamment les bourses, les programmes de cours en anglais, les initiatives visant à informer et convaincre les étudiants, les campagnes de marketing et de promotion, les procédures de reconnaissance des diplômes et les services aux étudiants. La plupart des pays restent plutôt vagues quant à motivations et aux raisons pour lesquelles ils souhaitent la mobilité. Les plus motivés mentionnent un surcroît de qualité de l'enseignement et de meilleures perspectives professionnelles pour les *outgoing students*. Pour ce qui est de l'*incoming degree mobility*, les 'gains de connaissances' (et la plus-value économique qui y est liée) figurent en tête de liste. D'autres motivations invoquées sont la migration des compétences, l'internationalisation 'à la maison' (avec davantage de *foreign students*), l'aide au développement et la politique culturelle vis-à-vis de l'étranger.

Les obstacles et les stimulants à la mobilité (Chapitre VI)

Nous avons étudié les documents qui traitent des obstacles et des mesures pour stimuler la mobilité dans les milieux institutionnels, gouvernementaux, non gouvernementaux, supranationaux et académiques. Il en ressort que huit types de problèmes (dont aucun ne date d'hier) sont régulièrement considérés comme les principaux obstacles à la mobilité: (1) le manque d'information sur les possibilités de mobilité; (2) peu de motivation ou d'intérêt pour la mobilité; (3) un soutien financier inadapté; (4) une maîtrise insuffisante des langues étrangères; (5) le manque de temps ou d'occasions pour des études internationales pendant le programme d'études en cours; (6) des inquiétudes quant à la qualité des séjours à l'étranger; (7) des contraintes légales (visas, restrictions à l'immigration, permis de travail); et (8) les problèmes de reconnaissance des études faites à l'étranger. Nous avons également identifié trois types de solutions: (1) le soutien financier (le plus souvent sous la forme d'un apport financier aux personnes et/ou aux programmes impliquant la mobilité); (2) le soutien aux études par divers mécanismes techniques (tels que l'instauration d'un Supplément du Diplôme et d'ECTS) et des programmes innovants (notamment les "fenêtres de mobilité"); et (3) un soutien personnel, plus particulièrement sous la forme d'accompagnement et de conseils, pour convaincre davantage de personnes de tenter la mobilité, tout en leur offrant la qualité à laquelle elles ont droit tout au long de cette expérience.

L'étude des documents nous confronte à une série de difficultés dans la compréhension des obstacles et des stimulants à la mobilité. De nombreuses lacunes affectent les données sur les facteurs favorables et défavorables à la participation. Et lorsque les données existent, nous constatons des disparités importantes dans l'impact des mesures ou dans la difficulté des obstacles lorsque nous comparons, par exemple, les étudiants ou l'*academic staff* de plusieurs pays, dans des disciplines différentes ou à divers niveaux d'études. Cela compliquera immanquablement la mise en place de politiques européennes qui abaisseraient le seuil d'accès à la mobilité ou la stimuleraient. Qui plus est, les obstacles et les mesures pour stimuler la mobilité varient en fonction du type de mobilité (*credit mobility* ou *degree mobility*, par exemple). Toute élaboration de politiques en la matière nécessitera donc une compréhension approfondie des divers types de mobilité.

Conclusions et recommandations (Chapitre VII)

Nos recommandations portent tant sur la collecte de données que sur les mesures à prendre pour augmenter la mobilité dans l'enseignement supérieur.

La collecte des données sur la mobilité internationale des étudiants a beaucoup progressé, ces dernières années, mais la qualité et la diversification de ces informations laissent encore à désirer. Nous proposons, pour les améliorer:

- d'augmenter le nombre de pays qui procurent des données de *genuine mobility* et de nationalité à l'UOE;
- de séparer clairement, dans l'apport de données à l'UOE, la *degree mobility* et la *credit mobility*, en prévoyant une collecte séparée pour cette dernière;
- d'adapter la collecte de données de mobilité aux 4 types d'études supérieures (de type court, Bachelier, Master et Doctorat);
- d'assurer une mise en œuvre uniforme des concepts de *country of prior education* et *residence* en les définissant comme le pays d'enseignement/de résidence principal *juste avant* le niveau d'études actuel;
- de récolter des informations sur la mobilité au cours des études par le biais d'enquêtes auprès des diplômés (*graduates*) et/ou étudiants.

En ce qui concerne les statistiques de mobilité de l'*academic staff*, beaucoup reste à déblayer avant d'espérer aboutir à un corpus de données de base. Nous recommandons :

- de mettre en place un système performant de collecte de données sur l'*academic staff*, qui prendrait en compte la nationalité étrangère et la mobilité de ce personnel et bien d'autres aspects encore;
- de garder, tout en l'améliorant, le système actuel de mesure de la mobilité au premier niveau de la carrière académique (PhD), en se concentrant sur les doctorats plutôt que sur les inscriptions de doctorants;
- d'instaurer un tout nouveau système de collecte de données sur la '*temporary staff mobility*' qui prendrait en compte des activités telles que des visites, des échanges et des congés sabbatiques à l'étranger;
- de créer un système européen de mobilité internationale de l'*academic staff* au cours de sa carrière, en se fondant sur des enquêtes régulières.

Dans le cadre des mesures visant à augmenter les niveaux de mobilité actuels, nous différencions la *degree mobility* et la *credit mobility* et nous formulons des recommandations distinctes pour ces types de mobilité très différents. La présente étude a été demandée par la Commission Européenne; nos propositions se centrent donc sur les actions à prendre au niveau européen. Nous tenons néanmoins à souligner que les Etats membres ont chacun leurs objectifs de mobilité et que les niveaux et modèles de mobilité varient beaucoup d'un pays à l'autre. De ce fait, la première zone d'action reste le niveau national. Nos recommandations en ce qui concerne l'*incoming degree mobility* :

- un nouvel effort de promotion et de marketing international de l'enseignement supérieur européen, par exemple par la relance du Global Promotion Project (GPP);
- des initiatives visant à augmenter l'offre de programmes en langues étrangères (notamment l'anglais) pour abaisser le seuil d'accès à l'*incoming degree mobility* dans les pays dont la langue nationale est peu répandue à l'étranger;
- l'attraction d'étudiants non européens performants aux niveaux Master et Doctorat, plus particulièrement dans les matières et compétences critiques, en renforçant le programme ERASMUS MUNDUS;
- un objectif européen de 10 % d'*incoming students*, tout en établissant des objectifs de croissance différenciés en fonction des pays. Ces objectifs seraient plus élevés pour les

pays qui accueillent actuellement un nombre faible d'*incoming students*, et seraient plus modestes pour les destinations qui connaissent déjà un franc succès.

En ce qui concerne la *credit mobility* (principalement intra-européenne), nous recommandons :

- de poursuivre le programme ERASMUS sans modifications majeures (en maintenant son ouverture à tous les domaines et niveaux d'études et en gardant l'accent sur la *credit mobility*), tout en le renforçant et en lui procurant les ressources nécessaires;
- de mettre l'accent sur la création de ''fenêtres de mobilité'' à l'aide d'ERASMUS et d'autres instruments de financement et de gestion, tout en mettant en œuvre des procédures de reconnaissance fiables pour les études effectuées à l'étranger;
- de fixer un objectif quantitatif en matière d'*outgoing credit mobility*, en phase avec l'objectif de Bologne (pour éviter la confusion), tout en veillant (1) à ce que la définition de la mobilité tienne compte de normes minimales sérieuses pour la durée et les activités à l'étranger, et (2) à ne pas prendre en compte l'*outgoing degree mobility* pour atteindre les objectifs (ces deux formes peuvent être comptabilisées séparément, si nécessaire);
- de renforcer les mécanismes existants – voire d'en créer d'autres – pour soutenir la *degree* et la *credit mobility* d'étudiants européens et leur permettre d'étudier dans des institutions réputées de certains pays non-européens de type BRIC.

i Kurzfassung (Deutsch)

Die vorliegende Studie wurde zwischen Oktober 2009 und Juni 2011 im Auftrag der Generaldirektion Bildung und Kultur der Europäischen Kommission von einem Konsortium von Organisationen und Einzelpersonen unter Leitung der Academic Cooperation Association (ACA) erstellt. Die Gesamtverantwortung lag bei Ulrich Teichler (INCHER), Irina Ferencz und Bernd Wächter (beide ACA).

Gegenstand der Studie ist die internationale Mobilität von Studierenden (und, in einem geringeren Maße, von Hochschulangehörigen/*staff*) in Europa. Sie verfolgt zwei Hauptziele. Zum einen präsentiert und analysiert sie die gegenwärtigen Ausmaße und Muster studentischer Mobilität sowie deren historische Entwicklung in, aus und zwischen 32 europäischen Ländern (EU-27, EFTA-4 und Türkei, in dieser Studie auch die Europa-32-Region genannt). Zum anderen eruiert sie Fragen der Verfügbarkeit, Qualität und Tiefe der vorhandenen Information und Daten zur Mobilität von Studierenden und Hochschulangehörigen, mit anderen Worten, sie bewertet die Angemessenheit der derzeitigen internationalen Datenerhebung im Bereich der Mobilität von Studierenden und *staff.* Ausgehend von diesen beiden Untersuchungssträngen spricht sie ausserdem Empfehlungen für Maßnahmen zur zukünftigen Verbesserung der internationalen Mobilitätsstatistik sowie zur Steigerung der Mobilität aus.

Die Studie wird in zwei Bänden vorgelegt. Band I – den Sie gerade lesen – ist der Analyse der gegenwärtigen und historischen Mobilität in der Europa-32-Region als ganzer gewidmet. Band II zeichnet ein detailliertes Bild der Studierenden- und Staff-Mobilität in insgesamt 11 Ländern. Diese Länder sind Österreich, Zypern, Estland, Belgien (niederländischsprachige Gemeinschaft), Deutschland, Frankreich, Italien, Rumänien, Spanien, Schweden und das Vereinigte Königreich. Diese Zusammenfassung (*executive summary*) bezieht sich ausschließlich auf Band I.

Diploma (degree) mobility in der Europa-32-Region (Kapitel I)

Für den Bereich der *diploma (degree) mobility* (Mobilität zur Erzielung eines Abschlusses in einem anderen Land) hat diese Studie drei übergreifende Befunde erbracht. Erstens: ungeachtet wichtiger Verbesserungen in der internationalen Datenerhebung ist die Datenlage bezüglich „echter Mobilität“ noch immer sehr lückenhaft. Deshalb basiert unsere Analyse im wesentlichen auf Daten zum Studium von Ausländern bzw. dem Studium im Ausland – die, wie wir wissen, nur Näherungswerte für das Ausmaß „echter“ Mobilität zu Studienzwecken darstellen. Zweitens: Der in Europa erreichte Grad an Mobilität ist im globalen Vergleich hoch und im vergangenen Jahrzehnt stark gestiegen. Drittens, und vielleicht am wichtigsten: Mobilitätsgrade unterscheiden sich in dramatischem Maße zwischen einzelnen Ländern. Die einzige wirkliche Gemeinsamkeit innerhalb der Europa-32-Zone ist deshalb der Unterschied.

Ausländische Studierende und Inwards Mobile Students

Im akademischen Jahr 2006/07 waren in den Europa-32-Ländern mehr als 1,5 Millionen ausländische Studierende eingeschrieben. Dies entsprach einem Anteil dieser Region von 50,9% an der Gesamtzahl aller ausländischen Studierenden weltweit, was für eine Weltregion mit weniger als 10% der globalen Bevölkerung ein beachtliches Ergebnis ist. Noch erstaunlicher ist, dass die Europa-32-Region seit 1998/99 ihren ‚Weltmarktanteil’ trotzt wachsender internationaler

Konkurrenz sogar leicht steigern konnte. Allerdings sind fast zwei Drittel aller ausländischen Studierenden in der Europa-32-Zone in nur drei Ländern, dem Vereinigten Königreich, Deutschland und Frankreich, eingeschrieben. Da der Grad an Mobilität in diesen Ländern weit über dem europäischen Durchschnitt liegt, bedeutet dies auch, dass die Zahlen ausländischer Studierender in den meisten anderen Ländern der Europa-32-Region ganz erheblich niedriger liegen.

Die Zahl der ausländischen Studierenden in der Europa-32-Zone stieg in der Zeit von 1998/99 bis 2006/07 sehr schnell an. In denjenigen Ländern, in denen die Methoden der Datenerhebung einen Vergleich erlauben und die zudem Zahlen für beide Referenzzeitpunkte verfügbar hatten, betrug der Anstieg im Durchschnitt etwa 50%. Auf der Basis aller 32 Länder betrug das Wachstum sogar 82.3%. Wir schätzen, dass das wahre Ausmaß des Anstiegs näher bei dem höheren als dem niedrigeren der beiden Prozentwerte liegt.

Die Zahl aller eingeschrieben Studierenden (Ausländer und Inländer) wuchs im 9-jährigen Bezugszeitraum ebenfalls an, allerdings im schwächeren Maß. Dadurch stieg der durchschnittliche prozentuale Anteil der ausländischen an allen Studierenden von 4,5% im Jahre 1998/99 auf 6,9% im Jahre 2006/07.

Der starke Zuwachs beim Studium ausländischer Staatsbürger ging im wesentlichen auf Staatsangehörige von ausserhalb der Europa-32-Region zurück. Deren Anteil an allen ausländischen Studierenden betrug im Jahre 2006/07 58% (38,2% waren Staatsbürger von Europa-32 Ländern, die Nationalität von 3,8% war unbekannt). In absoluten Zahlen: von den ca. 1,5 Millionen ausländischen Studierenden in der Europa-32 Region hatten ca. 870 000 die Staatsangehörigkeit eines Landes von ausserhalb der Europa-32 Zone. Im Referenzzeitraum ist der Anteil der Nicht-Europa-32-Staatsangehörigen an allen ausländischen Studierenden gestiegen und derer aus der Europa-32-Region gefallen.

Die Gesamtzahl der tatsächlich mobilen Studierenden („*'genuine incoming mobility"*) – nach den Indikatoren Land des vorherigen / permanenten Wohnsitzes bzw. Land der vorherigen Ausbildung – liegt etwa ein Viertel unter der mit ausländischer Staatsbürgerangehörigeschaft (in den Ländern, die Zahlen für beide Gruppen bereithalten). Mit anderen Worten: die Statistiken zum Ausländerstudium inflationieren das wahre Ausmaß der *incoming mobility* (im Umfang eines Viertels).

Wie schon betont: Die Durchschnittswerte für die Europa-32-Region sagen wenig über die Situation in einem einzelnen Land aus, u.a. als Folge der starken Konzentration von ausländischen Studierenden im Vereinigten Königreich, Deutschland und Frankreich. Eine Konzentration auf diese drei „Import"-Länder besteht auch – allerdings weniger stark ausgeprägt – für die Gruppe der *incoming mobile students*.

Auslandsstudium (Study Abroad) und Outgoing Mobility

Die Zahl der Staatsangehörigen von Europa-32-Ländern, die in einem anderen Land als dem ihrer Nationalität studieren (*study abroad*), ist erheblich niedriger als die der ausländischen Studierenden in der Europa-32-Region. Die Gesamtzahl der *study abroad* Studierenden betrug etwa 673 000, und damit weniger als die Hälfte der Zahl der ausländischen Studierenden in den 32 Ländern dieser Studie (rund 1 507 000). Ungeachtet dessen ist auch das Ausmaß von *study abroad* in der Zeit von 1998/99 bis 2006/07 angestiegen, allerdings mit 37.1% deutlich geringer als das des Ausländerstudiums.

Das Verhältnis von *study abroad* Studierenden zu im Inland studierenden Staatsangehörigen desselben Landes (*resident students*) betrug im Jahre 2006/07 0.033. Mit anderen Worten: auf 1 000 *resident students* kamen im Europa-32-Durchschnitt 33 *study abroad* Studierende. Die Abweichungen von diesem Durchschnitt können jedoch erheblich sein. Ein „Extremfall" ist Zypern, wo auf 1 000 in Zypern eingeschriebene Zyprioten 1 380 im Ausland studierende kommen. Am

andern Ende des Spektrums rangiert das Vereinigte Königreich, wo auf 1 000 im Heimatland eingeschriebene Briten nur 12 im Ausland kommen.

Die große Mehrheit der *study abroad students* aus Ländern der Europa-32-Zone studiert in einem anderen Land dieser Region (85,5%). *Study abroad* ausserhalb der Europa-32-Region ist sehr selten. Der Anteil der im Europa-32-Ausland studierenden *study abroad students* an der Gesamtheit der *study abroad students* ist seit 1998/99 noch gestiegen (von 82,2% auf 85,5%).

Aufgrund unterschiedlicher Methoden der Datenerfassung und -kategorisierung in weiten Teilen der Welt ist es nicht möglich, präzise Zahlen zum Verhältnis zwischen *study abroad* Zahlen und Zahlen für *outgoing mobility* aus den Europa-32-Ländern zu präsentieren. Wir sind aber sicher, dass die *study abroad*-Zahlen das Ausmaß der tatsächlichen *outgoing mobility* überzeichnen. Wir schätzen den *Over-estimate* auf maximal 20%.

Temporäre Mobilität im ERASMUS-Programm (Kaptitel II)

Anders als im Bereich der *degree mobility* gibt es für die temporäre Mobilität (oder *credit mobility*) keine *internationale* Statistik. Eine Ausnahme bildet das ERASMUS-Programm. Der Anteil dieses Programms an der Gesamtheit aller temporären Mobilität in der Europa-32-Region ist letztlich unklar. Oder, um es anders zu sagen: das Ausmaß der europäischen *credit mobility* ausserhalb von ERASMUS kann nur erahnt werden. Wir müssen unsere Analyse deshalb auf das ERASMUS-Programm beschränken.

Studentische Mobilität im ERASMUS-Programm verzeichnet ein sehr starkes Wachstum. Die Zahl der mobilen Studierenden stieg im 11-Jahres-Bezugszeitraum (1998/99 - 2008/09) auf fast 200 000 und damit auf mehr als das Doppelte. Dennoch entspricht die Zahl von ERASMUS-Studierenden im Jahre 2008/09 lediglich knapp 1% aller eingeschriebenen Studierenden in der Europa-32-Region (was etwa 4% entpricht, wenn man die Studiendauer in Rechnung stellt).

Begreiflicherweise sind die Mobilitätszahlen in ERASMUS niedriger als die für *degree mobility*, doch sie sind keinesfalls vernachlässigbar. Im Jahre 2006/07 betrug der Anteil der ERASMUS *incomings* in der Europa-32-Zone 10% aller *inbound mobility*. Bei den *outgoings* und gemessen an *study abroad* Studierenden in anderen Europa-32-Ländern betrug der Anteil der ERASMUS-Studierenden sogar ein Viertel.

Wiederum bestehen erhebliche Unterschiede zwischen den einzelnen Ländern. Länder wie etwa Spanien, Finnland, Malta, Polen, Portugal und die Slowakische Republik scheinen für ERASMUS-Aufenthalte weitaus attraktiver zu sein als für *degree mobility*. In allen diesen Ländern war die Zahl der ERASMUS *incomings* höher als die der *degree students* aus anderen Europa-32-Ländern. In einer anderen Ländergruppe, zu der unter anderem das Vereinigte Königreich, Bulgarien, Zypern und Rumänien zählen, spielt das ERASMUS-Programm dagegen quantitativ eine beinahe marginale Rolle.

Die Profile der Länder der Europa-32-Zone weisen hinsichtlich der *degree mobility* und ERASMUS-Mobilität eine Reihe von Gemeinsamkeiten auf. 21 der insgesamt 32 Länder waren in beiden Mobilitätsformen „Netto-Exporteure“ (besonders Länder in Mittel-/Ost-Europa) bzw. „Netto-Importeure“ (besonders Länder in West- und Nordeuropa). Im Unterschied dazu wiesen lediglich 10 Länder „reifere“ Mobilitätsmuster auf. Diese Länder waren „Netto-Importeure“ von *degree students* und „Netto-Exporteure“ von ERASMUS-Studierenden. Unter Ländern mit solchen Profilen befinden sich ‚klassische’ Zielländer wie Deutschland und Frankreich, aber auch die Tschechische Republik und Ungarn.

Ein Vergleich auf disziplinärer Basis zeigt, dass Studierende in den Disziplingruppen *Humanities and arts*, sowie *Social sciences, business and law* und *Engineering, manufacturing and construction* vergleichsweise häufiger an ERASMUS teilnehmen als Studierende in den andern 5

Disziplingruppen. Für Studienstufen können wir einen solchen Vergleich nicht anstellen, da die vorhanden Daten in beiden Datensets problembehaftet sind.

Staff mobility (Kapitel III)

Unser Wissen über die internationale Mobilität von *staff* ist ungleich geringer als das über studentische Mobilität. Dies ist ein Ergebnis der Vielfalt des Akademikerarbeitsmarktes, der vielen unterschiedlichen Zwecke und Bedingungen von Mobilität, der wechselnden Rollen von Mobilität auf verschiedenen Karrierestufen und auch der zunehmenden Doppelrollen von *staff* für administrative Aufgaben einerseits und Forschungsarbeit andererseits. Deshalb erachten einige Experten ausschließlich Statistiken zu erfolgreich abgeschlossenen Doktorandenstudien als verlässliche Quelle für internationale Vergleiche. Als Folge dieser fast vollständigen Abwesenheit von wie auch immer gearteten international vergleichbaren Datensets konzentriert sich dieses Kapitel im wesentlichen auf eine Diskussion der verschiedenen Typen von *staff* und der unterschiedlichen Ausformungen von Mobilität, sozusagen als vorbereitenden Schritt für eine zukünftige internationale Erhebung von vergleichbaren Daten.

Die Statistiken zur Mobilität von *scholars* können nur dann wesentlich verbessert werden, wenn ein Konsens über eine Definition der 'Population' erzielt werden kann (welche Personen sind *academic staff* und welche nicht?). Einvernehmen ist auch zu relevanten Binnendifferenzierungen (z.B. in Sektoren des Beschäftigungssystems und in Laufbahnabschnitte) sowie zu Mobilitätsformen und –zwecken (Kurzaufenthalte, Mobilität zu Zwecken der Forschung oder Lehre, Migration, etc.) zu erzielen. Um den Mindestanforderungen an eine verbesserte Datenlage in diesem Feld genüge zu tun, werden zukünftig vier Typen von Datenerhebungen für vier verschiedene Mobilitätsformen notwendig sein. Diese sind:

- ein neues umfassendes statitstisches Informationssystem zu derzeit mobilem *staff*;
- eine Verbesserung der vorhandenen Statistiken zu verliehenen Doktortiteln,
- ein neues Berichtssystem zu Besuchen, Austauschen und *sabbaticals*, das mit Hilfe von Hochschulen und Forschungseinrichtungen zu etablieren ist,
- retrospektive Befragungen von staff zur Ermittlung von internationaler Mobilität innerhalb wichtiger Karierreabschnitte oder im Zuge der Karriere als ganzer.

Statistische Fragen studentischer Mobilität (Kapitel IV)

Die internationale Datenlage zur studentischen Mobilität war in der Vergangenheit durch erhebliche Schwächen gekennzeichnet. In jüngster Zeit sind bedeutende Anstrengungen zur Verbesserung der UOE Statistik unternommen worden. Die Zahl der europäischen Länder, die Zahlen zur 'genuinen internationalen Mobilität' bereithält (im Unterschied zu Zahlen zum Studium ausländischer Staatsangehöriger), hat sich seit dem Jahre 2002/03 fast verdreifacht. Die beiden Indikatoren der Messung echter Mobilität – das Land des vorherigen oder des permanenten Wohnsitzes oder das Land des vorherigen Bildungsabschlusses – ersetzen schrittweise den Nationalitätsindikator. Dier korrigierende Wirkung dieser methodologischen Evolution ist erheblich (eine Reduktion der *inbound mobility* um 25%).

Parallel zum Übergang zu Daten ‚echter' Mobilität ist das vorliegende Datenmaterial durch die Neueinführung der Erhebung von Absolventendaten (für ausländische wie mobile Studierende) bereichert worden, wie auch durch verschiedene meist auf nationaler Ebene durchgeführte Studierenden- und Absolventenbefragungen. Letztere liefern Informationen über Mobilitätsbewegungen im Verlauf des Studiums, wie auch über weitere mobilitätsbezogene Aspekte, die die reguläre Mobilitätsstatistik nicht erfasst. Trotzt unbestreitbarer Fortschritte in

einem kurzen Zeitintervall ist die die Datenlage weiterhin mit einer Reihe von Problemen behaftet, die der Abhilfe bedürfen.

- Obwohl die UOE Statistik lediglich *degree mobility* (für ein ganzes Studium) erfassen soll, liefert eine ganze Reihe von Ländern einen gemischten Datensatz, der auch einen Teil oder alle *credit mobile students* des Landes enthält. Dies führt zur „Verunreinigung" der UOE Daten. Da es zudem keine internationale Datenerhebung zur *credit mobility* gibt, existiert hier dringender Handlungsbedarf. Wir empfehlen die Einführung einer zusätzlichen *credit mobility* Kategorie in der UOE Datenerhebung oder alternativ die Einführung einer europaweiten Graduiertenbefragung zur Ermittlung von Mobilitätsbewegungen im Verlauf des Studiums.
- Zusätzlich notwendig ist ein weiteres Streamlining bei der Erhebung von ‚echten' Mobilitätsdaten. Insbesondere ist ein Konsens zur Operationalisierung der Indikatoren *country of prior / permanent residence* und *country of prior education* vonnöten, da sie über Ländergrenzen nicht einheitlich interpretiert werden.
- Desweiteren wird bisher keine Unterscheidung für *inter-cycle mobile students* vorgenommen. Die ISCED 97 Klassifizierung unterscheidet bis *dato* nicht zwischen Studierenden in Bachelor-, Master- und ‚langen prä-Bologna'-Studiengängen, die sie allesamt im 5A Segment kategorisiert. Dies hat zur Folge, dass die Auswirkungen der wichtigsten europäischen Hochschulreform der letzten Jahrzehnte (Bologna Prozess) und ihre Implikationen für die internationale Mobilität nicht bemessen werden können. Es gibt Anzeichen, dass die anstehende Revision der ISCED-Klassifizierung diesbezüglich Besserung bringen könnte.
- Wir weisen auch darauf hin, dass die Datenerfassung im ISCED 5B Bereich (*short-cycle*) unvollständig ist. Dies gilt auch für Studierende im Doktorandenbreich und in anderen fortgeschrittenen Studien. Diesbezügliche Verbesserungen erfordern nationale Anpassungen, die kurzfristig nicht in Sicht sind.
- Ausserdem sollten die internationalen Statistiken *incoming students* mit *home nationality*, d. h. sogenannte "Heimkehrer", erfassen, da sie in einigen Ländern eine personenstarke Gruppe ausmachen.

Nationale Mobilitätspolitiken (Kapitel V)

Angesichts der hohen Bedeutung, die die meisten nationalen Regierungen der Mobilität von Studierenden und *staff* in öffentlichen Stellungnahmen beimessen, verwundert es, wie wenige unter ihnen systematische und umfassende Mobilitätspolitiken bzw. –strategien entwickelt haben. Von wenigen Ausnahmen abgesehen, loben offizielle Dokumente Mobilität als erstrebenswert und verfolgen einen „je mehr, desto beser"-Ansatz, sind aber sonst wenig differenziert. Der Schwerpunkt der untersuchten offiziellen Dokumente liegt auf temporärer *outbound* Mobilität (der sich 19 Länder explizit verpflichtet fühlen), gefolgt von *incoming degree mobility* (18 Länder). *Outbound degree mobility* und *inbound credit mobility* spielt fast nirgends eine Rolle.

Obwohl quantitative Zielvorgaben häufiger werden, erweisen sich numerische Ziele als ein noch wenig verstandenes Konzept. Indikatoren werden selten präzise definiert. Die Mobilitätsambitionen sind je nach Land sehr unterschiedlich ausgeprägt. In regionaler Hinsicht gelten die EU bzw. der EWR für die meisten Länder (insbesondere diejenigen, die den Schwerpunkt auf temporäre *outbound* Mobilität legen) als höchste Priorität. Nachbarländer und solche mit traditionellen Bindungen werden ebenfalls häufig erwähnt, wie auch, in steigendem Maße, die BRIC-Ländergruppe. Studierende im Graduiertensegment sind die bevorzugte Zielgruppe bei der *inbound diploma* Mobilität. Differenzierungen nach Studienstufe werden im Bereich der *outbound mobility kaum* vorgenommen.

Die untersuchten Dokumente erwähnen eine breite Palette von Maßnahmen zur Erleichterung bzw. Ankurbelung von Mobilität, darunter Stipendienprogramme, englischsprachige Studiengänge, Informationsmaßnahmen, Marketing, Verbesserung der Anerkennung. Bezüglich der Motivation hinter ihrem Mobilitätsengagement bleiben viele Länder recht vage. Unter denjenigen, die sich deutlicher äussern, erwähnen einige eine Steigerung der Qualität der Hochschulbildung bzw. eine verbesserte Beschäftigbarkeit im Falle von *outgoing mobility*. Im Falle der *inbound degree mobility* spielen sogenannte „Erkenntnisgewinne" eine herausragende Rolle. Die (Erleichterung der) Zuwanderung von Hochqualifizierten, *internationalisation at home*, sowie entwicklungsbezogene und kultur-aussenpolitische Zielsetzungen kommen ebenfalls ins Spiel.

Mobilitätshindernisse und Mobilitätsanreize (Kapitel VI)

In unserer Analyse der vorliegenden Literatur zum Thema Mobilitätshindernisse konnten wir 8 Problemfelder (meist altbekannter Natur) von zentraler Bedeutung identifizieren: (1) mangelnde Information über Mobilitätsmöglichkeiten; (2) mangelnde Motivation zur internationalen Mobilität; (3) unzureichende finanzielle Unterstützung; (4) mangelnde Fremsprachenkenntnisse; (5) fehlende Zeit oder Möglichkeit ein Auslandsstudium in den normalen, vorgesehenen Ablauf des Studiums zu integrieren; (6) Bedenken hinsichtlich der Qualität des Studiums an der Zielhochschule; (7) rechtliche Hindernisse (insbesondere in Form von Visa, Einreisebestimmungen und Arbeitserlaubnis); sowie (8) Probleme bei der akademischen Anerkennung. Desweiteren konnten wir drei Gruppen von Mobilitätsanreizen identifizieren : finanzielle Unterstützung (insbesondere in Form von Stipendienprogrammen); curriculare Unterstützung (in Form unterschiedlichster Mechanismen, wie etwa dem Einsatz des Diploma Supplement und des ECTS) und innovative Lehrpläne (einschließlich „Mobilitätsfenster"); und personenbezogene Hilfe, etwa in Form von Beratungsleistungen zur Ermunterung zum Auslandsstudium und zur Sicherstellung einer hohen Qualität der gesamten Mobilitätsphase.

Unsere Literaturanalyse zeigt, dass die Interpretation von Mobilitätshindernissen und –anreizen in mehrfacher Hinsicht eine Herausforderung darstellt. Zunächst ist unsere Wissensbasis über die exakten Motivations- und Demotivationszusammenhänge ungenügend. Zudem wirken die motivierenden und demotivierenden Faktoren in den verschiedenen europäischen Ländern, in verschiedenen Fachrichtungen oder Studienstufen nicht in gleicher (oder gleich starker) Weise, was eine bedeutende Herausforderung für europaweite Maßnahmen zur Reduzierung von Mobilitätshindernissen und Schaffung von -anreizen darstellt. Die Hindernisse und Anreize für *degree und temporary mobility* sind zudem nicht immer identisch, was die Verantwortlichen beim Design von mobilitätsfördernden Maßnahmen berücksichtigen müssen.

Schlussfolgerungen und Empfehlungen (Kapitel VII)

Unsere Empfehlungen beziehen sich einerseits auf eine zukünftig verbesserte Datenerhebung und andererseits auf Maßnahmen zur Erhöhung der Mobilität in Europa.

Die Datenlage zur internationalen Studentenmobilität in Europa hat sich in jüngster Vergangenheit stark verbessert, aber die Qualität und der Differnziertheitsgrad der verfügbaren Statistiken lässt noch einiges zu wünschen übrig. Zur weiteren Verbesserung der Datenerhebung im Bereich der Studierendenmobilität empfehlen wir

- auf eine weitere Steigerung der Zahl von Ländern hinzuarbeiten, die für die UOE Statistik Daten zur 'echten' Mobilität von Studierenden bereitstellen, zusätzlich zu Nationalitäts-daten,
- in der UOE Statistik klar zwischen *diploma (degree) mobility* und *credit (temporary) mobility* zu unterscheiden, durch die Erfassung letzterer in einer separaten Kategorie,

- in der UOE Statistik vier verschiedene Studienstufen zu berücksichtigen (*short-cycle*, Bachelor, Bachelor, Master und Ph.D.),
- die Indikatoren *country of prior* bzw. *permanent residence* und *country of prior education* so zu operationalisieren (definieren), dass jeweils das Land, in dem eine Person *zuletzt* eine Ausbildung genoss, zugrunde gelegt wird,
- regelmäßig Informationen zu Mobilitätsbewegungen im Verlauf des Studiums in Form von Studierenden- bzw. Absolventenstudien zu sammeln.

Mit Blick auf eine zukünftige Datenerhebung im Bereich der *staff mobility* sind zunächst einige konzeptzionelle Vorarbeiten notwendig. Wir empfehlen diesbezüglich

- die Einrichtung einer regelmäßigen Grunddatenerhebung zu *academic staff* in Europa, die weit über die bisherige Erhebung von Mobilitätsdaten hinausgeht,
- die Beibehaltung und gleichzeitige Verbesserung der derzeitigen Datenerhebung im Doktorandenbereich, durch eine Konzentration auf vergebene Doktorabschlüsse (im Gegensatz zu Doktorandeneinschreibungen),
- die Schaffung einer neuen Datenerhebung für temporäre Mobilität von *staff,* die unter anderem Besuche, Austausche und *sabbaticals* im Ausland umfasst,
- die Schaffung eines europaweiten Systems zur Erfassung von internationaler Mobilität im Zuge des beruflichen Werdegangs von *staff*, auf der Basis von regelmäßigen *surveys*.

Mit Blick auf Maßnahmen zur Steigerung der heutigen Mobilitätsvolumina unterscheiden wir zwischen *incoming degree mobility* einerseits und *outgoing temporary mobility* andererseits und sprechen getrennte Empfehlungen für diese beiden sehr unterschiedlichen Mobilitätstypen aus. Da diese Studie im Auftrag der Europäischen Kommission erstellt wurde, fokussieren wir unsere Handlungsvorschläge auf die europäische Ebene. Doch möchten wir – auch angesichts der sehr unterschiedlichen Mobilitätszielsetzungen der Mitgliedstaaten und der sehr unterschiedlichen Mobilitätsvolumina und – muster in der einzelnen Ländern – darauf hinweisen, dass die entscheidende Interventionsebene die nationale ist.

Für den Bereich der *incoming degree mobility* empfehlen wir

- eine Erneuerung der Verpflichtung zum weltweiten Marketing des europäischen Hochschulwesens, etwa in Form einer Neuauflage des Global Promotion Project,
- Initiativen zur Verbreiterung des Lehrangebots in häufig gesprochenen Fremdsprachen (wie etwa Englisch) zum Abbau von Hindernissen für *incoming mobility* besonders in Ländern mit seltener gesprochenen Sprachen,
- Anstrengungen zur Attrahierung besonders begabter nichteuropäischer Studierender aus dem postgradualen Segment, besonders in Fachrichtungen und bezüglich Fähigkeitsbereichen von zentraler Relevanz, unter anderem durch eine weitere Verstärkung des ERASMUS MUNDUS Programms,
- eine Zielmarke von 10% für *incoming mobility* für Europa insgesamt zu setzen, aber den einzelnen Ländern unterschiedliche Wachstumsziele zu setzen. Diese wären höher für Länder mit derzeit niedrigen Volumina an *incoming mobility* und niedriger für Zielländer mit bereits hohen Volumina.

Im Bereich der temporären (und in wesentlichen innereuropäischen) Studierendenmobilität empfehlen wir

- das ERASMUS Programm in seiner derzeitigen Form – als ein für alle Fachrichtungen und Studienstufen offenes und auf die Förderung temporärer Mobilität beschränktes Programm – fortzuführen, zu stärken und adäquat auszustatten,

- im Rahmen des ERASMUS Programms und anderer Steuerungs- bzw. Finanzierungsinstrumente der Schaffung von Mobilitätsfenstern eine besondere Priorität einzuräumen und in den Bemühungen um robuste Anerkennungsprozeduren nicht nachzulassen,
- eine quantitative Zielmarke für *outgoing temporary mobility* in Anlehnung an die Bologna Zielmarke zu setzen, jedoch bei der Definition berücksichtigenswerter Mobilität auf seriösen Mindeststandards bezüglich Dauer und Tätigkeit im Ausland zu beharren und *degree mobility* für die Erreichung dieses Ziels nicht zu berücksichtigen (für diese kann notfalls eine separate Zielmarke gesetzt werden),
- vorhandene Instrumente zu stärken und ggf. neue Mechanismen zu schaffen, die eine Förderung temporärer Mobilität sowie degree mobility besonders qualifizierter Studierender zum Studium an ausgewählten Spitzenhochschulen in wichtigen nicht-europäischen Schwellenländern (etwa den BRICs und vergleichbaren) ermöglichen.

ii Key terms

Country/institution of destination = the country or institution to which the student moves. These concepts are synonyms of *host country/institution*, and are used interchangeably in the text.

Country/institution of origin = the country or institution from where the student moves. *Home country/institution* are used in the study as equivalent concepts to country/institution of origin. The country of origin can be identical with the country of nationality of the student, and/or with the country of permanent/prior residence or prior education.

Country of permanent/prior residence = the country where the student is formally domiciled, or the country of residence prior to taking up current study.

Country of prior education = the country where the student obtained the education certificate which qualified him/her for study at the subsequent higher education level. Prior education is defined, in the context of this study, as the education level *immediately prior* to the current level of study (e.g. the country where the bachelor degree was obtained for students currently enrolled in a master's programme). This definition is markedly different from the current definition of 'country of prior education' in the UOE statistics, i.e. the country where the upper secondary school leaving certificate – the qualification giving access to higher education studies – was obtained.

Credit/temporary mobility = mobility of a shorter duration (up to 1 academic year) which takes place in the framework of ongoing studies at a home intuition. After the credit/temporary mobility phase, students return to their home institution to complete their studies. An example of credit/temporary mobility is student exchanges. In the context of this study we define as credit/temporary mobility those mobility periods that consist of either study or traineeship (placement) abroad. Credit/temporary mobile students go abroad either for study or for a traineeship with the intention to have the mobility period recognised towards the degree at the home institution.

Diploma/degree mobility = mobility aimed at the acquisition of a whole degree or qualification in the country of destination.

Europe 32 countries = 32 European countries including (a) the 27 EU member states Austria, Belgium, Bulgaria, Cyprus, the Czech Republic, Germany, Denmark, Estonia, Spain, Finland, France, the United Kingdom, Greece, Hungary, Ireland, Italy, Lithuania, Luxembourg, Latvia, Malta, the Netherlands, Poland, Portugal, Romania, Sweden, Slovenia, and Slovakia; (b) the 4 EFTA members, i.e. Switzerland, Iceland, Liechtenstein, and Norway and (c) Turkey.

Foreign students = students with a nationality different from that of the country of study.

Graduates = students awarded a tertiary-level degree in a particular year.

Home/national students = students studying in the country of their nationality. To give an example, *home* or *national students* are Austrian nationals studying in Austria. The term indicates the opposite of *foreign students* in a given country.

Incoming students = students who come to a country for the purpose or in the context of their studies. These students are in most cases also *foreign students*, i.e. have a foreign nationality, but they can also be *national students*. As for the length and purpose of study, incoming students can be either *degree/diploma-seeking students* or *credit/temporary mobile students*.

Mobile students = students who cross national borders for the purpose or in the context of their studies. The opposite of a mobile student is a *non-mobile student*.

Mobility windows = periods of international mobility that are *embedded* in the curriculum. These phases can be either compulsory or optional, and can take different forms, from a semester abroad integrated in the curriculum, to joint/double degree programmes.

Other European countries = this sub-group includes Albania, Andorra, Belarus, Bosnia and Herzegovina, Croatia, Moldova, Monaco, the Russian Federation, Serbia and Montenegro, Ukraine and the Former Yugoslav Republic of Macedonia.

Outgoing students = students who leave their country and go to another, for the purpose or in the context of their studies. These students can be either *outgoing degree/diploma students*, i.e. aiming to obtain a full-degree in the country of destination, or *outgoing credit mobile students*, i.e. students aiming to do a shorter period of study or a traineeship abroad, as part of their ongoing degree studies. An *incoming student* in one country is an *outgoing stud*ent from another.

Short-cycle programmes = programmes at the ISCED 97 level 5B, i.e. which are below the bachelor level studies. The concept of *sub-bachelor programmes* is used alternatively in the study.

Study abroad students = national students enrolled, towards a degree/diploma, abroad. These students are *not* necessarily *outgoing students*, i.e. they need not have been mobile for the purpose of study. More precisely, they may have resided in the foreign country or completed prior education in the latter, already before starting higher education study there. For a reporting country, e.g. Austria, *study abroad students* are all Austrian nationals that study, in a giving year, outside Austria. A *foreign student* in one country is a *study abroad student* from another.

Study-related activities = are genuinely defined in the study as either *study periods* or *traineeships* abroad. The sole exception to this definition in the study is the data coming from the EUROSTUDENT report, which is presented in the country reports in Vol. II. For this dataset the concept of 'study-related activities' is broader, and encompasses traineeships, language courses and summer schools, but not study periods abroad (which are defined in the EUROSTUDENT report as 'enrolment').

iii Introduction

The present study, entitled *Mapping mobility in European higher education*, was produced by the Academic Cooperation Association (ACA) for the Directorate General for Education and Culture (DG EAC) of the European Commission. ACA was entrusted with the delivery of the study following a call for tenders[1] issued by DG EAC in the first half of 2009, in which the ACA proposal was successful. Work on the study commenced in October 2009 and was concluded in June 2011.

In the production of this study, ACA partnered with a number of institutions and individuals. Institutional partners were the *Hochschul-Informations-System GmbH* (HIS, Hannover), the *Deutscher Akademischer Austauschdienst* (DAAD, Bonn) and *CampusFrance* (Paris). The team was completed by three individuals currently or formerly working at the *International Centre for Higher Education Research* at the University of Kassel (INCHER, Kassel). Overall responsibility was with Ulrich Teichler (INCHER), Irina Ferencz and Bernd Wächter (both ACA). The study was carried out with the contribution of Ute Lanzendorf, with the support of colleagues from EUROSTAT and UIS and with that of national statistical offices in the 32 countries of analysis, to whom the members of the project team are sincerely grateful. The methodological design of the study was likewise refined through the valuable contributions and expert advice of Michael Bruneforth, John Reilly, Eric Beerkens, and Robert Gutierrez (the project's Advisory Board). The authors are also grateful to Queenie Lam, Neo Nkhereanye and Elke Lingier of ACA, for their support and work carried out for the completion of this study.

This study pursued three main aims. First, it was to analyse and document the development of the international mobility of students and – to a lesser extent – academic staff in Europe in the course of the past decade. Second, it was to explore and to report on the availability, quality, and depth of information and data on student and staff mobility. Third, it was to make two sets of recommendations. These were to relate, first, to desirable future improvements in the collection of data and information on international student and staff mobility, and, second, to suitable measures aiming to increase international student and staff mobility in Europe in the future.

The study covers mobility into, out of and between 32 European countries, which we refer to as the "Europe 32" region. This "region" is made up of the 27 member states of the European Union, the four member countries of the European Free Trade Association (EFTA) and Turkey.

The study consists of two volumes. The analyses in Volume I, which you are currently reading, relate to the Europe 32 region as a whole and are further detailed below. The focus of Volume II differs from that of the first volume in that it analyses developments in individual countries of the Europe 32 region. The volume is made up of in-depth analyses of the present state and past development of student mobility in 11 European countries, i.e. Austria, Cyprus, Estonia, the Dutch-speaking Community of Belgium, Germany, France, Italy, Romania, Spain, Sweden, and the United Kingdom. The country analyses were authored by Dominic Orr, Nicolai Netz and Maraja Riechers (HIS), Louise Watts and Nina Volz (CampusFrance) and Nicole Rohde (DAAD). Volume I, the present one, consists of seven chapters, which we are briefly describing below.

Chapter I - authored by Sandra Bürger, Irina Ferencz, and Bernd Wächter - provides a comparative analysis of degree mobility in Europe, or, to be more precise,

- on the study of foreign nationals in the Europe 32 countries and on the study of nationals from Europe 32 countries outside of those (also called *study abroad students*), as well as

[1] Public open tender EAC/02/2009: Study on mobility developments in higher education. Available at http://ec.europa.eu/education/programmes/calls/0209/index_en.html

- on ‘genuine’ incoming and outgoing mobility in the countries of the Europe 32 zone.

The main source of information used in this overview chapter are data from the international statistical collection of UNESCO, OECD and EUROSTAT (the so-called UOE data), which traditionally did not measure physical mobility across country borders, but the nationality of students and staff as well as, for those countries where this information is now available, data of the same organisations for genuine mobility (measured by country of prior/permanent residence or country of prior education). Wherever appropriate, the analysis of these data is “enriched” by insights from the country analyses in Volume II, and from findings from the other chapters in Volume I.

Chapter II – whose author is Irina Ferencz - is devoted to an analysis of the present situation, as well as the historical evolution of student mobility in the ERASMUS Programme (as well as of the student placement scheme which in earlier years formed part of the LEONARDO da VINCI Programme). The chapter also compares and contrasts the present mobility patterns and the historical development of ERASMUS student (and placement) mobility with the situation and trends of degree mobility described earlier in Chapter I. Additionally, it presents the – scarce – statistical information and other knowledge available on temporary mobility outside of ERASMUS.

Chapter III – authored by Ulrich Teichler – is devoted to staff mobility. The chapter presents the – very scarce – data available with regard to international movements of staff, but it is mainly a prolegomenon for a future data collection system. For this purpose, it analyses the various types of academic staff and the various forms of staff mobility, and it makes recommendations for a set of measures to start an international data collection on mobile staff.

Chapter IV – again by Ulrich Teichler and Irina Ferencz – is devoted to methodological issues of data collection on student mobility. The chapter discusses progress (or otherwise) made in the international data collection on student mobility; it identifies the – still numerous – shortcomings of and gaps in the available information on student mobility, and it proposes next steps to be taken to improve the international knowledge base on mobile students.

Chapter V – authored by Bernd Wächter – presents an analysis of policy papers and other documentation on the “mobility strategies” of the governments of the 32 countries covered in the study. The chapter provides information on the favoured modes of mobility, on quantitative mobility targets set, on regional foci, on mobility rationales, and on measures to implement the strategies, amongst others.

Chapter VI – by Laura Rumbley – provides an overview of the existing body of knowledge on the obstacles standing in the way of the mobility of students, based on the findings in the rich literature by researchers, practitioners and policy-makers. The chapter also contains a presentation of key contextual considerations, at the level of institutions and individuals.

The concluding Chapter VII – by the three editors Ulrich Teichler, Irina Ferencz and Bernd Wächter – presents the main conclusions and recommendations. In line with the double focus of the study (on data collection issues and on mobility in a substantive sense), the recommendations are also twofold. One set of recommendations relates to the future improvement in mobility data collection, regarding both students and staff. The second set of recommendations relates to possible measures to be taken to increase present levels of mobility.

Chapter I: International mobility of European students: comparative overview and trends

Sandra Bürger, Irina Ferencz, and Bernd Wächter

1 Introduction

This overview chapter presents the current picture and the historical development of international mobility of students into, out of and inside of "Europe".

For the purposes of this study, "Europe" means the 32 countries which, at the time work on the study commenced, were participating in the European Union's Lifelong Learning Programme. These are the 27 Member States of the European Union, the four members of the European Free Trade Association (EFTA), and Turkey. In this chapter, as throughout this study, we are referring to these countries also as the "Europe 32" region.

Data to describe and analyse the "present picture" refer to the year 2006/07. These may appear to be less than recent data. However, 2006/07 is the latest year for which, at the time of writing of this study, international mobility data were available from the main source of data used in this chapter – the so-called UOE data set. We use this set of data rather than data from other (for example, national) sources because it is the only source of internationally *comparable* data based on common definitions and reporting procedures[2]. UOE data are collected from national statistical offices and ministries by the three international data gatherers UNESCO (Institute of Education), OECD and EUROSTAT. The data were provided to us via EUROSTAT.

In order to trace developments in student mobility over time, i.e. to give a historical account, we use time series covering a nine-year period, starting with the academic year 1998/99 and ending with the year 2006/07.

Despite being the only source of internationally comparable data on student mobility, the UOE data set has some notable limitations, which we need to briefly describe before embarking on the substantive analysis of mobility.

Foreign nationality vs. 'genuine mobility'

Until a few years ago, the UOE data collection contained only data on foreign nationality students, which it used as a proxy of international mobility. For example, a Turkish student enrolled at a university in the UK or a Croatian student enrolled in Sweden was classified as 'mobile' due to the fact that his or her nationality was not British or Swedish. In line with this, the national statistical bodies which provide data to UOE were asked to report students with a foreign nationality – and the vast majority complied.

The equation of foreign nationality and international mobility might have been defendable in times when international migration was a rare phenomenon and the presence of foreign nationals was low. But under the conditions of globalisation, this equation became less and less tenable, especially in a European context, where the free movement of people became part of European legislation (Single European Act) in the 1980s. Many students with a foreign citizenship had actually lived and or attended school (and received their secondary school leaving certificate) in the

[2] The common definitions and reporting guidelines are described in the so-called UOE Manual, which can be accessed at the following site: http://circa.europa.eu/Public/irc/dsis/edtcs/library?l=/public/unesco_collection

country where they enrolled in higher education – and thus had not been mobile for the purposes of study. At the beginning of the 21st century, this became increasingly clear and was documented in a number of studies, in which the authors of the present report were also involved. [3] As a result of the changed situation, EURODATA, OECD and UNESCO encouraged their national data deliverers to report to them – in addition to data on foreign nationality which it continues to collect to this very day – statistics on 'truly mobile' students. They defined the *country of prior education* and the *country of prior/permanent residence* as the measures to identify a mobile student. While nine of the 32 countries covered in this study already reported data on genuine mobility in the year 2002/03, 24 countries[4] reported mobility data to UOE in 2006/07. This is substantial progress, but it still poses severe limitations for the present study because no data on incoming mobility is available in 8 countries of the Europe 32 region.

The historical development of mobility in the form of time series on incoming mobility can be analysed only for those 9 countries which collected mobility data already earlier (and only for the brief time span from 2002/03 to 2006/07); and since statistics for outgoing mobility are created from incoming mobility statistics in other countries of the world, and few countries outside of the Europe 32 region have embarked on collecting 'genuine' mobility data, the knowledge base on mobility out of the Europe 32 region to the rest of the world is even considerably weaker.

As a result of this situation, we have an incomplete picture with regard to data on genuine mobility. Therefore, we have to base our analysis of mobility below mainly on nationality data, even though they describe real mobility levels and patterns less precisely. We will use the mobility data mainly to put into perspective and to correct the picture emerging from the nationality data.

Levels of study

The UOE data set on foreign students and internationally mobile students is part of a much larger data collection on education indicators. This wider data collection follows the 1997 International Standard Classification of Education (ISCED)[5]. ISCED subdivides tertiary education into three categories (levels): 5B, 5A and 6. The main problem with this cut-up is that it lumps together the bachelor and master levels in ISCED 5A. One of the most important structural reforms of European higher education – the differentiation of the former 'long' single-cycle degrees into consecutive bachelor and master cycles in the course of the Bologna Process – is not reflected in the ISCED classification. As a result, we cannot provide separate data for these two levels in this chapter. Further, since not all of the Europe 32 countries can or do report on students at the ISCED 6 level (doctoral students) and at the ISCED 5B level ('short-cycle' qualifications), the present chapter cannot differentiate by level at all. We will therefore be reporting on 'students' without any further distinction.

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[3] Lanzendorf, U. and Teichler, U. (2003), Statistics on student mobility within the European Union: a statistical analysis, European Parliament (EDUC 112 EN), Luxembourg.

Kelo, M., Teichler, U. and Wächter, B (2006). *EURODTA. Student mobility in European higher education, Bonn (Lemmens) 2006.*

[4] The 9 countries which had information on incoming mobility already in 2002/03 were AT, BE-NL, CH, CY, DE, ES, UK, IE and LV. The 15 countries which have since started to collect data on incoming mobile students are BG, CZ, DK, EE, FI, HU, IS, LI , LT, NL, NO, RO, SE, SI and SK. The only countries which remained unable to provide incoming mobility data in 2006/07 were FR, GR, IT, LU, MT, PL, PT and TR. Contrary to the UOE requirement and the general trend, IE, LT and the UK had always reported data on incoming mobility; they had none on foreign nationality.

[5] For details of the ISCED97 classification, see

http://www.unesco.org/education/information/nfsunesco/doc/isced_1997.htm

Further limitations

There are a few further limitations inherent in the UOE data set. Amongst the more important ones are the following:

- The UOE Manual asks the national data providers only to report students who have been enrolled for at least one academic year. In other words, the UOE statistics are to record what we call in this study *degree or diploma mobility* (study in order to obtain a degree/qualification). They are to exclude temporarily mobile students, such as ERASMUS and other 'exchange' students. However, as explained in more detail in Chapter IV, not all countries abide by this rule. Some of them include all temporary mobile students in their reporting, whilst others include some temporary mobile students in their reporting. This can lead to a relative overcount of mobility in some countries, and therefore leads to distortions in country-comparative analyses.
- Not all countries provide important sub-differentiations of mobile or foreign students, such as a breakdown by country of origin of mobile students, or their fields of study.

This chapter is structured in the subsequent way. Following this introductory section, section 2 presents and analyses the most complete data set available – that on foreign students in the Europe 32 countries, and on students with a Europe 32 nationality studying outside of their country of nationality (whom we refer to as 'study abroad' students). Section 3 is a comparative analysis of these two datasets. Section 4 presents and analyses the available data on 'genuine mobility' into the Europe 32 countries and out of them (as far as any are available). It also contrasts the aforementioned data with the data on nationality and, on the basis of the two data sets, it tries to assess the real extent of incoming and outgoing mobility. At last, section 5 highlights the most important findings of the chapter. As previously mentioned, this chapter focuses exclusively on degree mobility and thus excludes temporary mobility.

2 Foreign students vs. study abroad students

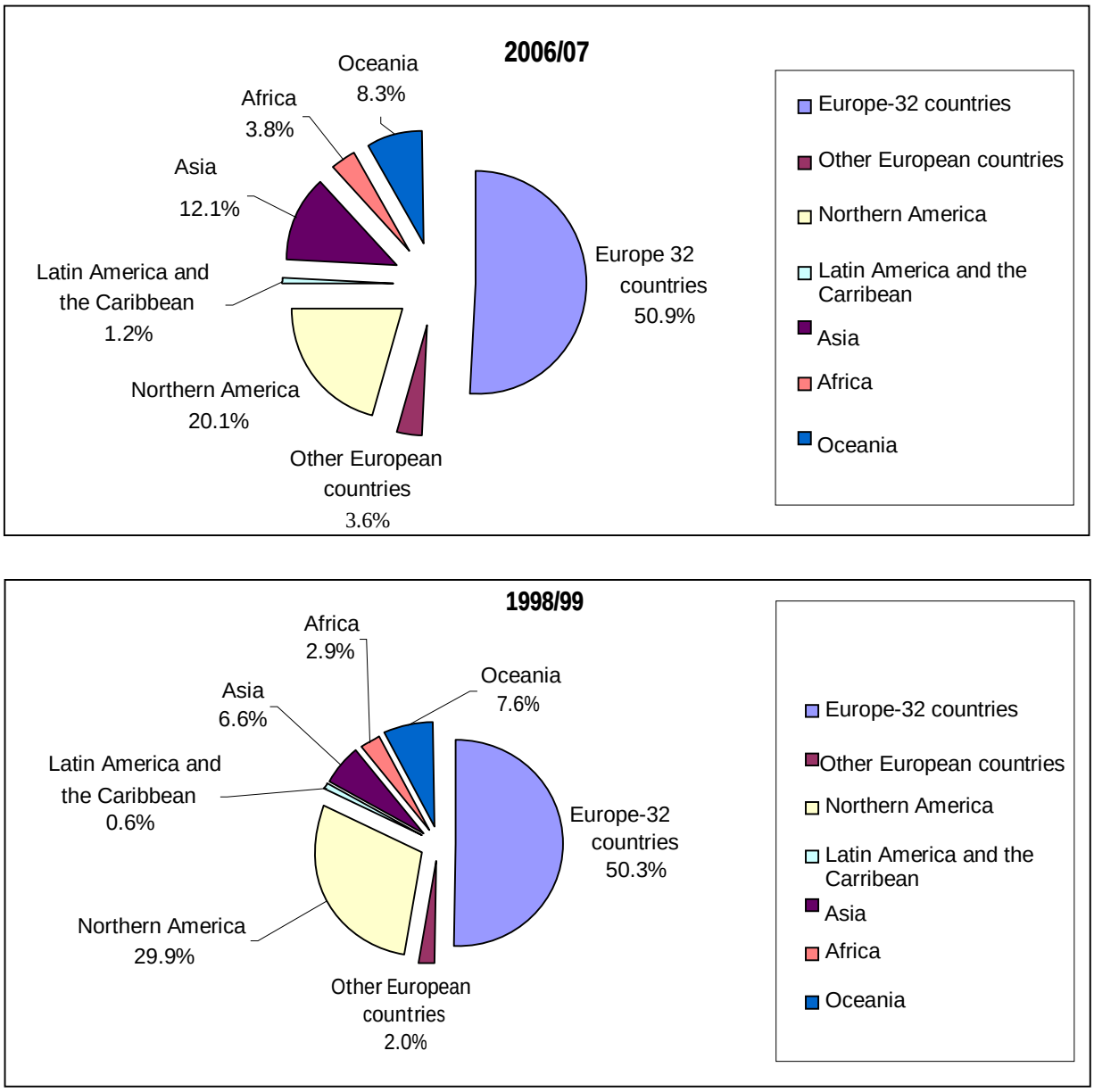
This section deals with *foreign students* and with *study abroad students* (both of whom are, as explained earlier, not necessarily *mobile* students). The data presented are from the UOE data collection. The section produces both a snapshot picture of the situation in the year 2006/07 (the last year for which UOE data were available at the time of production of the present study), as well as a historical development view, by comparing the 2006/07 dataset with data from 2002/03 and from 1998/99. The analysis is made separately for the two groups of foreign students and study abroad students. A concluding part provides a comparison of both data sets.

2.1 Foreign students

Overall levels and developments

In the year 2006/07, about 1.5 million students with a foreign nationality were enrolled in the countries of the Europe 32 region. These 1.5 million represented more than half (50.9%, see Figure 1) of the total number of students worldwide who studied outside of their country of nationality in this particular year. Nine years earlier, in 1998/99, Europe's share had been almost the same (50.3%).

Figure 1: Distribution of students studying outside their country of nationality (foreign students) across world regions in 1998/99 and 2006/07 (Source: UOE data collection; ISCED 5/6)

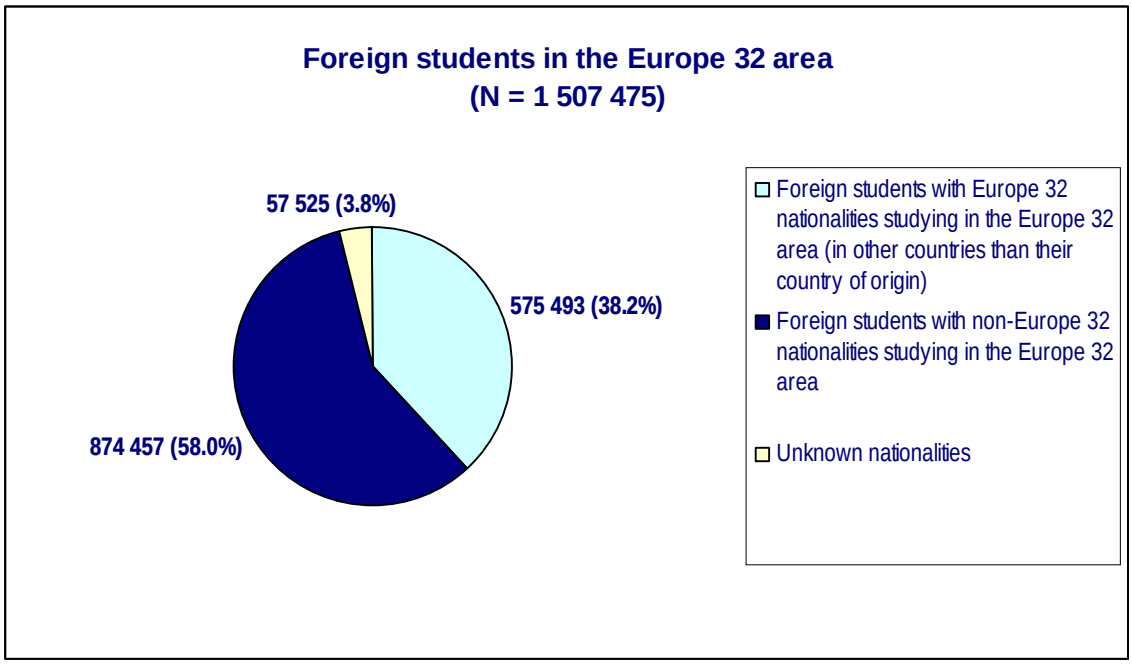


Both the 2006/07 numbers and the development over the nine-year period since 1998/99 are remarkable. The 32 countries covered in this study have a share of less than 10% of the world's population. The fact that every second student with a foreign nationality in the world is enrolled in the Europe 32 area is a clear expression of the very considerable popularity of European higher education. The fact that the Europe 32 region's share of all foreign students world-wide has remained stable (and even slightly increased) is even more astonishing. In the nine years since 1998/99, the global landscape of higher education has undergone immense changes. A number of economically emerging states (including China and India) were, in 1998/99, mainly 'sending' countries, due to limitations in capacity and quality. By 2006/07, many had started to attract foreign students and establish themselves as host countries of foreign students. This translated into increased competition for Europe. The notion that Europe would maintain its market share under

these conditions was far from self-evident, as the example of the US and its continuously falling 'world market share' illustrates. As will become apparent later, however, some countries contributed to this success far more than others.

The total of about 1.5 million foreign nationals enrolled the in Europe-32 region in 2006/07 consists of students from *both* the Europe-32 region and from elsewhere in the world. Nationals of Europe-32 countries are in the minority (about 575 000, or 38.2%). The larger group is made up of nationals of non-Europe-32 countries, inclusive of Europeans with a nationality of a non-Europe-32 country (about 874 000, or 58%). The origin of 3.8% (about 58 000) is unknown. Figure 2 illustrates the described distribution. As will be seen later, the share of nationals from outside of the Europe-32 zone has increased over time.

Figure 2: Foreign students in the Europe 32 area by region of origin (Source: UOE data collection; ISCED 5/6)



The total number of foreign nationality students in the Europe 32 region went up strongly in the eight-year period under review (see Table 1). The numbers grew by 681 000 from 827 000 in 1998/99 to 1 507 000 in 2006/07 (figures rounded), representing a growth rate of 82.3%. However, data were not available for all of the 32 countries for the years 1998/99 and 2006/07, which distorts the comparison. Taking into account only countries which had data available for both years, the growth was lower, yet still increased by 412 000, or 49.9%. Since some of the countries, for which either no data were available for the two reference years, or where the data definitions were not identical over time, appear to be amongst those with robust growth, we estimate that real growth was closer to the higher percentage (82.3%).

Total enrolment (of both students with foreign and home nationality) in the period from 1998/99 to 2002/03 grew much more modestly, by only 28.2% (see Table 2). As a result of the differences in growth for the two groups, the share of foreign students of all students (total enrolment) in the Europe 32 countries also grew, from 4.5% in 1998/99 to 6.9% in 2006/07. This Europe 32 average is paralleled by the development in most single countries, even though the speed of growth differs

markedly and there are even some countries where the share of foreign students amongst all students has fallen, such as Turkey and Romania.[6]

[6] These two countries, however, also show that the percentage of foreign students amongst all students – a very frequently used indicator – can be a treacherous one. Whereas the absolute number of foreign students dropped in the nine-year period under review in Romania, it rose in Turkey, yet total enrolment in Turkish higher education increased so rapidly that the foreign student share still dropped.

Table 1: All students and foreign students in Europe 32 countries in 1998/99, 2002/03 and 2006/07 (Source: UOE data collection; ISCED 5/6)

Europe 32 countries of enrolment/destination	All tertiary students			All foreign students			Proportion of foreign among all students %			Foreign female %		
	1998/99	2002/03	2006/07	1998/99	2002/03	2006/07	1998/99	2002/03	2006/07	1998/99	2002/03	2006/07
AT Austria	252 893	229 802	260 975	29 819	31101	43 572	11.5	13.5	16.7	49	51.9	53.8
BE Belgium	351 788	374 532	393 687	36 136	41 856	47 218	10.3	11.2	12.0	48	n.a.	57.2*
BG Bulgaria	270 077	230 513	258 513	8 412	8 025	9 351	3.1	3.5	3.6	42	41.6	41.1
CH Switzerland	156 390	185 965	213 112	25 258	32 847	41 058	16.2	17.7	19.3	44	44.8	46.9
CY Cyprus	10 842	18 272	22 227	1 860	5 282	5 973	17.2	28.9	26.9	39	22.6	25.6
CZ Czech Republic	231 224	287 001	362 630	4 583	10 338	24 483	2.0	3.6	6.8	41	48.6	51.2
DE Germany	-	2 242 397	2 278 897	178 195	240 619	258 513	n.a.	10.7	11.3	46	49.3	50.9
DK Denmark	106 957	201 746	232 194	12 325	18 120	20 851	11.5	9.0	9.0	61	54.1	55.4
EE Estonia	48 684	63 625	68 767	793	1 090	2 200	1.6	1.7	3.2	58	-	57.8
ES Spain	1 786 778	1 840 607	1 777 498	32 954	53 639	59 814	1.8	2.9	3.4	51	56.0	56.1
FI Finland	262 890	291 664	309 163	4 847	7 361	10 066	1.8	2.5	3.3	41	46.5	44.3
FR France	2 012 193	2 119 149	2 179 505	130 952	221 567	246 612	6.5	10.5	11.3	-	48.7	49.9
GR Greece	387 859	561 457	602 858	-	12 456	21 160	n.a.	2.2	3.5	-	-	-
HU Hungary	279 397	390 453	431 572	8 869	12 226	15 110	3.2	3.1	3.5	54	47.8	47.0
IE Ireland	151 137	181 557	190 349	7 183*	10 201*	16 758*	4.8	5.6	8.8	51	50.3	59.7
IS Iceland	8 462	13 347	15 821	207	580	783	2.4	4.3	4.9	72	65.3	60.9
IT Italy	1 797 241	1 913 352	2 033 642	23 496	36 137	57 271	1.3	1.9	2.8	50	56.3	58.8
LI Liechtenstein	-	440	673	-	346	594	n.a.	78.6	88.3	-	-	33.0
LT Lithuania	107 419	167 606	199 855	477	-	1 920	0.4	n.a.	1.0	22	33.8	48.3
LU Luxembourg	2 717	3 077	-	652	-	-	24.0	n.a.	n.a.	-	-	-
LV Latvia	82 042	118 944	129 497	1 847*	2 390*	1 433*	2.3	2.0	1.1	-	-	-
MT Malta	5 768	8 946	9 811	302	409	607	5.2	4.6	6.2	53	57.7	56.8
NL The Netherlands	469 885	526 767	590 121*	13 619	20 531	37 815	2.9	3.9	6.4	46	53.9	55.8*
NO Norway	187 482	212 395	215 237	9 004	11 060	15 618	4.8	5.2	7.3	53	56.9	57.6
PL Poland	1 399 090	1 983 360	2 146 926	5 693	7 617	13 021	0.4	0.4	0.6	48	54.0	50.4
PT Portugal	356 790	400 831	366 729	-	15 483	17 950	n.a.	3.9	4.9	-	50.1	47.9
RO Romania	407 720	643 911	928 175	13 279	9 730	12 188	3.3	1.5	1.3	40	47.5	10.3
SE Sweden	335 124	414 657	413 710	24 412	32 469	42 769	7.3	7.8	10.3	45	56.6	50.1
SI Slovenia	79 126	101 458	115 944	654	963	1 511	0.8	0.9	1.3	40	48.9	57.2
SK Slovakia	122 886	158 089	217 952	-	1 651	2 010	n.a.	1.0	0.9	-	46.0	48.7
TR Turkey	1 464 740	1 256 629	2 453 664	18 337	15 719	19 257	1.3	1.3	0.8	28	30.7	32.7
UK United Kingdom	2 080 960	2 287 833	2 362 815	232 540*	388 365	459 987	11.2	11.2	19.5	47*	48.3	50.7
Total	**15 216 561**	**19 430 382**	**21 782 519**	**826 705**	**1 117 735**	**1 507 473**	**4.5**	**5.8**	**6.9**	**39.1**	**46.4**	**49.9**

* 2006/07 data - BE: The calculation of the proportion of females is based on a total excluding (higher) social advancement education in the Flemish Community of Belgium (total: 41 351); UK: national estimation; IE, LV: *incoming students*; NL: According to EUROSTAT the tertiary student total of 590 121 includes around 17 000 students from the Open University. The proportion of female *foreign students* was calculated from a total excluding 208 *foreign students* with unknown nationality (37 607 students instead of 37 815) 1998/99 data.- Missing data.

Table 2: Increase/decrease in absolute and relative terms (%) in the number of all students and foreign students in Europe 32 countries, 1998/99 vs. 2006/07

Europe 32 countries of enrolment/destination	All tertiary students		Increase/decrease 1998/99-2006/07		All foreign students		Increase/decrease 1998/99-2006/07	
	1998/99	2006/07	Abs.	%	1998/99	2006/07	Abs.	%
	1	2	3	4	5	6	7	9
AT Austria	252 893	260 975	8 082	3.2%	29 819	43 572	13 753	46.1%
BE Belgium	351 788	393 687	41 899	11.9%	36 136	47 218	11 082	30.7%
BG Bulgaria	270 077	258 513	- 11 564	- 4.3%	8 412	9 351	939	11.2%
CH Switzerland	156 390	213 112	56 722	36.3%	25 258	41 058	15 800	62.6%
CY Cyprus	10 842	22 227	11 385	105.0%	1 860	5 973	4 113	221.1%
CZ Czech Republic	231 224	362 630	131 406	56.8%	4 583	24 483	19 900	434.2%
DE Germany	-	2 278 897	n.a.	n.a.	178 195	258 513	80 318	45.1%
DK Denmark	106 957	232 194	125 237	117.1%	12 325	20 851	8 526	69.2%
EE Estonia	48 684	68 767	20 083	41.3%	793	2 200	1 407	177.4%
ES Spain	1 786 778	1 777 498	- 9 280	- 0.5%	32 954	59 814	26 860	81.5%
FI Finland	262 890	309 163	46 273	17.6%	4 847	10 066	5 219	107.7%
FR France	2 012 193	2 179 505	167 312	8.3%	130 952	246 612	115 660	88.3%
GR Greece	387 859	602 858	214 999	55.4%	-	21 160	n.a.	n.a.
HU Hungary	279 397	431 572	152 175	54.5%	8 869	15 110	6 241	70.4%
IE Ireland	151 137	190 349	39 212	25.9%	7 183**	16 758**	9 575	133.3%
IS Iceland	8 462	15 821	7 359	87.0%	207	783	576	278.3%
IT Italy	1 797 241	2 033 642	236 401	13.2%	23 496	57 271	33 775	143.7%
LI Liechtenstein	-	673	n.a.	n.a.	-	594	n.a.	n.a.
LT Lithuania	107 419	199 855	92 436	86.1%	477	1 920	1 443	302.5%
LU Luxembourg	2 717	-	n.a.	n.a.	652	-	n.a.	n.a.
LV Latvia	82 042	129 497	47 455	57.8%	1 847**	1 433**	- 414	- 22.4%
MT Malta	5 768	9 811	4 043	70.1%	302	607	305	101.0%
NL The Netherlands	469 885	590 121***	120 236	25.6%	13 619	37 815	24 196	177.7%
NO Norway	187 482	215 237	27 755	14.8%	9 004	15 618	6 614	73.5%
PL Poland	1 399 090	2 146 926	747 836	53.5%	5 693	13 021	7 328	128.7%
PT Portugal	356 790	366 729	9 939	2.8%	-	17 950	n.a.	n.a.
RO Romania	407 720	928 175	520 455	127.7%	13 279	12 188	- 1 091	- 8.2%
SE Sweden	335 124	413 710	78 586	23.4%	24 412	42 769	18 357	75.2%
SI Slovenia	79 126	115 944	36 818	46.5%	654	1 511	857	131.0%
SK Slovakia	122 886	217 952	95 066	77.4%	-	2 010	n.a.	n.a.
TR Turkey	1 464 740	2 453 664	988 924	67.5%	18 337	19 257	920	5.0%
UK United Kingdom	2 080 960	2 362 815	281 855	13.5%	232 540**	459 987	n.a.	n.a.
Total	**15 216 561**	**21 782 519**	**4 289 105***	**28.2%***	**826 705**	**1 507 473**	**412 259***	**49.9%***

Source: UOE data collection

* Some data was excluded from the count – the calculation formula excludes the countries which had data only for one of the two years under consideration, in order to prevent false increases/decreases in the resulting totals. In this sense, the numerical difference between columns 2 and 1 does not match the number in column 3, as well as the difference between columns 6 and 5 does not match the total in column 7. The percentages were also calculated on the adjusted totals. In the calculation for foreign students UK was excluded as well, because of a change of descriptor from 2002/03 to 2006/07: the 1998/99 total reflects incoming mobile students, while the 2006/07 is the total of foreign students within the country. If we were to include this incomplete data set in the calculation, then the growth for All students would have been 6 565 958 (43%) and for foreign students 680 768 (82%).

** Data on incoming mobile students for UK, IE and LV.

*** According to EUROSTAT, the tertiary student total of 590 121 includes around 17 000 students from the Open University.

Much more than differences over time, differences between countries are striking, as a look at Table 1 reveals. Excluding the atypical example of Liechtenstein, the share of foreign students of total enrolment ranges from 26.9% in Cyprus, 19.5% in the UK, 19.3% and 16.7% in Switzerland and Austria respectively to only 0.6% in Poland, 0.8% in Turkey and 0.9% in Slovakia. This is another clear indication that European averages say little when it comes to the study of foreign nationals in single European countries. In fact, the majority of countries in the Europe 32 region have a share of foreign students of below 5%, as Map 1 one shows.

In absolute terms, the countries with the largest numbers of foreign students are the UK, Germany and France, in this order (see Table 1). The UK, the second most popular destination of foreign students in the world behind the US, hosted close to 460 000 foreign students in 2006/07, i.e. over 30% of all students in the Europe 32 countries. Germany and France followed at a distance, with almost 260 000 (17.1%) and 250 000 students (16.4%) respectively. Together, these three countries account for close to two-thirds of all foreign students in all Europe 32 countries (with European and non-European nationalities alike). On the one hand, one is inclined to regard this as trivial information, given the expectation that larger countries have a better 'absorption capacity' to attract and accommodate higher numbers of foreign students than smaller ones. However, country size and size of inflows often do not correlate. Italy, a country with roughly the same population size as the UK or France, has only close to 60 000 foreign students, and thus a fraction of foreign enrolment in these countries. Likewise, Poland, a country with a population size of close to 40 million, has only 13 000 foreign students. Another implication of the strong concentration of foreign students in the UK, Germany and France is that European averages are heavily influenced by mobility developments in these three countries.

When comparing growth rates in numbers of foreign students over the nine-year period from 1998/99 to 2006/07 (Table 2), we must again stress that we do not have comparable data for both reference years from every country. Therefore, we cannot precisely cite growth in the UK, which, against the European trend, did not collect nationality, but only mobility data (on prior residence) in 1998/99. Of the 25 countries for which comparable information is available (see Table 2), only two – Romania and Latvia – saw a decrease. Latvian numbers – which are, however, on incoming students, not on those with a foreign nationality – fell by 22.4% and Romanian numbers went down by 8.2%. At the other end of the spectrum, the Czech Republic recorded a huge increase of 434.2% (although almost entirely from one single source country, neighbouring Slovakia; see the country sheets for the Czech Republic and Slovakia in Annex I). Iceland (278.3%), Cyprus (221.1%), the Netherlands (177.7%), Estonia (177.4%), Italy (143.7%), Ireland (133.3%), Slovenia (131%), Poland (128.7%), Finland (107.7%) and Malta (101%) all saw increases of over 100%, though absolute numbers were often low. One can assume that the highest increase in *absolute numbers* of foreign students occurred in the UK, but, due to missing nationality data for the year 1998/99, it is not possible to precisely quantify this increase. Amongst the countries with available data for both reference years, France recorded the highest increase, of over 115 000 students. Nonetheless, France still fares lower than the aforementioned countries in relative terms, i.e. translated into a percentage growth rate, with a growth rate below 100% (88.3%).

Development of foreign and total enrolment

As we stated above, over the nine-year period from 1998/99 to 2006/07, growth in *foreign enrolment* in the Europe 32 region outpaced growth in *total enrolment ('all students')* considerably (49.9% vs. 28.2% in those countries which had data for both years). This overall picture – of bigger growth in the foreign than the total student population – is mirrored in most of the single Europe 32 countries (see Table 2). In France, the disparity in favour of growth in foreign enrolment is biggest, with growth rates for foreign students being ten times those for total enrolment (88.3% vs. 8.3%). Italy (143.7% vs. 13.2%), the Czech Republic (434.2% vs. 56.8%) and Finland (107.7% vs.17.6%) also show a large disparity in favour of growth in foreign enrolment. The trend is opposite in

Denmark, Latvia, Romania and Turkey, though the underlying drivers in these four countries are likely very different. All four countries show a remarkable expansion of total enrolment, which is understood as a result of additionally created capacity in countries with less than average higher education participation (i.e. in Turkey, Romania and, to an extent, Latvia). However, it is difficult to explain the more than twofold increase in total enrolment over the nine-year period in Denmark – a country with high participation rates already in the late 1990s. In two of the four countries, Romania[7] and Latvia, the picture is additionally the result of declining foreign enrolment in absolute terms. We do not have an explanation for this, and do not exclude that it is due to discontinuities in data collection practices in these countries.

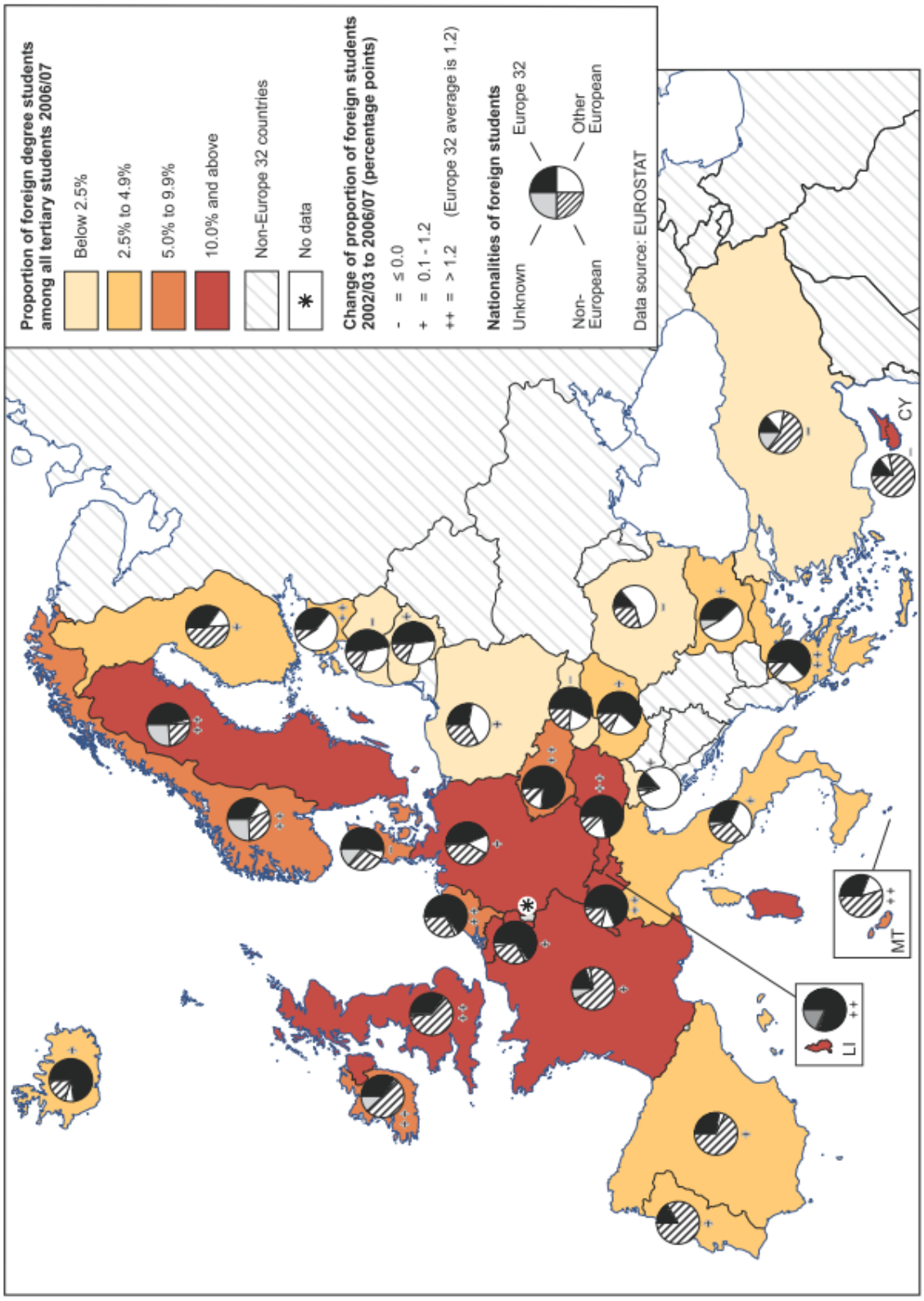
Gender

As Table 1 shows, there is an almost even *gender distribution* of foreign students in the Europe 32 region. At 49.9%, the share of female foreign students is only minimally lower than that of males. Female enrolment has steadily risen since 1998/99, when less than two-fifths (39.1%) of foreign enrolment was female. In 11 countries, the share of female foreign students is 55% or higher, with Iceland (60.9%) in the lead. Against the general trend, female participation is low (and has even decreased over time) in Romania (10.3%[8]) and Cyprus (25.6%). While the data for some individual countries, including the two-aforementioned ones, are sometimes difficult to explain, it is fairly safe to attribute the overall Europe 32 trend to changes in global gender role patterns, rather than to a particular attractiveness of the Europe 32 countries for female students.

[7] As we know from the country analysis of Romania (see Volume II of this study), numbers of foreign students in Romania actually went down sharply between 1998/99 and 2002/04, and then rose again.

[8] As Table 1 shows, the share of female foreign students in Romania stood at 47.5% in 2002/03. We therefore have reason to mistrust the 10.3% for 2006/07.

Map 1: Proportion of *foreign students* among all students, in 2006/07 (ISCED 5/6)



Nationalities

A closer look at the *regions and countries of nationality of foreign students* enrolled in Europe 32 countries and their evolution over time reveals a host of highly interesting findings. Map 1, as well as Tables 3 and 4 and Annex I are particularly valuable for this analysis.

The majority of foreign students in the Europe 32 region have nationalities of countries from outside of the same region (see Table 4). In absolute terms, some 874 000 students had non-Europe 32 nationalities, compared to about 575 000 students with a nationality of one of the 32 countries covered in this study, and about 129 000 from European countries outside the Europe 32 region. Thus in 2006/07, non-Europeans accounted for 49.9% all foreign students, followed by Europe 32 nationals (38.2%) and non-Europe 32 European nationals (8.5%).

Looking at the development over time, the chief finding is that growth in foreign student numbers in the Europe 32 area between 1998/99 and 2006/07 has been mainly fuelled by nationals of countries outside of Europe. In 1998/99, the single largest group of foreign students in the Europe 32 zone still came from this same area (see Table 3). This group represented 48.8% of all foreign students, followed by non-European nationals at 44.2% and students from "other European countries" (outside of the Europe 32 group) at 7%. This does not mean that absolute numbers have not also risen among Europe 32 nationals. However, the increase of roughly 172 000 (from approximately 403 000 to 575 000) of this group is much lower than that of students with non-European nationalities, which rose by about 380 000 (from 365 000 to 745 000), thus almost doubling. The growth in the numbers (and, as a result, the share) of students from European non-Europe 32 countries was also substantial.

The large growth in the numbers of non-European nationals is no doubt due to both "push" and "pull" effects. The fact that the Europe 32 region has managed to keep (and even slightly increase) its share of all foreign students worldwide in the nine years under review is a clear sign of its attractiveness in the eyes of potential students around the world; this is the pull effect. Conversely, the fact that a large number of countries around the world (predominantly outside of Europe) still do not have the capacity for (quality) higher education institutions to educate their citizens constitutes a push factor, from which Europe benefits, as do other countries with developed higher education sectors.

The single largest nationality group amongst foreign students is Chinese. In 2006/07, total enrolment of Chinese students studying abroad in the Europe 32 countries amounted to almost 123 000 (of whom a total of 104 000 studied in the UK, Germany and France). This translates into a Chinese share of 8.2% of all foreign nationality students in the Europe 32 area. At a considerable distance, Germans followed the Chinese, with a total number of 75 000. French (53 000), Italians (41 000), Poles (39 000), Turks (38 000) and Greeks (36 000) occupied the next ranks.

In absolute numbers, the group of Chinese saw the biggest growth in the period from 2002/03 to 2006/07, with an increase of some 42 000. In relative terms, this increase represented 52.3%, which is well above the Europe 32 average growth rate of 35.3%. But in relative terms, Indian students studying abroad grew most, by 131.6% (though it is important to know that 3 out of 4 Indians were enrolled at UK institutions). Of the nationalities mentioned in the previous paragraph, all but Greeks saw growth. Polish growth was biggest at 66.9%. The numbers of Germans also increased markedly, by 48.9%. Increases for French (18.2%), Turkish (6.4%) and Italian (4.6%) students were much more modest. The largest community of *foreign students* in any single country in the Europe 32 zone were Chinese students in the UK (close to 58 000), which had already been the case in 2002/03. Further, there were large communities of Indian and Irish students studying abroad in the UK (about 30 000 and around 27 000 respectively), and Chinese (around 27 000) and Turkish students (nearly 25 000) studying abroad in Germany.

As previously mentioned, the number of Greeks dropped. The case of the declining number of Greek students studying abroad is instructive, since it helps explain one of the drivers of outgoing degree mobility. Very often, high outflows of own nationals are a reaction to a quantitatively and/or qualitatively insufficient provision of higher education in a given country. This lack of provision acts as a push factor. This is the case with many developing (and economically emerging) countries, which helps explain the high numbers of Chinese and Indian students studying abroad (despite the remarkable speed of higher education expansion, especially in China). This was also, for a long time, the case with Greece (and it still applies to Cyprus). Therefore, the reduction of the excessively high numbers of Greek students in other Europe 32 countries is an encouraging sign, rather than a discouraging one.

There are four other countries that witnessed a reduction of the number of their nationals studying abroad. One of them was the UK, with a drop of about a fifth in the 4-year period from 2002/03 to 2006/07. The UK has, over a long period of time, been witnessing falling study abroad numbers. The drop in the number of Slovenes, by over two thirds, is less easily explicable, and might well be due to changes in data collection and recording. This could also be the explanation for the less dramatic decrease in the number of Belgians (of about 10%). Finland also saw a very minor drop, of 3.7%.

Overall, we observe a tendency towards more diversification of foreign nationalities of students in the Europe 32 zone. Between 1998/99 and 2006/07, the share of the ten most frequent nationalities of foreign students dropped from 57.2% to 54.3%, as Table 3 reveals. This is one of the side effects of the growth in non-European enrolment. However, also in this respect, diversity reigns supreme. In a number of countries, the *foreign student* body is becoming more homogeneous over time, e.g. in Bulgaria, the Czech Republic, Denmark or Malta. On the contrary, Austria and Norway show mixed trends in the eight year interval. In some countries, one single nationality group accounts for approximately half or more of all foreign students. We already mentioned the case of the Czech Republic, where Slovaks represent over two-thirds of the foreign student body. In Greece, 54% of foreign enrolment is from Cyprus. In Estonia, nearly 50% of foreign students are (probably resident) Russians and in Romania, some 49% are Moldavians.

Analysing the nationality composition of the foreign student body within each of the Europe 32 countries, we must stress again that variety is the chief characteristic. However, a few trends can be identified nonetheless.

The “global players” among the 32 countries, such as the UK, Germany and France, show a lesser degree of concentration of the top ten nationalities (roughly between 46% and 50%) than the Europe 32 area as a whole (54.3%).

Since these three countries make up almost two-thirds of all foreign students in the Europe 32 region, it is clear that the concentration of single nationalities in most of the other countries is considerably above the average.

Non-European nationalities reach extraordinarily high shares (above 60%) among *foreign students* in Portugal, Cyprus, France, Spain and the UK (Table 3), while countries such as Liechtenstein, Bulgaria, and Estonia have a much higher than average (above 90%) concentration of European nationality students (i.e. Europe 32 and “other European countries” combined).

Historical (including colonial) ties, cultural proximity and linguistic links still have a strong impact on the nationality composition of foreign students in many countries. In Portugal, for example, two-thirds of all foreign students come from three former colonies alone – Angola, Brazil and Cape Verde. A large proportion of foreign students in Spain are from Latin America. Amongst the top five nationalities in France, four are former colonies (in Africa). The share of Moldavians in Romania of some 49% and that of Cypriots in Greece (54%) has already been mentioned. The fact that the

third largest group of foreign students in Denmark is from Iceland – a nation of some 300 000, which was a Danish colony until 1944 – also underscores the power of traditional links.

While, as we already pointed out, non-European enrolment has increased and more foreign students than in previous years are nationals from countries outside of Europe, "neighbouring nationalities" (mostly from Europe) still dominate in a considerable number of countries. This is the case in many countries in Central and Eastern Europe and especially in Southeast Europe.

The majority of countries with high near-neighbour enrolment have relatively low shares of foreign students. This applies to most countries in Central and Southeast Europe. But it is not a "law of nature". Switzerland and Austria, with high foreign student shares of 19.3% and 16.7% respectively, also draw large numbers from neighbouring countries (i.e. each other, Germany, Italy and France).

Two interesting variants of a near-neighbour focus coupled with linguistic and cultural ties are the highly federalised countries of Belgium and Switzerland. In Belgium, the largest single group of foreign students is French at almost 38%. These students study, very predominantly, in the French speaking Community of Belgium (BE-FR). The second-largest group is made up of Dutch, who are almost all enrolled in the Dutch-speaking Community of Belgium (BE-NL). In Switzerland, the three largest groups are Germans (about 24%), Italians and French (both at around 11%). These groups predominantly study in the parts of the Swiss Federation where their respective mother tongue is spoken.

Table 3: Foreign students in Europe 32 countries in 1998/99, 2002/03 and 2006/07, by country of destination and region of foreign nationality (Source: UOE data collection; ISCED 5/6) (UOE)

Europe 32 country of destination	Regions of foreign nationality									10 most frequent nationalities of *foreign students* %		
	Europe 32 countries %			*Other European countries* %			Non-European countries %					
	1998/99	2002/03	2006/07	1998/99	2002/03	2006/07	1998/99	2002/03	2006/07	1998/99	2002/03	2006/07
AT Austria	71.9	74.6	71.9	10.4	13.3	15.5	17.7	11.7	12.5	66.3	97.1	72.1
BE Belgium	58.2	53.2	64.9	1.1	1.7	2.4	40.6	27.0	29.6	73.3	60.0	71.7
BG Bulgaria	65.1	38.2	38.0	24.3	51.4	54.0	10.6	10.4	8.1	89.1	90.3	90.2
CH Switzerland	73.8	69.8	68.2	3.7	10.0	10.3	22.4	20.1	19.5	65.3	61.6	61.6
CY Cyprus	15.5	9.5	14.2	20.5	6.6	7.5	63.9	82.7	78.3	79.6	88.6	83.5
CZ Czech Republic	51.3	77.0	76.7	6.3	8.9	10.6	42.4	12.3	11.9	53.0	82.0	84.4
DE Germany	52.9	48.1	43.5	11.2	13.1	14.5	35.9	38.0	41.4	52.2	49.0	50.2
DK Denmark	40.1	36.9	51.9	5.9	6.3	6.1	54.1	19.9	28.1	40.9	38.3	53.7
EE Estonia	83.9	75.1	35.7	11.2	11.2	55.0	4.9	13.7	9.3	96.2	94.8	94.5
ES Spain	58.8	56.2	27.5	1.6	2.1	4.3	39.6	41.7	68.2	62.3	63.8	58.4
FI Finland	38.4	38.4	34.8	12.5	17.3	14.2	49.1	42.4	50.3	55.0	58.5	56.2
FR France	28.6	21.5	19.2	2.9	2.7	3.4	68.5	69.1	69.3	49.5	47.9	46.4
GR Greece	-	84.9	62.7	-	8.3	23.8	-	6.3	12.7	-	92.5	85.4
HU Hungary	44.6	63.7	61.4	15.9	20.9	20.8	39.5	15.5	17.8	60.4	84.6	81.7
IE Ireland	47.7	42.1	34.4	0.8	1.7	2.0	51.6	56.2	51.6	73.9	72.7	61.6
IS Iceland	77.8	74.3	73.1	4.3	6.9	6.5	17.9	18.4	20.2	76.8	64.5	59.0
IT Italy	57.5	41.9	31.7	15.7	30.0	31.6	26.9	27.7	32.9	69.1	61.7	52.7
LI Liechtenstein	-	-	79.3	-	-	1.2	-	-	1.5	-	-	81.0
LT Lithuania	16.1	32.9	48.0	12.2	12.9	32.4	71.7	54.1	19.5	85.3	76.3	73.5
LU Luxembourg	89.0	-	-	0	-	-	11.0	-	-	88.8	-	*
LV Latvia	6.9	29.4	46.8	21.5	15.4	34.0	71.6	55.2	19.3	93.4	93.2	81.5
MT Malta	34.8	28.6	31.0	22.8	26.2	14.5	42.4	45.2	54.5	54.0	59.7	64.1
NL The Netherlands	54.8	57.8	65.1	5.0	3.5	3.0	40.2	38.0	31.4	71.0	70.0	68.0
NO Norway	34.8	40.4	34.2	9.6	9.6	9.3	55.6	24.6	31.0	39.1	43.2	37.4
PL Poland	31.0	29.1	27.7	33.8	45.2	39.8	35.3	25.5	32.5	64.5	74.1	68.0
PT Portugal	-	17.7	15.3	-	0.5	1.4	-	80.1	83.3	-	82.7	86.2
RO Romania	37.4	19.4	13.7	39.7	56.8	57.1	22.9	23.6	29.0	81.2	81.8	77.4
SE Sweden	54.2	53.7	45.4	6.3	4.6	3.3	39.6	20.0	25.2	47.2	44.9	38.7
SI Slovenia	14.4	11.2	13.6	77.8	83.8	80.2	6.9	3.1	4.3	92.5	92.9	89.7
SK Slovakia	-	39.4	58.0	-	25.0	18.1	-	35.6	23.9	-	72.0	71.9
TR Turkey	12.2	15.9	13.7	33.1	17.0	13.8	54.6	48.0	57.7	74.0	55.3	48.1
UK United Kingdom	51.8	40.8	34.9	1.2	1.5	1.7	47.0	57.4	61.8	56.4	55.5	49.4
Total	**48.8**	**42.1**	**38.2**	**7.0**	**8.0**	**8.5**	**44.2**	**45.6**	**49.5**	**57.2**	**56.8**	**54.3**

Table 4: Increase/decrease of foreign student numbers in Europe 32 countries 2002/03-2006/07 by country of nationality (Source: UOE data collection; ISCED 5/6)

Countries of nationality of *foreign students* in Europe 32 countries		2002/03		2006/07		Increase/Decrease 2002/03-2006/07	
		Abs.	%	Abs.	%	Abs.	%
AT	Austria	11 256	1.0%	11 798	0.8%	542	4,8%
BE	Belgium	10 468	0.9%	9 446	0.6%	- 1 022	-9,8%
BG	Bulgaria	18 055	1.6%	22 827	1.5%	4 772	26,4%
CH	Switzerland	5 602	0.5%	8 140	0.5%	2 538	45,3%
CY	Cyprus	14 995	1.3%	21 461	1.4%	6 466	43,1%
CZ	Czech Republic	5 434	0.5%	7 309	0.5%	1 875	34,5%
DE	Germany	50 451	4.5%	75 124	5.0%	24 673	48,9%
DK	Denmark	5 400	0.5%	5 617	0.4%	217	4,0%
EE	Estonia	2 079	0.2%	3 173	0.2%	1 094	52,6%
ES	Spain	18 375	1.6%	25 010	1.7%	6 635	36,1%
FI	Finland	9 412	0.8%	9 060	0.6%	- 352	-3,7%
FR	France	44 746	4.0%	52 892	3.5%	8 146	18,2%
GR	Greece	47 808	4.3%	36 098	2.4%	- 11 710	-24,5%
HU	Hungary	6 828	0.6%	7 622	0.5%	794	11,60%
IE	Ireland	14 241	1.3%	28 880	1.9%	14 639	102,8%
IS	Iceland	2 420	0.2%	3 276	0.2%	856	35,4%
IT	Italy	39 353	3.5%	41 144	2.7%	1 791	4,6%
LI	Liechtenstein	654	0.1%	740	0.0%	86	13,1%
LT	Lithuania	4 127	0.4%	6 861	0.5%	2 734	66,2%
LU	Luxembourg	6 428	0.6%	7 066	0.5%	638	9,9%
LV	Latvia	2 060	0.2%	3 345	0.2%	1 285	62,4%
MT	Malta	543	0.0%	1 022	0.1%	479	88,2%
NL	Netherlands	10 232	0.9%	12 391	0.8%	2 159	21,1%
NO	Norway	9 785	0.9%	10 705	0.7%	920	9,4%
PL	Poland	23 153	2.1%	38 649	2.6%	15 496	66,9%
PT	Portugal	11 051	1.0%	15 635	1.0%	4 584	41,5%
RO	Romania	14 779	1.3%	20 861	1.4%	6 082	41,2%
SE	Sweden	10 731	1.0%	11 613	0.8%	882	8,2%
SI	Slovenia	7 418	0.7%	2 361	0.2%	- 5 057	-68,2%
SK	Slovakia	12 797	1.1%	24 733	1.6%	11 936	93,3%
TR	Turkey	36 160	3.2%	38 474	2.6%	2 314	6,4%
UK	United Kingdom	15 084	1.4%	12 160	0.8%	- 2 924	-19,4%
Subtotal		**471 925**	**42,3%**	**575 493**	**38.2%**	**103 568**	**21.9%**
Other countries and regions							
Other European Countries		88 993	8,0%	128 589	8.5%	39 596	44.5%
...incl. Russian Federation		21 547	1,9%	31 679	2.1%	10 132	47.0%
Northern America		34 642	3,1%	44 678	3.0%	10 036	29.0%
...incl. United States		27 235	2,4%	33 055	2.2%	5 820	21.4%
Latin America and the Caribbean		50 274	4,5%	80 198	5.3%	29 924	59.5%
...incl. Mexico		6 820	0,6%	9 841	0.7%	3 021	44.3%
...incl. Brazil		8 700	0.8%	13 286	0.9%	4 586	52,7%
Africa		185 616	16,7%	250 480	16.6%	64 864	34.9%
Asia		236 711	21.2%	362 602	24.1%	125 891	53,2%
...incl. China		80 768	7.2%	122 987	8.2%	42 219	52,3%
...incl. India		17 224	1.5%	39 897	2.6%	22 673	131,6%
...incl. Japan		12 176	1.1%	12 757	0.8%	581	4,8%
Oceania		3 506	0.3%	7 910	0.5%	4 404	125,6%
Subtotal		**599 742**	**53.8%**	**874 457**	**58.0%**	**274 715**	**45,8%**
Unknown		***42 723***	**3.8%**	**57 525**	**3.8%**	**14 802**	**34,6%**
Total *foreign students*		**1 114 390**	**100,0%**	**1 507 475**	**100.0%**	**393 085**	**35.3%**

Subject areas

The distribution of foreign students over *subject areas* (Table 5) displays a pattern very similar to that of total enrolment. The largest single subject area group amongst foreign students is social sciences, business and law, with a share of 34.17%. This is very close to the 35.54% share of this subject cluster of total enrolment. The share is almost identical – at close to 14% – in engineering, manufacturing and construction. Foreign students have slightly higher shares in health and welfare, science and, in particular, in the humanities and arts. Differences in other subject areas may be larger, but absolute numbers in these are small.

However, a number of countries display a higher than average concentration of foreign students in particular subject fields. We would like to highlight the following:

- In Cyprus and Liechtenstein respectively, 74.1% and 72.6% of foreign students are enrolled in Social Sciences, Business and Law, compared to the Europe 32 average of 34.17%.
- A larger percentage of foreign students in some Central and Eastern European countries (i.e. Romania, Slovakia, Poland, Hungary, and Bulgaria) and Belgium enrol in health and welfare programmes (12.65%) than the Europe 32 average for foreign students in this subject area.
- Foreign students in Finland, Sweden and Liechtenstein show a higher than average (13.92%) rate of enrolment in engineering, manufacturing and construction programmes.

In two of the three cases above, the subject area deviation is a result of offerings in particular programmes in the countries concerned. In Cyprus, a very high share of foreign students is enrolled in private sector colleges offering sub-bachelor qualifications mainly in business studies at ISCED level 5B (see country sheet Cyprus in the Annex and the country chapter on Cyprus in Volume II of this study). In particular, these institutions target students from Asia. In Southern, Central and Eastern Europe, there is a long tradition of offering programmes in medical and paramedical studies (taught in English and, originally, in German) to foreign students from countries with limited capacities in these disciplines. In Belgium, the high share of foreign students in the health area is explained by capacity limits in paramedical subject areas in northern France.

Levels of study

The analysis in this section is based on UOE data, as explained earlier. UOE data provide a weak basis for differentiations into different study levels. UOE differentiates levels into ISCED 5B, ISCED 5A and ISCED 6. By lumping together the bachelor and master levels into ISCED 5A, UOE data do not reflect the major degree structure change of the Bologna Process. Data on the ISCED 6 level of doctoral students are provided separately, but, due to very different registration practices of doctoral students in Europe, the data are hardly comparable. We do not know to what extent the data on ISCED level 5B are solid and comparable.

Foreign graduates

In this section, we have so far only presented data on foreign students. In this concluding part, we are turning to data on foreign *graduates*. The UOE data collection has only very recently (in 2006/07) started collecting and publishing foreign graduate data (see Table 6).

Altogether, almost 291 000 foreign students graduated in the Europe 32 region in 2006/07. This corresponds to 6.4% of all graduates of the respective academic year. This rate is not much below the share of foreign students in the Europe 32 region in the same year (6.9%). However, the

foreign student rate a few years earlier, when the 2006/07 graduates entered higher education, was generally lower and, as we pointed out, in a number of countries this rate included not only degree students, but also credit mobile students. Taking these factors into consideration, we dare to conclude that a larger share of foreign students than that of domestic (home nationality) students made it to graduation (i.e. completion rates of foreign students are higher than those of home nationality students).

The available statistics, though, indicate that the relation between rates of *foreign students* and of foreign graduates vary substantially by country. We do not have information to explain the causes of the rates for individual countries.

Table 5: Fields of study of *foreign students* and all students in Europe 32 countries 2006/07 (ISCED 5/6)

Field of study / Country	Social sciences, business and law		Humanities and arts		Engineering, manufacturing and construction		Science		Health & welfare	
	Abs.	%	Abs.	%	Abs.	%	Abs.	%	Abs.	%
AT Austria	15 747	36.1%	9 911	22.7%	5 211	12.0%	5 184	11.9%	3 259	7.5%
BE Belgium	9 615	23.3%	5 949	14.4%	3 280	7.9%	2 950	7.1%	14 350	34.7%
BG Bulgaria	2 286	24.4%	1 026	11.0%	1 853	19.8%	297	3.2%	2 762	29.5%
CH Switzerland	14 502	35.3%	6 088	14.8%	6 424	15.6%	5 740	14.0%	3 311	8.1%
CY Cyprus	4 424	74.1%	278	4.7%	145	2.4%	564	9.4%	42	0.7%
CZ Czech Republic	8 694	35.5%	1 974	8.1%	2 709	11.1%	2 586	10.6%	4 766	19.5%
DE Germany	70 296	27.2%	51 021	19.7%	48 606	18.8%	42 032	16.3%	15 232	5.9%
DK Denmark	6 737	32.3%	2 579	12.4%	4 154	19.9%	2 001	9.6%	3 859	18.5%
EE Estonia	1 103	50.1%	315	14.3%	169	7.7%	165	7.5%	220	10.0%
ES Spain	12 185	20.4%	3 658	6.1%	4 418	7.4%	2 702	4.5%	7 139	11.9%
FI Finland	2 778	27.6%	1 426	14.2%	2 988	29.7%	1 144	11.4%	1 009	10.0%
FR France	98 187	39.8%	49 664	20.1%	31 070	12.6%	38 873	15.8%	21 532	8.7%
GR Greece	*	*	*	*	*	*	*	*	*	*
HU Hungary	3 766	24.9%	1 646	10.9%	1 269	8.4%	1 188	7.9%	4 359	28.8%
IE Ireland	*	*	*	*	*	*	*	*	*	*
IS Iceland	176	22.5%	336	42.9%	47	6.0%	141	18.0%	23	2.9%
IT Italy	18 206	31.8%	11 390	19.9%	8 281	14.5%	3 768	6.6%	11 662	20.4%
LI Liechtenstein	431	72.6%	5	0.8%	146	24.6%	*	0.0%	12	2.0%
LT Lithuania	898	46.8%	265	13.8%	211	11.0%	34	1.8%	298	15.5%
LU Luxembourg	*	*	*	*	*	*	*	*	*	*
LV Latvia	804	56.1%	141	9.8%	50	3.5%	28	2.0%	203	14.2%
MT Malta	289	47.6%	147	24.2%	14	2.3%	19	3.1%	88	14.5%
NL The Netherlands	15 260	40.6%	6 387	17.0%	2 804	7.5%	2 437	6.5%	5 553	14.8%
NO Norway	4 576	29.3%	2 598	16.6%	1 157	7.4%	2 261	14.5%	2 422	15.5%
PL Poland	4 577	35.2%	2 384	18.3%	597	4.6%	728	5.6%	3 677	28.2%
PT Portugal	8 810	49.1%	1 523	8.5%	3 293	18.3%	1 303	7.3%	1 304	7.3%
RO Romania	3 845	31.5%	1 444	11.8%	1 486	12.2%	508	4.2%	4 361	35.8%
SE Sweden	11 319	26.5%	6 237	14.6%	10 149	23.7%	6 221	14.5%	4 992	11.7%
SI Slovenia	487	32.2%	292	19.3%	235	15.6%	144	9.5%	178	11.8%
SK Slovakia	250	12.4%	294	14.6%	249	12.4%	127	6.3%	664	33.0%
TR Turkey	7 085	36.8%	1 937	10.1%	2 819	14.6%	1 692	8.8%	2 824	14.7%
UK United Kingdom	172 749	37.6%	61 273	13.3%	59 854	13.0%	61 860	13.4%	64 968	14.1%
TOTAL *foreign students*	**500 082**	**34.17%**	**232 188**	**15.9%**	**203 688**	**13.92%**	**186 697**	**12.76%**	**185 069**	**12.65%**
All students	**7 739 927**	**35.54%**	**2 669 867**	**12.26%**	**3 013 190**	**13.84%**	**2 218 184**	**10.19%**	**2 575 883**	**11.83%**

Source: UOE data collection

Field of study / Country	Education		Agriculture		Services		Unknown/not specified		TOTAL	
	Abs.	%	Abs.	%	Abs.	%	Abs.	%	Abs.	%
AT Austria	2 686	6,2%	742	1,7%	678	1,6%	154	0,4%	**43 572**	100%
BE Belgium	2 015	4,9%	2 422	5,9%	741	1,8%	29	0,1%	**41 351**	100%
BG Bulgaria	541	5,8%	151	1,6%	293	3,1%	142	1,5%	**9 351**	100%
CH Switzerland	1 728	4,2%	284	0,7%	2 351	5,7%	630	1,5%	**41 058**	100%
CY Cyprus	108	1,8%	8	0,1%	404	6,8%	0	0,0%	**5 973**	100%
CZ Czech Republic	1 275	5,2%	605	2,5%	411	1,7%	1 463	6,0%	**24 483**	100%
DE Germany	11 739	4,5%	3 110	1,2%	3 884	1,5%	12 593	4,9%	**258 513**	100%
DK Denmark	865	4,1%	556	2,7%	100	0,5%	0	0,0%	**20 851**	100%
EE Estonia	79	3,6%	91	4,1%	58	2,6%	0	0,0%	**2 200**	100%
ES Spain	899	1,5%	459	0,8%	1 458	2,4%	26 896	45,0%	**59 814**	100%
FI Finland	160	1,6%	142	1,4%	419	4,2%	0	0,0%	**10 066**	100%
FR France	2 824	1,1%	488	0,2%	3 682	1,5%	292	0,1%	**246 612**	100%
GR Greece	*	*	*	*	*	*	*	*	*****	100%
HU Hungary	980	6,5%	1 448	9,6%	454	3,0%	0	0,0%	**15 110**	100%
IE Ireland	*	*	*	*	*	*	*	*	*****	100%
IS Iceland	41	5,2%	9	1,1%	10	1,3%	0	0,0%	**783**	100%
IT Italy	1 341	2,3%	1 139	2,0%	994	1,7%	490	0,9%	**57 271**	100%
LI Liechtenstein	0	0,0%	0	0,0%	0	0,0%	0	0,0%	**594**	100%
LT Lithuania	192	10,0%	13	0,7%	9	0,5%	0	0,0%	**1 920**	100%
LU Luxembourg	*	*	*	*	*	*	*	*	*****	100%
LV Latvia	8	0,6%	0	0,0%	199	13,9%	0	0,0%	**1 433**	100%
MT Malta	5	0,8%	0	0,0%	45	7,4%	0	0,0%	**607**	100%
NL The Netherlands	1 401	3,7%	733	1,9%	2 717	7,2%	315	0,8%	**37 607**	100%
NO Norway	1 246	8,0%	215	1,4%	541	3,5%	602	3,9%	**15 618**	100%
PL Poland	547	4,2%	71	0,5%	440	3,4%	0	0,0%	**13 021**	100%
PT Portugal	652	3,6%	171	1,0%	894	5,0%	0	0,0%	**17 950**	100%
RO Romania	89	0,7%	174	1,4%	221	1,8%	60	0,5%	**12 188**	100%
SE Sweden	2 576	6,0%	366	0,9%	810	1,9%	99	0,2%	**42 769**	100%
SI Slovenia	68	4,5%	29	1,9%	78	5,2%	0	0,0%	**1 511**	100%
SK Slovakia	102	5,1%	233	11,6%	91	4,5%	0	0,0%	**2 010**	100%
TR Turkey	1 832	9,5%	457	2,4%	611	3,2%	0	0,0%	**19 257**	100%
UK United Kingdom	22 128	4,8%	3 259	0,7%	5 682	1,2%	8 214	1,8%	**459 987**	100%
TOTAL *foreign students*	**58 127**	**3,97%**	**17 375**	**1,19%**	**28 275**	**1,93%**	**51 979**	**3,55%**	**1 463 480**	**100%**
All students	**1 943 282**	**8,92%**	**452 309**	**2,08%**	**885 242**	**4,07%**	**277 305**	**1,27%**	**21 775 189**[9]	**100%**

Source: UOE data collection

[9] Total differs slightly from total in table 1.2

Table 6: All graduates, foreign graduates and foreign students in Europe 32 countries, in 2006/07 (ISCED 5/6)

Country of graduation	ALL graduates	Foreign nationality graduates		Foreign students among all students
	Abs.	Abs.	%	%
AT Austria	36 429	3 874	**10.6%**	**16.7%**
BE Belgium	103 970	10 944	**10.5%**	**12.0%**
BG Bulgaria	49 165	126	**0.3%**	**3.6%**
CH Switzerland	75 650	7 060	**9.3%**	**19.3%**
CY Cyprus	4 445	1 214	**27.3%**	**26.9%**
CZ Czech Republic	77 580	4 061	**5.2%**	**6.8%**
DE Germany	376 898	33 262	**8.8%**	**11.3%**
DK Denmark	50 849	4 141	**8.1%**	**9.0%**
EE Estonia	12 612	212	**1.7%**	**3.2%**
ES Spain	279 412	*	*	**3.4%**
FI Finland	42 296	1 336	**3.2%**	**3.3%**
FR France	541 930	63 103	**11.6%**	**11.3%**
GR Greece	60 475	*	*	**3.5%**
HU Hungary	67 224	1 973	**2.9%**	**3.5%**
IE Ireland	59 011	*	*	**8.8%**
IS Iceland	3 542	80	**2.3%**	**4.9%**
IT Italy	400 021	8 778	**2.2%**	**2.8%**
LI Liechtenstein	146	135	**92.5%**	**88.3%**
LT Lithuania	43 153	161	**0.4%**	**1.0%**
LU Luxembourg	3 818	*	*	*
LV Latvia	22 934	*	*	**1.1%**
MT Malta	2 729	*	*	**6.2%**
NL Netherlands	123 321	*	*	**6.4%**
NO Norway	35 410	2 280	**6.4%**	**7.3%**
PL Poland	532 827	1 692	**0.3%**	**0.6%**
PT Portugal	83 276	2 653	**3.2%**	**4.9%**
RO Romania	205 970	2 136	**1.0%**	**1.3%**
SE Sweden	60 243	5 858	**9.7%**	**10.3%**
SI Slovenia	16 680	172	**1.0%**	**1.3%**
SK Slovakia	202 826	334	**0.2%**	**0.9%**
TR Turkey	259 882	2 058	**0.8%**	**0.8%**
UK United Kingdom	732 066	133 249	**18.2%**	**19.5%**
Total	**4 566 790**	**290 892**	**6.4%**	**6.9%**

Source: UOE Data collection

2.2 Study abroad students

At the risk of stating the obvious, we would like to underline that "study abroad" in the context of the present study does *not* mean temporary study abroad. Study abroad students are nationals of a given country who are enrolled not in their country of nationality, but in another one. A French student studying in Austria is a foreign student from the Austrian perspective, but a study abroad student from the French perspective.

Europe is a net exporter of higher education

The total number of students of all Europe 32 countries studying outside their country of nationality stood at almost 673 000 in 2006/07. As shown in the previous section, the total number of foreign students in the Europe 32 region was slightly over 1.5 million. This is our first important finding on study abroad students. The number of foreign students in the Europe 32 area is more than twice as high as that of Europe 32 students studying abroad. Moreover, the Europe 32 is a "net importer" of students, or, to put it in trade terms, a net exporter of higher education.

Development across the Europe 32 area

Even though study abroad numbers for Europe 32 students are far below numbers for foreign students enrolled in the Europe 32 area, study abroad of students with a Europe 32 nationality did increase in the nine-year period in focus. Enrolment abroad grew from about 492 000 in 1998/99 to around 576 000 in 2002/03 and finally reached 673 000 in 2006/07 (see Table 7). This constitutes an increase of about 37%. Again, this growth is much lower than that of foreign students, which, as stated before, ranged at 82.3% and 49.9%, depending on the reference data preferred. The rate of Europe 32 study abroad students has grown slightly faster than the rate of home students in the nine-year period. The growth rate for the latter group was about 25% (compared to 37% for study abroad students). This means that study abroad of Europe 32 students was also increasing in relative terms, although much more moderately than that of the study of non-Europe 32 foreign students. We can express this development also in the form of a ratio of Europe 32 study abroad students to Europe 32 home students. This ratio went up from 0.026[10] in 1998/99 to 0.333 in 2006/07. Or, to put it in less technical terms, for every 1 000 students with a Europe 32 nationality enrolled at "home", there were 33 Europe 32 students studying outside their country of nationality in 2006/07, while there had been only 26 for every 1 000 in the same category in 1998/99.

But, once again, there are vast differences between countries. Excluding the very small and highly atypical Liechtenstein, the country with the highest study abroad rate was Cyprus; for every 100 Cypriots studying in their home country, there were 138 Cypriots enrolled abroad. After Cyprus, Iceland (25 out of 100), Ireland (17 out of 100) and Bulgaria (11 out of 100) followed. At the other end, i.e. amongst countries with a very low study abroad rate, the UK provided the most extreme example: for every 1 000 UK nationals studying at home institutions, there were 12 UK students enrolled abroad. Study abroad is almost as rare in Spain, Hungary and Turkey (with 17, 21 and 23 for every 1 000, respectively). For an easy overview of study abroad orders of magnitude, see Map 2.

[10] Please note that the growth, both in absolute numbers and percentages was calculated taking into account only those countries that provided data for all the reference years both for "all resident students" with home nationality and for Study abroad students. Countries that had data only for 1998/99, 2002/03 or 2006/07 were thus left out, in order to exclude artificial growth of absolute numbers and shares. If we were to include this incomplete dataset in the calculation, then ratio for 1998/99 would have been higher, i.e. at 0.036, as a result of the presence of the data for DE, GR, LI, PT and SK for study abroad students, but not for "all national resident students". The same calculation method was used for 2002/03 and 2006/07.

Developments in individual countries

Amongst the Europe 32 countries, development over time has been far from homogeneous. Against the general trend of moderate growth, study abroad numbers from the UK and Greece have actually decreased in the nine-year reference period. In Norway, there was a decrease between 2002/03 and 2006/07 (after a rise in the period from 1998/99 to 2002/03). As mentioned in the previous section, the constant and large decrease of Greek study abroad – of about 28 000 students or a 42.4% decrease (see Table 8) – is a good sign and must not be misread as a declining international orientation of young people in Greece. Greece has, in the period under review, created considerable additional study capacities "at home", thereby enabling more young Greeks to access higher education in their own country. The drop in UK study abroad numbers, from previously low levels, is a different matter altogether.

Nevertheless, study abroad of students in most Europe 32 countries grew, as earlier stated. The biggest absolute increase was recorded with German students, whose numbers grew by about 26 000, to nearly 88 000. Moreover, every eighth study abroad student with a Europe 32 nationality is a German. In relative terms, however, growth was highest for a number of new member states in the Baltic Sea region and in Central and Southeast Europe. Study abroad of Slovak students increased almost fivefold (though most of them went to neighbouring Czech Republic). Lithuania roughly tripled its study abroad numbers, as did Latvia. Cyprus' numbers grew nearly two and a half times, though it is interesting to note that the development in the sub-period from 2002/03 to 2006/07 was inverse, indicating that the country's study abroad pattern might follow that of Greece in the future. Further countries with growth rates between 150% and 200% were Estonia, Poland, Romania and Bulgaria.

Study abroad of Europe 32 students is less "concentrated" than study of non-European students in the Europe 32 region. The top three sending countries in 2006/07 – Germany, France and Turkey – accounted for approximately 206 000 of the roughly 673 000 study abroad students with Europe 32 nationalities (see Table 7). This translates into a 31% share for these countries. When comparing to foreign students studying in the Europe 32 region, the share of the top three receiving countries (UK, France and Germany) amounted to almost two-thirds of the total.

"Destinations"

In which countries/regions do students from Europe 32 countries study? The most important finding is put very simply: the vast majority of students from the Europe 32 area study in another country of the Europe 32 region. The share of Europe 32 students who studied in another Europe 32 country stood at 85.5% in 2006/07. The rate was already high in 1998/99, at 82.2%, but has since increased (see Tables 9 and 10). This high share of study abroad in Europe is, in technical terms, the result of an increase of study abroad in Europe 32 destination countries and a decrease of study in some non-European countries. It is interesting to note that numbers of Europe 32 students in Australia and the US have actually decreased. With about 72 000 students from the Europe 32 region, the US still attracts a high number of European students, but the often made claim that the US is an increasingly sought after study destination for European students is simply not supported by facts. The UK and Germany receive much higher numbers of Europe 32 study abroad students than that of the US – about 160 000 for the UK and 112 000 for Germany – thereby debunking this particular mobility myth.

We are unsure how to evaluate the very strong European focus of study abroad students from the Europe 32 region. On the one hand, this phenomenon constitutes a very clear vote of confidence for Europe as a study destination. If a majority of study abroad students from the Europe 32 zone opted for study elsewhere in the world, this would be bad news for the (perceived) quality of European higher education. On the other hand, the absence of sizeable numbers of students from the Europe 32 area in important emerging economies – particularly in China, India, and the

reduced enrolment of Europe 32 students in important neighbouring countries such as Russia – might well be a reason for concern. Europe needs young people knowledgeable about these up-and-coming economic and academic powerhouses.

Table 7: Students with Europe 32 nationalities enrolled abroad 1998/99, 2002/03 and 2006/07 (Source: UOE data collection; ISCED 5/6) (UOE)

Country of nationality	All resident students with home nationality			Home nationality students enrolled abroad			Ratio of students with home nationality enrolled abroad to resident students with home nationality		
	1998/99	2002/03	2006/07	1998/99	2002/03	2006/07	1998/99	2002/03	2006/07
AT Austria	223 074	198 701	217 403	11 407	12 628	12 965	0.051	0.064	0.060
BE Belgium	315 652	332 676	346 469	9 391	11 502	10 355	0.030	0.035	0.030
BG Bulgaria	261 665	222 488	249 162	9 673	22 072	26 623	0.037	0.099	0.107
CH Switzerland	131 132	153 118	172 054	8 400	8 765	9 850	0.064	0.057	0.057
CY Cyprus	8 982	12 990	16 254	6 471	16 904	22 411	0.720	1.301	1.379
CZ Czech Republic	226 641	276 663	338 147	3 837	6 800	8 419	0.017	0.025	0.025
DE Germany	-	2 001 778	2 020 384	52 080	62 821	87 750	-	0.031	0.043
DK Denmark	94 632	183 626	211 343	6 326	6 733	6 838	0.067	0.037	0.032
EE Estonia	47 891	62 535	66 567	1 399	2 399	4 020	0.029	0.038	0.060
ES Spain	1 753 824	1 786 968	1 717 684	25 909	27 626	29 027	0.015	0.015	0.017
FI Finland	258 043	284 303	299 097	9 817	10 430	9 838	0.038	0.037	0.033
FR France	1 881 241	1 897 582	1 932 893	44 593	53 188	61 593	0.024	0.028	0.032
GR Greece	-	549 001	581 698	66 428	50 284	38 231	-	0.092	0.066
HU Hungary	270 528	378 227	416 462	6 402	8 237	8 551	0.024	0.022	0.021
IE Ireland*	143 954	171 356	173 591	19 285	15 823	30 204	0.134	0.092	0.174
IS Iceland	8 255	12 767	15 038	2 395	2 985	3 771	0.290	0.234	0.251
IT Italy	1 773 745	1 877 215	1 976 371	43 268	43 061	45 044	0.244	0.023	0.023
LI Liechtenstein	-	94	79	531	665	747	-	7.074	9.456
LT Lithuania	106 942	166 917	197 935	2 141	4 817	8 532	0.020	0.029	0.043
LU Luxembourg	2 065	-	-	5 388	6 513	7 148	2.609	-	-
LV Latvia*	80 195	116 554	128 064	1 250	2 572	4 680	0.016	0.022	0.037
MT Malta	5 466	8 537	9 204	594	625	1 074	0.109	0.073	0.117
NL The Netherlands	456 266	506 236	552 306	12 819	12 486	14 433	0.028	0.025	0.026
NO Norway	178 478	201 335	199 619	12 749	15 453	13 646	0.071	0.077	0.068
PL Poland	1 393 397	1 975 743	2 133 905	15 600	26 267	41 896	0.011	0.013	0.020
PT Portugal	-	385 348	348 779	10 730	12 086	16 639	-	0.031	0.048
RO Romania	394 441	634 181	915 987	9 247	19 181	24 597	0.023	0.030	0.027
SE Sweden	310 712	382 188	370 941	13 758	15 254	15 791	0.044	0.040	0.043
SI Slovenia	78 472	100 495	114 433	1 719	2 385	2 699	0.022	0.024	0.024
SK Slovakia	-	156 438	215 942	4 428	14 429	25 466	-	0.092	0.118
TR Turkey	1 446 403	1 240 910	2 434 407	46 514	51 117	56 555	0.032	0.041	0.023
UK United Kingdom*	1 848 420	2 032 600	1 902 828	26 098	28 596	23 393	0.014	0.014	0.012
Total	**13 700 516**	**18 309 570**	**20 275 046**	**490 647**	**574 704**	**672 786**	**0.026**	**0.031**	**0.033**

Table 8: Increase/decrease of all resident students and of study abroad students by country of nationality, in 1998/99 vs. 2006/07

Country of nationality of *study abroad students*	All resident students with home nationality		Increase/decrease 1998/99-2006/07		Home nationality students enrolled abroad		Increase/decrease 1998/99-2006/07	
	1998/99	2006/07	Abs.	%	1998/99	2006/07	Abs.	%
	1	2	3	4	5	6	7	8
AT Austria	223 074	217 403	- 5 671	-2.5%	11 407	12 965	1 558	13.7%
BE Belgium	315 652	346 469	30 817	9.8%	9 391	10 355	964	10.3%
BG Bulgaria	261 665	249 162	- 12 503	-4.8%	9 673	26 623	16 950	175.2%
CH Switzerland	131 132	172 054	40 922	31.2%	8 400	9 850	1 450	17.3%
CY Cyprus	8 982	16 254	7 272	81.0%	6 471	22 411	15 940	246.3%
CZ Czech Republic	226 641	338 147	111 506	49.2%	3 837	8 419	4 582	119.4%
DE Germany	-	2 020 384	n.a.	n.a.	52 080	87 750	35 670	68.5%
DK Denmark	94 632	211 343	116 711	123.3%	6 326	6 838	512	8.1%
EE Estonia	47 891	66 567	18 676	39.0%	1 399	4 020	2 621	187.3%
ES Spain	1 753 824	1 717 684	- 36 140	-2.1%	25 909	29 027	3 118	12.0%
FI Finland	258 043	299 097	41 054	15.9%	9 817	9 838	21	0.2%
FR France	1 881 241	1 932 893	51 652	2.7%	44 593	61 593	17 000	38.1%
GR Greece	-	581 698	n.a.	n.a.	66 428	38 231	- 28 197	-42.4%
HU Hungary	270 528	416 462	145 934	53.9%	6 402	8 551	2 149	33.6%
IE Ireland*	143 954	173 591	29 637	20.6%	19 285	30 204	10 919	56.6%
IS Iceland	8 255	15 038	6 783	82.2%	2 395	3 771	1 376	57.5%
IT Italy	1 773 745	1 976 371	202 626	11.4%	43 268	45 044	1 776	4.1%
LI Liechtenstein	-	79	n.a.	n.a.	531	747	216	40.7%
LT Lithuania	106 942	197 935	90 993	85.1%	2 141	8 532	6 391	298.5%
LU Luxembourg	2 065	-	n.a.	n.a.	5 388	7 148	1 760	32.7%
LV Latvia*	80 195	128 064	47 869	59.7%	1 250	4 680	3 430	274.4%
MT Malta	5 466	9 204	3 738	68.4%	594	1 074	480	80.8%
NL The Netherlands	456 266	552 306	96 040	21.0%	12 819	14 433	1 614	12.6%
NO Norway	178 478	199 619	21 141	11.8%	12 749	13 646	897	7.0%
PL Poland	1 393 397	2 133 905	740 508	53.1%	15 600	41 896	26 296	168.6%
PT Portugal	-	348 779	n.a.	n.a.	10 730	16 639	5 909	55.1%
RO Romania	394 441	915 987	521 546	132.2%	9 247	24 597	15 350	166.0%
SE Sweden	310 712	370 941	60 229	19.4%	13 758	15 791	2 033	14.8%
SI Slovenia	78 472	114 433	35 961	45.8%	1 719	2 699	980	57.0%
SK Slovakia	-	215 942	n.a.	n.a.	4 428	25 466	21 038	475.1%
TR Turkey	1 446 403	2 434 407	988 004	68.3%	46 514	56 555	10 041	21.6%
UK United Kingdom*	1 848 420	1 902 828	54 408	2.9%	26 098	23 393	- 2 705	-10.4%
Total	**13 700 516**	**20 275 046**	**3 407 648***	**24.9%***	**490 647**	**672 786**	**182 139**	**37.1%**

* Some data was excluded from the calculation formula, i.e. the totals for the countries which had data only for one of the two years under consideration, in order to prevent false increases/decreases in the resulting totals. In this sense, the numerical difference between columns 2 and 1 does not match the number in column 3. The percentage value was also calculated on the adjusted total. If we were to include this incomplete dataset in the calculation, then the growth for All resident students would have been 6 745 530 (48%), mainly due to the impact of the German data.

Map 2: Proportion of study abroad students to all students with home nationality in 2006/07 (ISCED 5/6)

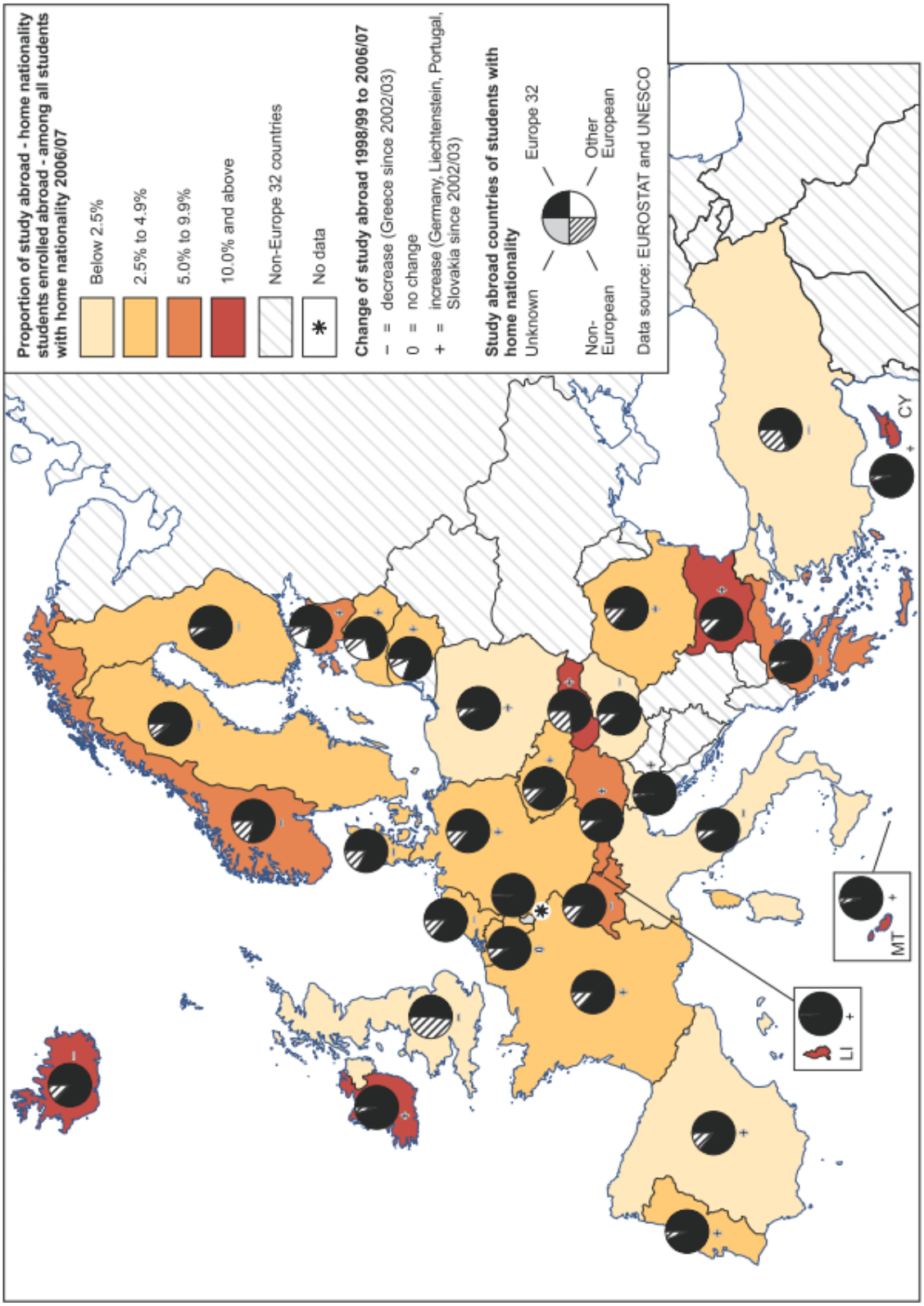


Table 9: Students with Europe 32 nationalities enrolled abroad 1998/99, 2002/03 and 2006/07, by region of study abroad (Source: UOE data collection; ISCED 5/6) (UOE)

Country of nationality	Study abroad regions									10 most frequent countries of study abroad %			Ratio national students abroad/*foreign students*		
	Europe 32 countries %			*Other European countries* %			Non-European countries %								
	1998/99	2002/03	2006/07	1998/99	2002/03	2006/07	1998/99	2002/3	2006/07	1998/99	2002/03	2006/07	1998/99	2002/03	2006/07
AT Austria	90.9	89.1	91.0	0.3	0.0	0.0	8.8	10.8	9.0	97.1	97.1	93.4	0.383	0.406	0.298
BE Belgium	89.1	91.0	91.2	0.2	0.0	0.1	10.7	9.0	8.7	95.7	96.5	94.6	0.230	0.275	0.219
BG Bulgaria	73.2	81.8	85.7	1.2	0.2	0.3	25.6	18.0	13.9	92.0	93.6	92.8	1.150	2.750	2.847
CH Switzerland	76.8	78.4	82.6	0.5	0.0	0.0	22.7	21.5	17.3	95.9	95.4	92.7	0.333	0.267	0.240
CY Cyprus	67.7	88.7	95.8	0.2	0.1	0.1	32.1	11.2	4.1	98.3	99.1	99.0	3.479	3.200	3.752
CZ Czech Republic	74.3	79.9	86.8	1.6	0.0	0.1	24.1	20.1	13.1	92.8	90.8	90.7	0.837	0.658	0.344
DE Germany	80.0	80.3	85.6	0.3	0.0	0.0	19.7	19.7	14.4	92.6	92.2	89.2	0.292	0.261	0.339
DK Denmark	81.1	80.2	82.1	0.1	0.0	0.0	18.8	19.8	17.8	94.3	93.6	93.6	0.513	0.372	0.328
EE Estonia	85.0	86.7	78.9	0.5	0.0	14.1	14.5	13.3	6.9	94.2	93.9	90.3	1.764	2.201	1.827
ES Spain	82.8	85.5	86.2	1.5	0.0	0.0	15.7	14.5	13.8	96.9	95.3	93.7	0.786	0.515	0.485
FI Finland	90.3	90.2	92.1	0.0	0.0	0.0	9.7	9.8	7.9	94.4	92.2	92.1	2.025	1.417	0.977
FR France	85.8	84.1	85.9	0.2	0.0	0.0	13.9	15.9	14.1	96.5	95.5	93.5	0.341	0.240	0.250
GR Greece	95.9	95.1	94.4	0.0	0.0	0.0	4.1	4.9	5.6	96.5	95.8	93.8	-	4.037	1.807
HU Hungary	81.3	82.9	89.1	1.0	0.1	0.2	17.7	17.0	10.7	92.2	91.3	90.5	0.722	0.674	0.566
IE Ireland	93.1	90.0	95.6	0.2	0.2	0.0	6.7	9.8	4.4	98.9	98.5	98.7	2.685	1.551	1.802
IS Iceland	78.7	81.1	86.9	0.1	0.0	0.0	21.2	18.9	13.1	97.5	96.5	95.6	11.570	5.147	4.816
IT Italy	83.3	91.4	91.3	9.5*	0.0	0.0	7.2	8.6	8.6	97.4	97.0	95.5	1.842	1.192	0.787
LI Liechtenstein	96.8	98.3	99.1	0.0	0.0	0.0	3.2	1.7	0.9	100.0	99.8	99.6	-	1.922	1.258
LT Lithuania	79.3	85.7	80.4	3.5	0.0	12.8	17.2	14.3	6.8	89.3	90.9	87.5	4.488	6.991	4.444
LU Luxembourg	98.9	98.7	98.9	0.0	0.0	0.0	1.1	1.3	1.1	99.5	99.3	98.9	8.264	-	-
LV Latvia	79.0	80.1	71.5	0.8	0.0	18.0	20.2	19.9	10.6	93.8	90.0	87.1	0.677	1.076	3.266
MT Malta	83.7	86.9	95.2	1.3	0.0	0.0	15.0	13.1	4.8	98.1	98.1	97.6	1.967	1.528	1.769
NL The Netherlands	83.3	81.9	85.9	0.1	0.0	0.0	16.6	18.0	14.1	96.2	95.0	93.4	0.941	0.608	0.382
NO Norway	75.5	63.3	78.4	0.0	0.0	0.2	24.5	36.7	21.3	94.6	93.2	90.5	1.416	1.397	0.874
PL Poland	84.2	88.1	92.2	3.2	0.1	0.1	12.7	11.7	7.6	92.5	93.7	92.9	2.740	3.448	3.218
PT Portugal	91.4	91.4	94.0	0.5	0.0	0.0	8.1	8.6	6.0	97.3	97.1	96.0	-	0.781	0.927
RO Romania	74.2	77.1	84.8	1.6	3.9	1.4	24.2	19.1	13.8	89.5	91.3	91.5	0.696	1.971	2.018
SE Sweden	64.0	62.5	87.5	0.1	0.0	3.8	35.9	37.5	8.7	92.4	91.7	89.0	0.564	0.470	0.369
SI Slovenia	82.4	82.4	97.1	6.2	6.1	0.0	11.3	11.5	2.8	94.8	93.3	90.7	2.628	2.477	1.786
SK Slovakia	88.1	94.9	73.5	1.9	0.0	0.0	10.0	5.1	26.4	96.2	96.7	97.4	-	8.740	12.670
TR Turkey	76.2	70.7	68.0	0.1	0.2	1.6	23.7	29.1	30.3	96.1	95.4	92.3	2.537	3.252	2.937
UK United Kingdom	51.9	47.0	52.0	0.3	0.0	0.0	47.8	53.0	48.0	91.6	91.2	86.4	0.112	0.112	0.051
Total	**82.2**	**82.0**	**85.0**	**1.3**	**0.2**	**0.6**	**16.6**	**17.8**	**14.4**	**95.3**	**94.7**	**92.9**	**0.593**	**0.514**	**0.444**

Table 10: Increase/decrease in Europe 32 study abroad students by country and region of destination, 2002/03-2006/07 (Source: UOE data collection; ISCED 5/6)

Nationals of Europe 32 countries studying abroad, by country of destination	2002/03		2006/07		Increase/Decrease 2002/03-2006/07	
	Abs.	% of all Europe 32 students studying abroad	Abs.	% of all Europe 32 students studying abroad	Abs.	%
AT Austria	23 210	4.0%	31 321	4.7%	8 111	34.9%
BE Belgium	22 268	3.8%	30 653	4.6%	8 385	37.7%
BG Bulgaria	3 068	0.5%	3 550	0.5%	482	15.7%
CH Switzerland	22 922	4.0%	27 985	4.2%	5 063	22.1%
CY Cyprus	504	0.1%	848	0.1%	344	68.3%
CZ Czech Republic	7 957	1.4%	18 780	2.8%	10 823	136.0%
DE Germany	116 624	20.1%	112 352	16.7%	- 4 272	-3.7%
DK Denmark	6 688	1.2%	10 831	1.6%	4 143	61.9%
EE Estonia	819	0.1%	786	0.1%	- 33	-4.0%
ES Spain	30 130	5.2%	16 461	2.4%	- 13 669	-45.4%
FI Finland	2 827	0.5%	3 500	0.5%	673	23.8%
FR France	47 659	8.2%	47 374	7.0%	- 285	-0.6%
GR Greece	10 578	1.8%	13 275	2.0%	2 697	25.5%
HU Hungary	7 782	1.3%	9 275	1.4%	1 493	19.2%
IE Ireland	4 293	0.7%	5 766	0.9%	1 473	34.3%
IS Iceland	431	0.1%	572	0.1%	141	32.7%
IT Italy	15 151	2.6%	18 156	2.7%	3 005	19.8%
LI Liechtenstein	*	0.0%	471	0.1%	n.a.	n.a.
LT Lithuania	227	0.0%	922	0.1%	695	306.2%
LU Luxembourg	702	0.1%	670	0.1%	- 32	-4.6%
LV Latvia	*	0.0%	*	0.0%	n.a.	n.a.
MT Malta	117	0.0%	188	0.0%	71	60.7%
NL Netherlands	11 876	2.0%	24 603	3.7%	12 727	107.2%
NO Norway	4 470	0.8%	5 345	0.8%	875	19.6%
PL Poland	2 220	0.4%	3 604	0.5%	1 384	62.3%
PT Portugal	2 741	0.5%	2 747	0.4%	6	0.2%
RO Romania	1 883	0.3%	1 672	0.2%	- 211	-11.2%
SE Sweden	17 449	3.0%	19 422	2.9%	1 973	11.3%
SI Slovenia	650	0.1%	1 165	0.2%	515	79.2%
SK Slovakia	108	0.0%	205	0.0%	97	89.8%
TR Turkey	2 499	0.4%	2 646	0.4%	147	5.9%
UK United Kingdom	104 072	17.9%	160 348	23.8%	56 276	54.1%
Subtotal	**471 925**	**81.4%**	**575 493**	**85.5%**	**103 568**	**21.9%**
Other European countries	5 662	1.0%	4 174	0.6%	- 1 488	-26.3%
...incl. Russian Federation	4 472	0.8%	2 215	0.3%	- 2 257	-50.5%
Northern America	76 694	13.2%	72 172	10.7%	- 4 522	-5.9%
...incl. United States	76 694	13.2%	72 172	10.7%	- 4 522	-5.9%
Latin America and the Caribbean	942	0.2%	325	0.0%	- 617	-65.5%
...incl. Mexico	*	0.0%	*	0.0%	n.a.	n.a.
...incl. Brazil	61	0.0%	*	0.0%	n.a.	n.a.
Africa	54	0.0%	87	0.0%	33	61.1%
Asia	6 063	1.0%	8 265	1.2%	2 202	36.3%
...incl. China	134	0.0%	130	0.0%	- 4	-3.0%
...incl. India	131	0.0%	*	0.0%	n.a.	n.a.
...incl. Japan	2 033	0.4%	2 767	0.4%	734	36.1%
Oceania	18 481	3.2%	12 267	1.8%	- 6 214	-33.6%
...incl. Australia	17 012	2.9%	9 480	1.4%	- 7 532	-44.3%
Subtotal	**107 896**	**18.6%**	**97 290**	**14.5%**	**- 10 606**	**-9.8%**
TOTAL	**579 821**	**100%**	**672 783**	**100%**	**92 962**	**16.0%**

Source: UOE

2.3 Foreign students vs. study abroad students

As we mentioned in the preceding section, the number of foreign students in the Europe 32 area is more than twice as high as the number of students with a Europe 32 nationality studying abroad. In 2006/07, the numbers (rounded) were 1 507 000 and 673 000 respectively. The gap between the two groups grew over the nine-year reference period, since the number of foreign students grew faster than that of Europe 32 study abroad students. The ratio of foreign students in the Europe 32 area to Europe 32 study abroad students grew from 1.7 in 1998/99 to 1.9 in 2002/03 and finally reached 2.2 in 2006/07.

Frequently in this study, we find the picture at the national level much more diverse. Of the 31 countries for which we have data for both the study of non-European students and for Europe 32 study abroad students (no data for Luxembourg, see Table 11 and Matrix 1), a slight majority of 17 countries have at least as many students of their own nationality abroad as foreign students enrolled in their country's higher education system. Among them are many modestly-sized European countries, mostly in Central and Eastern Europe, but also Finland, Greece, Ireland and Turkey. By far, the strongest dominance of home students abroad over foreign students enrolled at higher education institutions within a country exists in Slovakia, which has over ten times as many study abroad students as foreign students. Slovakia is followed by Iceland and Lithuania, which both have about four times as many study abroad students as foreign students. In addition, Poland and Turkey have about three study abroad students for every foreign student (see table 11 and Map 3).

In 14 countries – among them the large ones of the Europe 32 region – the situation is the opposite. These countries host more foreign students than students with their nationalities who enrol abroad. The country with the strongest dominance of foreign students over study abroad students is the UK. The number of foreign students in the UK is almost 20 times higher than the number of UK students enrolled abroad. The dominance of foreign students was already very pronounced in 1998/99 (8.9) and in 2002/03 (13.6), but has still grown since. This extreme picture is the result of very high numbers of foreign students and very low figures for study abroad students. We also want to point out that the UK situation heavily influences the European average ratio. As stated above, the ratio for the Europe 32 region as a whole stood at 2.2 in 2006/07. Excluding the UK, it would stand at 1.6. With an "in-out" ratio of 19.7, the UK is in a category of its own. The country with the next-highest "in-out" ratio is Belgium, at 4.6, followed by Switzerland, at 4.2 and France, at 4.0.

Looking at the development of ratios over time, we would like to highlight that while the evolution was unidirectional in most countries, this was not the case everywhere. Both Norway and Italy underwent a profile change, turning from 'net exporters' to 'net importers' of students in the course of nine-year reference period. Finland's development also moved in this direction, but has so far (as of 2006/07) reached equilibrium (a ratio of 1.0). In fact, Finland was, in 2006/07, the only country in the Europe 32 zone where the numbers of foreign students and study abroad students were more or less equal.[11] In a number of countries in the Baltic Sea region and Southeast Europe, there was a constant downward trend, due mainly to strong growth in study abroad. Latvia's ratio decreased from 1.5 in 1998/99 to 0.3 in 2006/07 and Romania from 1.4 to 0.5 in the same years. Like Norway and Italy, these two countries underwent a 'profile change', but in the opposite direction (i.e. they turned from 'net importers' to 'net exporters' of students). Ratio values also went down in Bulgaria, as they did, though to a very small extent, in Turkey, Poland and Estonia, but these countries did not change their role as 'net exporters'.

[11] This is in line with Finland's mobility target for incoming and outgoing degree mobility, which foresees a balanced situation (see Chapter VI on "mobility policies" further on in this study).

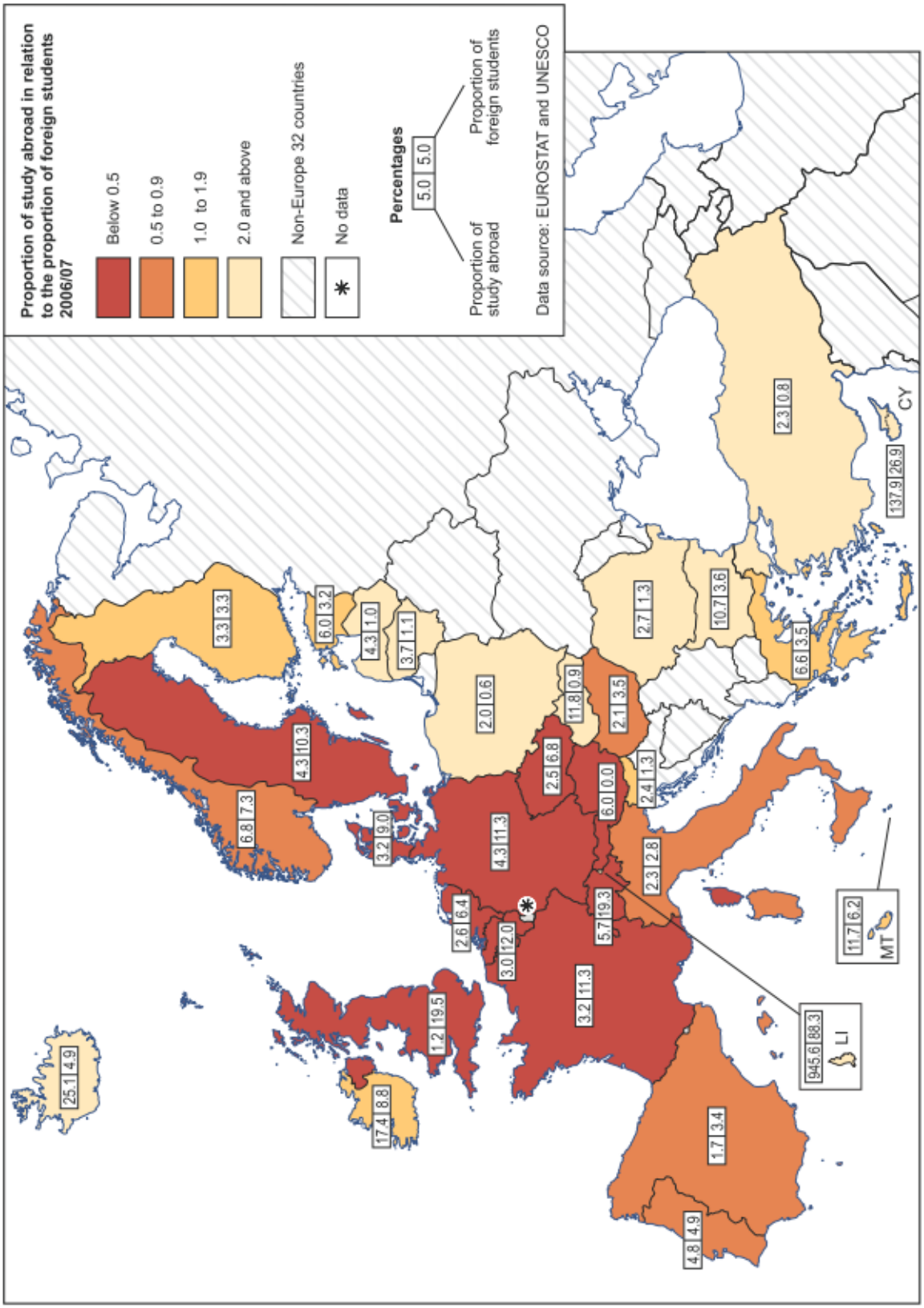
Furthermore, as in 2002/03, it still holds true that Germany and France are the only Europe 32 countries which not only rank high with respect to the number of home students enrolled abroad but also rank high as prominent host countries for *foreign students*.

Table 11: Foreign students vs. study abroad students absolute numbers and In:Out ratios* in 1998/99, 2002/03, 2006/07

Europe 32 countries		1998/99			2002/03			2006/07		
		Foreign students	*Study abroad students*	In:Out ratio	*Foreign students*	*Study abroad students*	In:Out ratio	*Foreign students*	*Study abroad students*	In:Out ratio
AT	**Austria**	29 819	11 407	**2.6**	31 101	12 628	**2.5**	43 572	12 965	**3.4**
BE	**Belgium**	36 136	9 391	**3.8**	41 856	11 502	**3.6**	47 218	10 355	**4.6**
BG	**Bulgaria**	8 412	9 673	**0.9**	8 025	22 072	**0.4**	9 351	26 623	**0.4**
CH	**Switzerland**	25 258	8 400	**3.0**	32 847	8 765	**3.7**	41 058	9 850	**4.2**
CY	**Cyprus**	1 860	6 471	**0,3**	5 282	16 904	**0.3**	5 973	22 411	**0.3**
CZ	**Czech Republic**	4 583	3 837	**1.2**	10 338	6 800	**1.5**	24 483	8 419	**2.9**
DE	**Germany**	178 195	52 080	**3.4**	240 619	62 821	**3.8**	258 513	87 750	**2.9**
DK	**Denmark**	12 325	6 326	**1.9**	18 120	6 733	**2.7**	20 851	6 838	**3.0**
EE	**Estonia**	793	1 399	**0.6**	1 090	2 399	**0.5**	2 200	4 020	**0.5**
ES	**Spain**	32 954	25 909	**1.3**	53 639	27 626	**1.9**	59 814	29 027	**2.1**
FI	**Finland**	4 847	9 817	**0.5**	7 361	10 430	**0.7**	10 066	9 838	**1.0**
FR	**France**	130 952	44 593	**2.9**	221 567	53 188	**4.2**	246 612	61 593	**4.0**
GR	**Greece**	-	66 428	**n.a.**	12 456	50 284	**0.2**	21 160	38 231	**0.6**
HU	**Hungary**	8 869	6 402	**1.4**	12 226	8 237	**1.5**	15 110	8 551	**1.8**
IE	**Ireland**	7 183	19 285	**0.4**	10 201	15 823	**0.6**	16 758	30 204	**0.6**
IS	**Iceland**	207	2 395	**0.1**	580	2 985	**0.2**	783	3 771	**0.2**
IT	**Italy**	23 496	43 268	**0.5**	36 137	43 061	**0.8**	57 271	45 044	**1.3**
LI	**Liechtenstein**	-	531	**n.a.**	346	665	**0.5**	594	747	**0.8**
LT	**Lithuania**	477	2 141	**0.2**	-	4 817	**n.a.**	1 920	8 532	**0.2**
LU	**Luxembourg**	652	5 388	**0.1**	-	6 513	**n.a.**	-	7 148	**n.a.**
LV	**Latvia**	1 847	1 250	**1.5**	2 390	2 572	**0.9**	1 433	4 680	**0.3**
MT	**Malta**	302	594	**0.5**	409	625	**0.7**	607	1 074	**0.6**
NL	**Netherlands**	13 619	12 819	**1.1**	20 531	12 486	**1.6**	37 815	14 433	**2.6**
NO	**Norway**	9 004	12 749	**0.7**	11 060	15 453	**0.7**	15 618	13 646	**1.1**
PL	**Poland**	5 693	15 600	**0.4**	7 617	26 267	**0.3**	13 021	41 896	**0.3**
PT	**Portugal**	-	10 730	**n.a.**	15 483	12 086	**1.3**	17 950	16 639	**1.1**
RO	**Romania**	13 279	9 247	**1.4**	9 730	19 181	**0.5**	12 188	24 597	**0.5**
SE	**Sweden**	24 412	13 758	**1.8**	32 469	15 254	**2.1**	42 769	15 791	**2.7**
SI	**Slovenia**	654	1 719	**0.4**	963	2 385	**0.4**	1 511	2 699	**0.6**
SK	**Slovakia**	-	4 428	**n.a.**	1 651	14 429	**0.1**	2 010	25 466	**0.1**
TR	**Turkey**	18 337	46 514	**0.4**	15 719	51 117	**0.3**	19 257	56 555	**0.3**
UK	**United Kingdom**	232 540	26 098	**8.9**	388 365	28 596	**13.6**	459 987	23 393	**19.7**
Total		**826 705**	**490 647**	**1.7**	**1 117 735**	**574 704**	**1.9**	**1 507 473**	**672 786**	**2.2**

* A ratio of 1.0 indicates equilibrium between the foreign students and the study abroad student totals. Values lower than 1.0 indicate that foreign students are fewer than study abroad students, while values above 1.0 indicate the opposite, i.e. foreign students are more numerous than study abroad students.

Map 3: Ratio study abroad: foreign students 2006/07 (ISCED 5/6)



In order to determine the attractiveness of the Europe 32 zone for students from countries outside the region and the attractiveness of higher education systems outside of the Europe 32 area for students from the Europe 32 area, it is advisable to compare separately the number of foreign students in the Europe 32 zone who have non-Europe 32 nationalities with the number of students with a Europe 32 nationality enrolled outside of the Europe 32 zone.

As highlighted in earlier sections of this chapter, students with non-Europe 32 nationalities have become more and more common in the Europe 32 area over time and students with Europe 32 nationalities have became rarer outside of this area. We can, unfortunately, only present data for the years 2002/03 and 2006/07 (see Table 12) and not for the usual nine-year interval because we do not have study abroad data for 1998/99. In this shorter period, the number of non-Europe 32 students studying in the Europe 32 zone increased by 46%, whereas the number of Europe 32 students studying outside of the Europe 32 zone decreased by 8.9%. In 2006/07, non-Europe 32 students represented 49.5% of all foreign students in Europe 32 countries, while the share of Europe 32 study abroad students enrolled in a country outside of the zone was only 13.8%. About 746 000 non-Europe 32 students studied in the Europe 32 zone compared to only 93 000 Europe 32 study abroad students enrolled outside the Europe 32 region (2006/07). This corresponds to an "in-out" ratio of 8.0. Again, we would like to point out that this overall picture is heavily influenced by the big countries in the Europe 32 region, which have high rates of foreign enrolment, particularly of non-European foreign students.

Earlier, we remarked, in passing, that enrolment of Europe 32 students in the US has decreased over time. In the period between 2002/03 and 2006/07, this decrease amounted to 5.9%. Australia, despite its very determined and aggressive (and, in many parts of the world, highly successful) attempts to recruit students globally, witnessed a much larger drop in the inflow of Europe 32 students, of 44.3%. The biggest percentage decrease was witnessed in Latin American and Caribbean countries (65.5%), but absolute numbers in this case were very low.

To avoid misunderstanding, we must underline that, despite these trends, the 'balance of trade' between the US and the Europe 32 area is still in favour of the US. While there were some 45 000 US students enrolled in Europe 32 countries in 2006/07, there were 72 000 Europe 32 students enrolled in US institutions. In other words, the 'in-out' ratio was 0.6. Taking Oceania as a proxy for Australia (for which we have no foreign student numbers), the situation is similar. In 2006/07, around 8 000 Oceanic students were enrolled in the Europe 32 region, while approximately 12 000 Europe 32 students studied in Oceania. This corresponds to an 'in-out' ratio of 0.6.

The balance with Asia, Latin America and Africa is, to an extreme extent, in favour of the Europe 32 zone. We earlier pointed out that this very marked imbalance is, in principle, a 'normal' sign of strong disparities in the quantitative and qualitative provisions of higher education in these respective parts of the world. Especially with regard to Asian countries, and possibly also in Latin America[12], the extent of this imbalance is likely to decrease in the coming years.

[12] We have reason to mistrust the validity of the data for Latin America.

Table 12: Non-European students studying in Europe 32 countries vs. nationals of Europe 32 countries studying in non-European countries

Foreign students in Europe 32 countries							Europe 32 students studying abroad						
Countries and regions of nationality	2002/03	% of all foreign	2006/07	% of all foreign	Increase/decrease 2002/03-2006/07 Abs.	Increase/decrease 2002/03-2006/07 %	Countries and regions of destination	2002/03	% of all study abroad students	2006/07	% of all study abroad students	Increase/decrease 2002/03-2006/07 Abs.	Increase/decrease 2002/03-2006/07 %
Non-European countries							**Non-European countries**						
Northern America	34 642	*3.1%*	44 678	*3.0%*	10 036	*29.0%*	**Northern America**	76 694	13.2%	72 172	10.7%	- 4 522	-5.9%
...incl. United States	27 235	*2.4%*	33 055	*2.2%*	5 820	*21.4%*	...incl. United States	76 694	13.2%	72 172	10.7%	- 4 522	-5.9%
Latin America and the Caribbean	50 274	*4.5%*	80 198	*5.3%*	29 924	*59.5%*	**Latin America and the Caribbean**	942	0.2%	325	0.0%	- 617	-65.5%
...incl. Mexico	6 820	*0.6%*	9 841	*0.7%*	3 021	*44.3%*	...incl. Mexico	*	0.0%	*	0.0%	n.a.	n.a.
...incl. Brazil	8 700	*0.8%*	13 286	*0.9%*	4 586	*52.7%*	...incl. Brazil	61	0.0%	*	0.0%	n.a.	n.a.
Africa	185 616	*16.7%*	250 480	*16.6%*	64 864	*34.9%*	**Africa**	54	0.0%	87	0.0%	33	61.1%
Asia	236 711	*21.2%*	362 602	*24.1%*	125 891	*53.2%*	**Asia**	6 063	1.0%	8 265	1.2%	2 202	36.3%
...incl. China	80 768	*7.2%*	122 987	*8.2%*	42 219	*52.3%*	...incl. China	134	0.0%	130	0.0%	- 4	-3.0%
...incl. India	17 224	*1.5%*	39 897	*2.6%*	22 673	*131.6%*	...incl. India	131	0.0%	*	0.0%	n.a.	n.a.
...incl. Japan	12 176	*1.1%*	12 757	*0.8%*	581	*4.8%*	...incl. Japan	2 033	0.4%	2 767	0.4%	734	36.1%
Oceania	3 506	*0.3%*	7 910	*0.5%*	4 404	*125.6%*	**Oceania**	18 481	3.2%	12 267	1.8%	- 6 214	-33.6%
...incl. Australia	*	*	*	*	*	*	...incl. Australia	17 012	2.9%	9 480	1.4%	- 7 532	-44.3%
Total	**510 749**	**45.7%**	**745 868**	**49.5%**	**235 119**	**46.0%**	**Total**	**102 234**	**17.6%**	**93 116**	**13.8%**	**- 9 118**	**-8.9%**

Source: UOE data collection

Matrix 1: Foreign students in Europe 32 countries and Europe 32 students enrolled abroad 2006/07 by country and region of destination (ISCED 5/6)

Countries/regions of destination / Countries/regions of nationality		AT	BE	BG	CH	CY	CZ	DE	DK	EE	ES	FI
AT	Austria	*	50	4	970	5	17	6 564	35	2	241	39
BE	Belgium	89	*	2	333	6	6	1 015	23	3	340	25
BG	Bulgaria	1 288	191	*	332	98	125	12 218	122	5	788	62
CH	Switzerland	355	101	1	*	2	12	2 245	68	1	357	26
CY	Cyprus	21	14	564	15	*	141	227	3	*	80	1
CZ	Czech Republic	545	49	4	174	7	*	2 205	42	*	132	46
DE	Germany	12 386	588	29	9 770	59	254	*	1 260	22	1 854	399
DK	Denmark	70	41	*	90	*	3	508	*	5	112	41
EE	Estonia	41	15	*	21	3	6	740	152	*	104	664
ES	Spain	419	1 101	10	1 496	34	34	4 974	130	8	*	117
FI	Finland	177	45	2	122	6	5	862	207	467	83	*
FR	France	495	17 882	6	4 335	4	30	6 274	230	3	1 907	160
GR	Greece	247	459	671	316	463	132	6 077	60	1	201	57
HU	Hungary	1 219	115	3	199	1	33	2 518	102	2	64	107
IE	Ireland	44	64	1	38	4	50	419	57	1	108	32
IS	Iceland	20	8	*	13	*	1	113	1 741	1	31	25
IT	Italy	6 209	2 219	13	4 598	9	33	7 457	185	6	3 226	159
LI	Liechtenstein	150	*	*	546	*	*	24	1	*	1	*
LT	Lithuania	83	45	10	67	16	14	1 719	376	61	78	102
LU	Luxembourg	470	1 667	*	297	*	*	2 450	4	*	12	5
LV	Latvia	50	32	*	55	7	12	910	179	170	18	53
MT	Malta	3	1	*	6	*	*	28	3	*	26	1
NL	Netherlands	151	3 447	1	350	2	19	1 558	201	2	265	86
NO	Norway	58	23	4	93	1	237	594	2 251	2	78	80
PL	Poland	1 472	536	12	512	33	262	15 347	686	2	754	170
PT	Portugal	80	843	6	1 015	2	270	1 556	50	1	2 785	29
RO	Romania	697	414	73	584	26	31	4 373	239	4	1 725	134
SE	Sweden	180	58	8	242	6	86	712	1 586	9	213	572
SI	Slovenia	556	21	16	43	1	18	599	7	*	52	13
SK	Slovakia	1 301	75	4	163	10	16 505	1 611	37	*	93	24
TR	Turkey	2 245	283	2 099	826	*	39	24 601	315	4	71	82
UK	United Kingdom	200	266	7	364	43	405	1 854	479	4	662	189
Subtotal		**31 321**	**30 653**	**3 550**	**27 985**	**848**	**18 780**	**112 352**	**10 831**	**786**	**16 461**	**3 500**
Other countries and regions												
Other European countries		6 745	1 147	5 048	4 222	449	2 584	37 450	1 274	1 210	2 559	1 429
...incl. Russian Federation		522	559	122	706	280	1 088	12 831	430	1 095	696	1 182
Northern America		419	296	77	782	21	194	4 223	439	17	824	302
...incl. United States		362	186	62	473	13	152	3 411	334	16	728	212
Latin America and the Caribbean		459	1 064	10	1 585	6	181	8 562	400	6	29 832	249
...incl Mexico		54	87	*	152	1	6	1 394	75	1	3 789	59
...incl. Brazil		79	150	4	329	1	5	2 101	95	1	2 106	39
Africa		620	9 117	130	2 598	304	418	23 245	867	3	7 316	1 399
Asia		3 863	3 481	532	2 949	4 340	2 103	70 679	4 090	178	2 759	3 081
...incl. China		1 391	1 182	17	821	909	40	27 117	2 037	123	867	1 678
...incl. India		170	262	71	390	838	102	3 899	355	17	128	197
...incl. Japan		284	164	3	259	1	25	2 385	59	4	192	98
Oceania		76	39	4	95	5	8	432	67	*	62	37
Subtotal		**12 182**	**15 144**	**5 801**	**12 231**	**5 125**	**5 488**	**144 591**	**7 137**	**1 414**	**43 352**	**6 497**
unknown		69	1 421	*	842	*	215	1 572	2 883	*	1	69
Total *foreign students*		**43 572**	**47 218**	**9 351**	**41 058**	**5 973**	**24 483**	**258 515**	**20 851**	**2 200**	**59 814**	**10 066**

Countries/regions of destination / Countries/regions of nationality		FR	UK	GR	HU	IE	IS	IT	LI	LT	LU	LV
AT	Austria	424	1 834	38	79	68	20	211	288	9	*	*
BE	Belgium	2 663	1 916	40	8	86	7	283	*	7	*	2
BG	Bulgaria	2 645	1 223	562	40	18	14	771	*	8	*	*
CH	Switzerland	1 604	1 190	21	11	31	5	1 371	138	3	*	9
CY	Cyprus	224	8 180	11 449	293	19	*	124	*	*	*	*
CZ	Czech Republic	752	1 748	2	19	36	14	175	2	39	*	7
DE	Germany	6 947	17 254	396	1 520	773	112	2 067	35	105	*	75
DK	Denmark	233	2 399	12	*	24	50	53	*	3	*	2
EE	Estonia	122	710	7	6	20	8	57	*	7	*	60
ES	Spain	3 860	8 930	31	33	350	26	519	*	65	*	7
FI	Finland	334	2 353	15	31	76	34	94	*	17	*	8
FR	France	*	15 809	59	47	855	60	1 083	*	93	*	19
GR	Greece	1 952	17 523	*	154	48	*	5 054	*	3	*	*
HU	Hungary	712	1 613	13	*	27	7	206	*	3	*	4
IE	Ireland	454	27 098	1	79	*	4	42	*	1	*	1
IS	Iceland	47	452	1	50	9	*	18	*	*	*	1
IT	Italy	4 790	9 691	81	36	278	34	*	2	50	*	5
LI	Liechtenstein	4	9	*	*	1	*	1	*	*	*	*
LT	Lithuania	257	2 364	5	9	51	22	175	*	*	*	415
LU	Luxembourg	1 575	428	3	2	14	*	49	*	*	*	*
LV	Latvia	147	1 098	5	10	29	8	63	*	79	*	*
MT	Malta	19	858	*	1	5	1	44	*	*	*	*
NL	Netherlands	626	4 464	25	9	91	14	114	1	17	*	2
NO	Norway	367	3 196	2	715	115	32	148	*	6	*	6
PL	Poland	3 396	11 151	104	58	253	24	1 478	*	191	*	14
PT	Portugal	2 664	5 477	11	14	48	*	121	*	73	*	4
RO	Romania	4 617	1 133	175	3 296	*	4	2 456	*	3	*	*
SE	Sweden	538	4 735	26	270	104	40	124	*	9	*	7
SI	Slovenia	87	334	1	18	6	1	387	*	12	*	2
SK	Slovakia	380	1 626	4	2 296	19	8	186	*	9	*	1
TR	Turkey	2 339	3 552	80	95	30	*	384	5	102	*	2
UK	United Kingdom	2 595	*	106	76	2 282	23	298	*	8	*	17
Subtotal		**47 374**	**160 348**	**13 275**	**9 275**	**5 766**	**572**	**18 156**	**471**	**922**	*	**670**
Other countries and regions												
Other European countries		8 344	7 632	5 026	3 149	328	51	18 091	7	623	*	487
...incl. Russian Federation		3 219	3 780	299	208	70	25	930	4	49	*	382
Northern America		4 467	24 262	171	383	3 014	66	619	*	62	*	10
...incl. United States		3 165	17 633	133	248	2 500	49	481	*	50	*	8
Latin America and the Caribbean		11 951	14 445	57	43	105	16	5 217	2	12	*	*
...incl. Mexico		1 640	1 828	1	8	18	2	262	*	2	*	*
...incl. Brazil		2 580	2 084	9	8	22	5	1 087	2	3	*	*
Africa		107 988	69 823	904	285	774	11	5 503	3	7	*	15
Asia		46 128	169 868	1 538	1 957	4 657	57	7 445	4	287	*	246
...incl. China		18 836	57 746	34	201	1 309	21	1 684	2	8	*	5
...incl. India		891	29 881	5	42	345	1	589	1	18	*	16
...incl. Japan		2 071	6 112	15	25	88	10	316	*	4	*	3
Oceania		379	5 835	20	18	96	8	67	*	7	*	5
Subtotal		**179 257**	**291 865**	**7 716**	**5 835**	**8 974**	**209**	**36 942**	**16**	**998**	*	**763**
unknown		19 981	7 774	169	*	2 018	2	2 173	107	*	*	*
Total *foreign students*		**246 612**	**459 987**	**21 160**	**15 110**	**16 758**	**783**	**57 271**	**594**	**1 920**	*	**1 433**

Countries/regions of destination / Countries/regions of nationality		MT	NL	NO	PL	PT	RO	SE	SI	SK	TR	Total Europe 32		
												Abs.	%	%
AT	Austria	1	212	46	40	23	21	497	8	23	29	11 798	2.1	3.5
BE	Belgium	2	2 154	27	19	80	9	289	2	*	10	9 446	1.6	0.8
BG	Bulgaria	67	488	100	97	47	222	114	4	9	1 169	22 827	4.0	2.4
CH	Switzerland	1	157	45	10	87	6	273	3	1	6	8 140	1.4	0.5
CY	Cyprus	5	34	3	11	*	23	11	*	19	*	21 461	3.7	1.9
CZ	Czech Republic	2	131	46	381	28	*	234	3	485	1	7 309	1.3	0.2
DE	Germany	17	13 990	656	398	303	247	3 301	10	31	266	75 124	13.1	2.7
DK	Denmark	2	142	840	14	6	6	953	2	*	6	5 617	1.0	0.0
EE	Estonia	3	76	71	17	2	*	259	2	*	*	3 173	0.6	0.5
ES	Spain	*	821	116	66	648	8	1 195	2	6	4	25 010	4.3	0.5
FI	Finland	2	191	293	12	16	2	3 602	*	*	4	9 060	1.6	0.2
FR	France	4	801	168	100	653	53	1 730	4	8	20	52 892	9.2	0.1
GR	Greece	9	601	20	23	31	612	314	2	184	884	36 098	6.3	0.7
HU	Hungary	1	244	37	61	20	95	165	13	36	2	7 622	1.3	2.6
IE	Ireland	1	134	19	16	13	*	172	*	12	15	28 880	5.0	1.0
IS	Iceland	*	80	252	2	*	*	409	*	2	*	3 276	0.6	1.4
IT	Italy	9	584	95	48	240	134	826	104	8	15	41 144	7.1	0.8
LI	Liechtenstein	*	1	*	*	*	*	2	*	*	*	740	0.1	0.2
LT	Lithuania	1	98	176	397	9	*	298	3	*	10	6 861	1.2	1.6
LU	Luxembourg	*	47	2	*	30	3	8	*	*	*	7 066	1.2	2.6
LV	Latvia	2	98	100	64	4	1	147	3	1	*	3 345	0.6	3.5
MT	Malta	*	7	3	*	1	*	12	1	1	1	1 022	0.2	0.8
NL	Netherlands	5	*	156	10	60	5	691	2	1	16	12 391	2.2	2.4
NO	Norway	3	307	*	911	9	4	1 314	2	146	1	10 705	1.9	0.5
PL	Poland	7	840	187	*	170	8	918	6	47	11	38 649	6.7	1.9
PT	Portugal	2	274	40	45	*	8	212	2	3	*	15 635	2.7	0.2
RO	Romania	3	221	143	53	86	*	226	15	74	56	20 861	3.6	2.7
SE	Sweden	3	177	1 264	516	26	56	*	1	34	11	11 613	2.0	0.0
SI	Slovenia	*	73	6	10	20	13	58	*	5	2	2 361	0.4	0.5
SK	Slovakia	6	112	35	139	16	1	58	9	*	5	24 733	4.3	0.5
TR	Turkey	11	706	56	67	29	102	345	1	3	*	38 474	6.7	0.2
UK	United Kingdom	19	802	343	77	90	33	789	1	26	102	12 160	2.1	0.8
Subtotal		**188**	**24 603**	**5 345**	**3 604**	**2 747**	**1 672**	**19 422**	**205**	**1 165**	**2 646**	**575 493**	**100.0**	**38.2**
Other countries and regions														
Other European countries		88	1 148	1 452	5 185	248	6 960	1 413	1 212	364	2 664	128 589	14.7	8.5
...incl. Russian Federation		46	464	798	488	85	17	688	28	32	556	31 679	3.6	2.1
Northern America		13	623	412	1 136	222	216	1 327	4	32	45	44 678	5.1	3.0
...incl. United States		11	469	325	817	136	109	912	2	24	34	33 055	3.8	2.2
Latin America and the Caribbean		8	1 568	389	97	2 814	27	1 044	11	25	13	80 198	9.2	5.3
...incl. Mexico		1	153	40	11	19	1	228	2	7	*	9 841	1.1	0.7
...incl. Brazil		*	124	75	35	2 204	5	127	5	1	*	13 286	1.5	0.9
Africa		75	1 985	1 512	628	11 624	1 423	1 439	8	62	394	250 480	28.6	16.6
Asia		229	7 604	2 486	2 351	275	1 864	6 517	42	362	10 630	362 602	41.5	24.1
...incl. China		165	3 584	725	423	77	45	1 779	3	22	136	122 987	14.1	8.2
...incl. India		1	265	158	270	33	160	762	21	4	5	39 897	4.6	2.6
...incl. Japan		1	231	58	31	11	18	277	1	3	8	12 757	1.5	0.8
Oceania		6	76	45	20	20	5	445	*	*	33	7 910	0.9	0.5
Subtotal		**419**	**13 004**	**6 296**	**9 417**	**15 203**	**10 495**	**12 185**	**1 277**	**845**	**13 779**	**874 457**	**100.0**	**58.0**
unknown		*	208	3 977	*	*	21	11 162	29	*	2 832	57 525	*	3.8
Total *foreign students*		**607**	**37 815**	**15 618**	**13 021**	**17 950**	**12 188**	**42 769**	**1 511**	**2 010**	**19 257**	**1507 475**	*****	**100.0**

Countries/regions of destination		Total Europe 32		Other European Countries		...incl. Russian Federation		Non-European Countries		Northern America		...incl. United States		Latin America and the Caribbean		Africa	
Countries/regions of nationality		Abs.	%	Abs.	%	Abs.	%	Abs.	%	Abs.	%	Abs.	%	Abs.	%	Abs.	%
AT	Austria	11 798	91.0	2	0.0	*	0.0	1 165	9.0	862	6.6	862	6.6	5	0.0	9	0.1
BE	Belgium	9 446	91.2	13	0.1	*	0.0	896	8.7	719	6.9	719	6.9	11	0.1	6	0.1
BG	Bulgaria	22 827	85.7	90	0.3	*	0.0	3 706	13.9	3 555	13.4	3 555	13.4	2	0.0	4	0.0
CH	Switzerland	8 140	82.6	4	0.0	*	0.0	1 706	17.3	1 268	12.9	1 268	12.9	16	0.2	2	0.0
CY	Cyprus	21 461	95.8	22	0.1	*	0.0	928	4.1	896	4.0	896	4.0	*	0.0	*	0.0
CZ	Czech Republic	7 309	86.8	5	0.1	*	0.0	1 105	13.1	934	11.1	934	11.1	5	0.1	*	0.0
DE	Germany	75 124	85.6	28	0.0	*	0.0	12 598	14.4	8 847	10.1	8 847	10.1	61	0.1	3	0.0
DK	Denmark	5 617	82.1	2	0.0	*	0.0	1 219	17.8	984	14.4	984	14.4	2	0.0	*	0.0
EE	Estonia	3 173	78.9	568	14.1	558	13.9	279	6.9	245	6.1	245	6.1	*	0.0	*	0.0
ES	Spain	25 010	86.2	6	0.0	*	0.0	4 011	13.8	3 654	12.6	3 654	12.6	76	0.3	6	0.0
FI	Finland	9 060	92.1	*	0.0	*	0.0	778	7.9	579	5.9	579	5.9	4	0.0	*	0.0
FR	France	52 892	85.9	5	0.0	*	0.0	8 696	14.1	6 852	11.1	6 852	11.1	57	0.1	33	0.1
GR	Greece	36 098	94.4	5	0.0	*	0.0	2 128	5.6	2 030	5.3	2 030	5.3	2	0.0	*	0.0
HU	Hungary	7 622	89.1	13	0.2	*	0.0	916	10.7	751	8.8	751	8.8	1	0.0	*	0.0
IE	Ireland	28 880	95.6	*	0.0	*	0.0	1 324	4.4	1 105	3.7	1 105	3.7	*	0.0	*	0.0
IS	Iceland	3 276	86.9	*	0.0	*	0.0	495	13.1	431	11.4	431	11.4	1	0.0	1	0.0
IT	Italy	41 144	91.3	9	0.0	*	0.0	3 891	8.6	3 416	7.6	3 416	7.6	29	0.1	*	0.0
LI	Liechtenstein	740	99.1	*	0.0	*	0.0	7	0.9	6	0.8	6	0.8	*	0.0	*	0.0
LT	Lithuania	6 861	80.4	1 090	12.8	869	10.2	581	6.8	548	6.4	548	6.4	*	0.0	*	0.0
LU	Luxembourg	7 066	98.9	1	0.0	*	0.0	81	1.1	57	0.8	57	0.8	*	0.0	1	0.0
LV	Latvia	3 345	71.5	841	18.0	788	16.8	494	10.6	440	9.4	440	9.4	1	0.0	*	0.0
MT	Malta	1 022	95.2	*	0.0	*	0.0	52	4.8	28	2.6	28	2.6	*	0.0	1	0.1
NL	Netherlands	12 391	85.9	*	0.0	*	0.0	2 042	14.1	1 622	11.2	1 622	11.2	8	0.1	4	0.0
NO	Norway	10 705	78.4	28	0.2	*	0.0	2 913	21.3	1 217	8.9	1 217	8.9	6	0.0	2	0.0
PL	Poland	38 649	92.2	55	0.1	*	0.0	3 192	7.6	2 872	6.9	2 872	6.9	2	0.0	*	0.0
PT	Portugal	15 635	94.0	*	0.0	*	0.0	1 004	6.0	873	5.2	873	5.2	2	0.0	3	0.0
RO	Romania	20 861	84.8	340	1.4	*	0.0	3 396	13.8	3 203	13.0	3 203	13.0	*	0.0	*	0.0
SE	Sweden	11 613	73.5	7	0.0	*	0.0	4 171	26.4	2 985	18.9	2 985	18.9	16	0.1	1	0.0
SI	Slovenia	2 361	87.5	102	3.8	*	0.0	236	8.7	203	7.5	203	7.5	*	0.0	*	0.0
SK	Slovakia	24 733	97.1	10	0.0	*	0.0	723	2.8	605	2.4	605	2.4	*	0.0	1	0.0
TR	Turkey	38 474	68.0	922	1.6	*	0.0	17 159	30.3	11 760	20.8	11 760	20.8	2	0.0	8	0.0
UK	United Kingdom	12 160	52.0	6	0.0	*	0.0	11 227	48.0	8 625	36.9	8 625	36.9	16	0.1	2	0.0
Subtotal		**575 493**	**85.5**	**4 174**	**0.6**	**2 215**	**0.3**	**93 119**	**13.8**	**72 172**	**10.7**	**72 172**	**10.7**	**325**	**0.0**	**87**	**0.0**
Other countries and regions																	
Other European countries		128 589	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
...incl. Russian Federation		31 679	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Northern America		44 678	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
...incl. United States		33 055	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Latin America and the Caribbean		80 198	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
...incl. Mexico		9 841	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
...incl. Brazil		13 286	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Africa		250 480	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Asia		362 602	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
...incl. China		122 987	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
...incl. India		39 897	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
...incl. Japan		12 757	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Oceania		7 910	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Subtotal		874 457															
unknown		57 525															
Total *foreign students*		1507 475															

Countries/regions of destination		Asia		...incl. China		...incl. India		...incl. Japan		Oceania		...incl. Australia		Total *Other countries and regions*		TOTAL		
Countries/regions of nationality		Abs.	%	Abs.	%	Abs.	%	Abs.	%	Abs.	%	Abs.	%	Abs.	%	Abs.	%	%
AT	Austria	60	0.5	4	0.0	*	0.0	43	0.3	229	1.8	201	1.6	1 167	9.0	**12 965**	**100.0**	**1.9**
BE	Belgium	69	0.7	4	0.0	*	0.0	55	0.5	91	0.9	82	0.8	909	8.8	**10 355**	**100.0**	**1.5**
BG	Bulgaria	121	0.5	*	0.0	*	0.0	106	0.4	24	0.1	22	0.1	3 796	14.3	**26 623**	**100.0**	**4.0**
CH	Switzerland	55	0.6	1	0.0	*	0.0	47	0.5	365	3.7	313	3.2	1 710	17.4	**9 850**	**100.0**	**1.5**
CY	Cyprus	5	0.0	*	0.0	*	0.0	2	0.0	27	0.1	26	0.1	950	4.2	**22 411**	**100.0**	**3.3**
CZ	Czech Republic	62	0.7	*	0.0	*	0.0	44	0.5	104	1.2	104	1.2	1 110	13.2	**8 419**	**100.0**	**1.3**
DE	Germany	547	0.6	26	0.0	*	0.0	404	0.5	3 140	3.6	1 866	2.1	12 626	14.4	**87 750**	**100.0**	**13.0**
DK	Denmark	35	0.5	1	0.0	*	0.0	28	0.4	198	2.9	140	2.0	1 221	17.9	**6 838**	**100.0**	**1.0**
EE	Estonia	27	0.7	*	0.0	*	0.0	23	0.6	7	0.2	5	0.1	847	21.1	**4 020**	**100.0**	**0.6**
ES	Spain	124	0.4	4	0.0	*	0.0	111	0.4	151	0.5	127	0.4	4 017	13.8	**29 027**	**100.0**	**4.3**
FI	Finland	92	0.9	14	0.1	*	0.0	70	0.7	103	1.0	72	0.7	778	7.9	**9 838**	**100.0**	**1.5**
FR	France	497	0.8	16	0.0	*	0.0	445	0.7	1 254	2.0	872	1.4	8 701	14.1	**61 593**	**100.0**	**9.2**
GR	Greece	45	0.1	*	0.0	*	0.0	27	0.1	51	0.1	49	0.1	2 133	5.6	**38 231**	**100.0**	**5.7**
HU	Hungary	100	1.2	*	0.0	*	0.0	83	1.0	64	0.7	56	0.7	929	10.9	**8 551**	**100.0**	**1.3**
IE	Ireland	13	0.0	*	0.0	*	0.0	9	0.0	206	0.7	171	0.6	1 324	4.4	**30 204**	**100.0**	**4.5**
IS	Iceland	21	0.6	*	0.0	*	0.0	21	0.6	41	1.1	30	0.8	495	13.1	**3 771**	**100.0**	**0.6**
IT	Italy	135	0.3	*	0.0	*	0.0	122	0.3	311	0.7	287	0.6	3 900	8.7	**45 044**	**100.0**	**6.7**
LI	Liechtenstein		0.0	*	0.0	*	0.0		0.0	1	0.1	1	0.1	7	0.9	**747**	**100.0**	**0.1**
LT	Lithuania	24	0.3	*	0.0	*	0.0	22	0.3	9	0.1	8	0.1	1 671	19.6	**8 532**	**100.0**	**1.3**
LU	Luxembourg	3	0.0	*	0.0	*	0.0	3	0.0	20	0.3	18	0.3	82	1.1	**7 148**	**100.0**	**1.1**
LV	Latvia	15	0.3	*	0.0	*	0.0	14	0.3	38	0.8	33	0.7	1 335	28.5	**4 680**	**100.0**	**0.7**
MT	Malta	3	0.3	*	0.0	*	0.0	3	0.3	20	1.9	20	1.9	52	4.8	**1 074**	**100.0**	**0.2**
NL	Netherlands	90	0.6	12	0.1	*	0.0	75	0.5	318	2.2	261	1.8	2 042	14.1	**14 433**	**100.0**	**2.1**
NO	Norway	39	0.3	1	0.0	*	0.0	34	0.2	1 649	12.1	1 479	10.8	2 941	21.6	**13 646**	**100.0**	**2.0**
PL	Poland	117	0.3	*	0.0	*	0.0	89	0.2	201	0.5	192	0.5	3 247	7.8	**41 896**	**100.0**	**6.2**
PT	Portugal	59	0.4	24	0.1	*	0.0	33	0.2	67	0.4	59	0.4	1 004	6.0	**16 639**	**100.0**	**2.5**
RO	Romania	138	0.6	*	0.0	*	0.0	122	0.5	55	0.2	55	0.2	3 736	15.2	**24 597**	**100.0**	**3.7**
SE	Sweden	153	1.0	9	0.1	*	0.0	132	0.8	1 016	6.4	879	5.6	4 178	26.5	**15 791**	**100.0**	**2.3**
SI	Slovenia	11	0.4	*	0.0	*	0.0	11	0.4	22	0.8	20	0.7	338	12.5	**2 699**	**100.0**	**0.4**
SK	Slovakia	26	0.1	*	0.0	*	0.0	21	0.1	91	0.4	91	0.4	733	2.9	**25 466**	**100.0**	**3.8**
TR	Turkey	5 113	9.0	*	0.0	*	0.0	168	0.3	276	0.5	254	0.4	18 081	32.0	**56 555**	**100.0**	**8.4**
UK	United Kingdom	466	2.0	14	0.1	*	0.0	400	1.7	2 118	9.1	1 687	7.2	11 233	48.0	**23 393**	**100.0**	**3.5**
Subtotal		**8 265**	**1.2**	**130**	**0.0**		**0.0**	**2 767**	**0.4**	**12 267**	**1.8**	**9 480**	**1.4**	**97 293**	**14.5**	**672 786**	**100.0**	**100**
Other countries and regions																		
Other European countries		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
...incl. Russian Federation		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Northern America		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
...incl. United States		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Latin America and the Caribbean		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
...incl. Mexico		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
...incl. Brazil		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Africa		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Asia		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
...incl. China		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
...incl. India		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
...incl. Japan		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Oceania		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Subtotal																		
unknown																		
Total *foreign students*																		

3 Incoming vs. outgoing students

In the previous sections, we presented and analysed data on students with a foreign nationality. In the present section, we will present the available data on 'genuine student mobility', i.e. on incoming and outgoing mobile students. These data are, for reasons previously explained, superior to nationality data regarding their explanatory value for assessing real mobility levels. However, as will become apparent further below, such data are not available for all Europe 32 countries, which is why we will not be able to provide a comprehensive picture of real mobility for the entire Europe 32 region. We will be in an even less opportune position to trace mobility developments over time, since comparative data from earlier years are available only for a minority of Europe 32 countries, and only for a short period backwards (to 2002/03).

For the reasons stated above and much to our regret, our analysis of the present (2006/07) situation and historical development of genuine mobility in the Europe 32 region will be brief and incomplete. The major part of this section will be devoted to a comparative analysis of nationality and mobility data for those countries which can provide both. On the basis of this analysis, we will try to "extrapolate" the likely levels of 'real mobility' in the remaining Europe 32 countries. Before embarking on this, we will briefly sketch the progress in the collection of genuine mobility data in the Europe 32 countries.

3.1 Progress in data collection

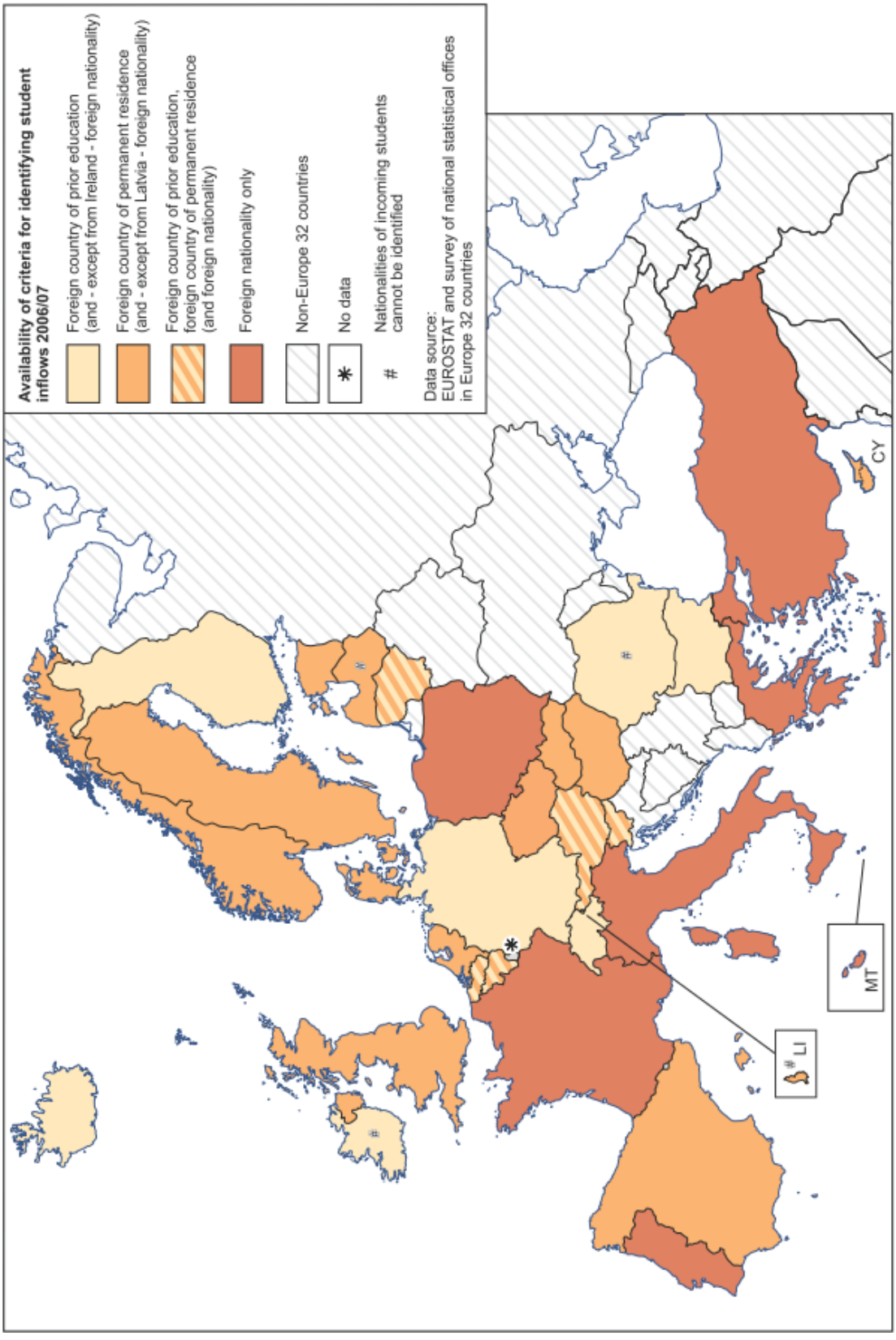
Since 2002/03, significant progress has been made in the collection of genuine mobility data, i.e. of data based on the descriptors of country of prior education and country of prior/permanent residence. This data set has the great advantage that, in contrast to the foreign student data, it identifies those students, be they foreign students or own-nationals (also called 'returners' or 'homecoming students'), that have beyond doubt been mobile in the context or for the purpose of their current higher education studies. The number of countries which collect genuine mobility data has risen from nine in 2002/03 to 24 of the 32 Europe 32 countries in 2006/07 (compare also Map 4). The majority of these 24 countries had actually started to collect mobility data for the first time in 2006/07. Amongst other things, this implies that it is impossible to trace the historical development of 'genuine mobility' in 15 out of the 24 countries.

Of the 24 countries that collected data on incoming mobile students in 2006/07 (which should also serve as a basis for the calculation of outgoing mobile student numbers), four countries, namely Austria, Belgium, Lithuania and Slovenia, provided data according to both criteria used to identify incoming mobile students (e.g. prior education abroad and permanent/prior residence abroad). However, the two data sets of these countries are unevenly detailed. We will therefore make use of the data set that is most complete and/or detailed enough for the purpose of our analysis.

- 13 countries collect information on student mobility based on the criterion country of permanent/prior residence abroad (i.e. Cyprus, the Czech Republic, Germany, Estonia, Hungary, Latvia, Lithuania, the Netherlands, Norway, Slovakia, Spain, Sweden and the UK), while only seven countries (Bulgaria, Finland, Germany, Iceland, Ireland, Romania and Switzerland) provide data based on the criterion country prior education.
- 21 countries specifically identify resident foreign students (i.e. non-mobile students with a foreign nationality). Based on this information, the number of incoming mobile students with home nationality ('returners') can be calculated, though figures on resident foreign students are not reliable for some countries (see below).

- For the first time in the year 2006/07, 15 countries also collected data on incoming mobile graduates or graduates of foreign nationality. These countries are Austria, Switzerland, Cyprus, the Czech Republic, Germany, Denmark, Estonia, Finland, Lithuania, Latvia, Norway, Romania, Sweden, Slovenia and the UK.

Map 4: Availability of genuine mobility data (incoming mobile students) (ISCED 5/6)



3.2 The situation in 2006/07

Overall picture

The total number of incoming students in the 24 countries which collected data on genuine mobility was about 841 000 in 2006/07. We can thus already state, before turning to a detailed comparative analysis further below, that this number is some 291 000 (or 25.7%) lower than that of the total of foreign students in these countries.

In other respects, too, the two data sets show a number of similarities (compare Table 13). The UK (351 000) and Germany (207 000) have the highest numbers of incoming students, as was already the case in the foreign student data set. Together, these two countries host two-thirds of all incoming students in the Europe 32 region and thus heavily impact on the Europe 32 average. In both data sets, the five leading countries are the same ones (UK, Germany, Spain, Belgium and Austria), with Belgium and Spain changing ranks (third and fourth) between the sets. In relative terms, i.e. as a percentage of all students (total enrolment), the share of incoming students is highest in the "atypical" countries of Liechtenstein and Cyprus, with 86.5% and 25.1% respectively. Amongst the remaining countries with double-digit percentages, the UK is in the lead (14.9%), followed by Switzerland (14%) and Austria (12.4%). At the low end, with approximately 1% values, we find Slovakia, Slovenia and Lithuania, which were also amongst the countries with the lowest shares of foreign students

The similarities between the two data sets also extend to the geographical origin of students. As was already the case with foreign nationality students, more incoming mobile students are coming from outside of Europe than inside. We have data on incoming students by country of origin (defined as the country of prior education or the country of prior/permanent residence) for only 18 countries. Of the approximate total of 754 000 incoming students into these countries, roughly 405 000 originated from non-Europe 32 countries. In comparison, only some 289 000 came from Europe-32 countries. An astonishingly high number of roughly 67 000 moved from an unknown origin. Expressed in relative terms, students moving from a Europe 32 country make up 38.3%, students from outside of the Europe 32 zone represent 53.7% and students of an unknown geographical origin represent 8.9% (see below). Taking the latter students out of the calculation, the average share of non-Europe 32 students rises to 58.9%.

Countries of origin

As was the case with foreign nationality students, geographical origin varies considerably by country of destination (compare Matrix 2). In ("atypical") Liechtenstein, almost 100% of all incoming students are Europeans (from Europe 32 countries). High shares of incoming students from Europe 32 countries, of close to 90%, are also found in Belgium and Sweden. At the other end of the spectrum, we find Romania and Slovenia, with over 80% of incoming students from outside of the Europe 32 zone.

Still in regard to country of origin, we must draw attention to one finding which highlights that the collection of genuine mobility data is far from mature, even in the 18 countries mentioned above. We already said that an astonishing 8.9% of students were from countries of unknown origin. The absolute number of such students is highest in Germany (almost 17 000), but in relative terms, this is still below the European average. The shares are, however, very high in Spain (28.8%), the Netherlands (30.1%), Belgium (37.7%) and astonishing in Sweden, where the origin of every second incoming student (49.2%) is not known.

Table 13: Incoming mobile students - comparison 2002/03 and 2006/07 (ISCED 5/6)

Year / Host country		2002/03			2006/07		
		All students	*Incoming mobile students*	% of incoming mobile of all	All students	*Incoming mobile students*	% of incoming mobile of all
AT	Austria p.r.[13]	229 802	27 309	**11.9%**	260 975	32 430	**12.4%**
BE	Belgium p.r.	374 532	*	*	393 687	25 202	**6.4%**
	Belgium p.e.[14]		*	*		32 869	**8.3%**
BG	Bulgaria p.e.	230 513	*	*	258 513	9 100	**3.5%**
CH	Switzerland p.e.	185 965	22 923	**12.3%**	213 112	29 777	**14.0%**
CY	Cyprus p.r.	18 272	4 620	**25.3%**	22 227	5 590	**25.1%**
CZ	Czech Republic p.r.	287 001	*	*	362 630	20 175	**5.6%**
DE	Germany p.e.	2 242 397	190 782	**8.5%**	2 278 897	206 875	**9.1%**
DK	Denmark p.r.	201 746	*	*	232 194	12 695	**5.5%**
EE	Estonia p.r.	63 625	*	*	68 767	966	**1.4%**
ES	Spain p.r.	1 840 607	33 604	**1.8%**	1 777 498	32 281	**1.8%**
FI	Finland p.e.	291 664	*	*	309 163	12 683	**4.1%**
HU	Hungary p.r.	390 453	*	*	431 572	12 946	**3.0%**
IE	Ireland p.r.	181 557	10 201	**5.6%**	190 349	16 758	**8.8%**
IS	Iceland p.e.	13 347	*	*	15 821	823	**5.2%**
LI	Liechtenstein p.r.	440	*	*	673	582	**86.5%**
LT	Lithuania p.e.	167 606	*	*	199 855	1 991	**1.0%**
	Lithuania p.r.					1 901	**1.0%**
LV	Latvia p.r.	118 944	2 930	**2.5%**	129 497	1 433	**1.1%**
NL	Netherlands p.r.	526 767	*	*	590 121	27 449	**4.6%**
NO	Norway p.r.	212 395	*	*	215 237	4 808	**2.2%**
RO	Romania p.e.	643 911	*	*	928 175	9 383	**1.0%**
SE	Sweden p.r.	414 657	*	*	413 710	22 135	**5.4%**
SI	Slovenia p.r.	101 458	*	*	115 944	1 195	**1.0%**
	Slovenia p.e.					1 713	**1.1%**
SK	Slovakia p.r.	158 089	*	*	217 952	1 901	**0.9%**
UK	United Kingdom p.r.	2 287 833	300 060	**13.1%**	2 362 815	351 470	**14.9%**
TOTAL		**11 183 581**	**592 429**	**8.3%****	**11 989 384**	**840 558*****	**7.0%**

Data legend: ** percentage calculated against the total enrolment of the eight countries that had genuine mobility data in the respective year; *** Grand total calculated taking into account the p.r. numbers for BE, LT and SI.

Source: UOE

[13] p.r. – prior residence

[14] p.e. – prior education

Matrix 2: Incoming mobile students in Europe 32 countries by country of destination and country of origin, 2006/07 (Source: UOE data collection; ISCED 5/6)[15]

Countries of destination	BE	BG	CH	CY	DE	DK	EE	ES	UK	IE
Countries of origin										
Europe 32 countries										
AT Austria	15	4	730	2	5 010	63	1	73	1 430	68
BE Belgium		1	219	7	1 394	157	3	265	2 560	86
BG Bulgaria	46		284	88	11 486	28	7	194	709	18
CH Switzerland	43	*		2	2 062	159	28	193	1 896	31
CY Cyprus	6	552	20		245	5	*	10	8 712	19
CZ Czech Republic	12	2	118	5	1 905	18	*	36	1 152	36
DE Germany	242	28	8 322	30		1 158	14	837	14 011	773
DK Denmark	1	*	70	*	441		7	30	1 567	24
EE Estonia	7	*	19	1	617	32		47	533	20
ES Spain	84	8	704	32	4 170	350	8		6 352	350
FI Finland	11	2	90	5	766	113	441	35	1 699	76
FR France	8 949	6	4 876	3	5 960	542	4	833	13 068	855
GR Greece	68	617	265	359	2 707	57	2	92	16 051	48
HU Hungary	25	4	167	*	2 121	30	1	35	1 040	27
IE Ireland	22	2	22	5	491	104	1	89	16 254	
IS Iceland	3	*	13	*	97	963	*	2	388	9
IT Italy	89	14	2 859	9	3 636	148	6	1 012	5 989	278
LI Liechtenstein	*	*	668	*	21	13	*	2	14	1
LT Lithuania	9	9	62	13	1 405	91	32	22	1 487	51
LU Luxembourg	1 077	*	306		2 536	78	*	44	879	14
LV Latvia	8		46	3	710	34	137	6	882	29
MT Malta	*	*	5	*	35	2	*	19	815	5
NL The Netherlands	2 089	2	163	1	909	116	1	138	2 811	91
NO Norway	12	4	83	1	573	1 935	2	25	3 017	115
PL Poland	86	12	442	31	12 592	190	1	264	6 768	253
PT Portugal	33	5	335	*	510	34	1	2 272	3 010	48
RO Romania	61	73	563	22	3 981	64	2	343	739	
SE Sweden	11	8	170	6	614	1 127	7	66	3 382	104
SI Slovenia	10	16	28	1	279	5	*	19	283	6
SK Slovakia	22	4	138	11	1 219	17	*	34	892	19
TR Turkey	69	2 029	621	*	7 165	53	2	19	2 233	30
UK United Kingdom	28	10	242	39	2 077	1 485	2	447		2 282
Subtotal	**13 138**	**3 412**	**22 650**	**676**	**77 734**	**9 171**	**710**	**7 503**	**120 623**	**5 766**
Other countries and regions										
Other European countries	**226**	**4 953**	**3 387**	**290**	**24 391**	**162**	**112**	**1 106**	**5 024**	**328**
... incl. Russian Federation	132	126	609	183	12 047	72	93	136	2 580	70
Other non-European Countries	**2 445**	**735**	**7 795**	**4 624**	**87 986**	**3 214**	**144**	**12 706**	**217 443**	**8 641**
Northern America	149	120	837	14	4 200	735	12	367	20 966	2 991
... incl. United States	103	102	552	11	3 554	608	12	344	15 956	2 500
Latin America and the Caribbean	235	7	1 772	4	8 310	203	4	9 422	8 846	123
... incl. Mexico	24	*	181	1	1 474	40	1	2 053	1 663	18
... incl. Brazil	30	4	339		1 908	40	1	737	1 313	22
Africa	685	121	2 433	291	17 858	268	3	2 367	33 341	774
Asia	1 342	483	2 642	4 312	57 075	1 613	125	534	151 862	4 657
... incl. China	520	15	720	901	23 791	885	92	100	49 594	1 290
... incl. India	200	71	335	838	3 421	161	16	21	23 833	345
... incl. Japan	30	4	228	1	2 039	30	3	61	5 706	88
Oceania	34	4	111	3	543	395		16	2 428	96
Subtotal	**2 671**	**5 688**	**11 182**	**4 914**	**112 377**	**3 376**	**256**	**13 812**	**222 467**	**8 969**
Unknown	9 589	*	4 485	*	16 754	148	*	6 134	8 380	2 044
Total incoming mobile students	**25 398**	**9 100**	**38 317**	**5 590**	**206 865**	**12 695**	**966**	**21 315**	**351 470**	**16 779**

[15] The table only includes the countries where the differentiation by country of origin is available.

Countries of destination	LI	LT	LV	NL	RO	SE	SI	SK	TOTAL	
Countries of origin									Abs.	%
Europe 32 countries										
AT Austria	297	9	*	74	12	349	13	21	8 171	1.1%
BE Belgium	*	7	*	991	9	234	3	*	5 936	0.8%
BG Bulgaria	*	6	*	310	205	22	2	8	13 413	1.8%
CH Switzerland	160	3	9	66	6	201	*	1	4 860	0.6%
CY Cyprus	*	*	*	7	19	7	*	18	9 620	1.3%
CZ Czech Republic	1	39	7	48	*	180	1	474	4 034	0.5%
DE Germany	12	106	75	10 170	203	2 113	4	29	38 127	5.1%
DK Denmark	*	4	2	49	3	143	1	*	2 342	0.3%
EE Estonia	*	7	60	20	*	27	2	*	1 392	0.2%
ES Spain	*	65	7	262	8	912	2	6	13 320	1.8%
FI Finland	*	16	8	90	1	622	*	*	3 975	0.5%
FR France	*	93	19	364	51	1 356	2	8	36 989	4.9%
GR Greece	*	3	*	103	382	82	1	183	21 020	2.8%
HU Hungary	*	3	4	94	86	67	11	24	3 739	0.5%
IE Ireland	*	1	1	35	*	80	*	12	17 119	2.3%
IS Iceland	*	*	1	27	*	29	*	2	1 534	0.2%
IT Italy	1	50	5	170	130	507	123	6	15 032	2.0%
LI Liechtenstein		*	*	52	*	2	*	*	773	0.1%
LT Lithuania	*		415	1	*	127	2	*	3 726	0.5%
LU Luxembourg	*	*	*	19	2	2	*	*	4 957	0.7%
LV Latvia	*	74		21	1	29	1	2	1 983	0.3%
MT Malta	*	*	*	1	*	10	*	1	893	0.1%
NL The Netherlands	*	17	6		4	475	1	1	6 825	0.9%
NO Norway	*	6	6	91	3	149	2	146	6 170	0.8%
PL Poland	*	192	14	401	7	387	6	39	21 685	2.9%
PT Portugal	*	73	4	73	8	115	2	3	6 526	0.9%
RO Romania	*	1	*	83		39	10	72	6 053	0.8%
SE Sweden	*	9	7	89	43	*	3	34	5 680	0.8%
SI Slovenia	*	12	2	15	13	42		5	736	0.1%
SK Slovakia	*	9	1	59	1	27	7	*	2 460	0.3%
TR Turkey	*	103	2	173	81	137	1	3	12 721	1.7%
UK United Kingdom	*	8	17	205	33	287	2	26	7 190	1.0%
Subtotal	**471**	**916**	**672**	**14 163**	**1 311**	**8 759**	**202**	**1 124**	**289 001**	**38.3%**
Other countries and regions										
Other European countries	*****	**615**	**487**	**460**	**4 846**	**153**	**955**	**316**	**47 811**	**6.3%**
... incl. Russian Federation	*	41	382	184	14	65	14	21	16 769	2.2%
Other non-European Countries	**3**	**370**	**276**	**4 570**	**3 208**	**2 323**	**33**	**461**	**356 977**	**47.3%**
Northern America	*	62	10	168	149	748	6	29	31 563	4.2%
... incl. United States	*	50	8	117	91	471	3	22	24 504	3.2%
Latin America and the Caribbean	*	11	*	500	64	245	12	24	29 782	3.9%
... incl. Mexico	*	2	*	44	*	117	2	7	5 627	0.7%
... incl. Brazil	*	2	*	37	5	20	4	1	4 463	0.6%
Africa	3	5	15	748	1 363	121	4	57	60 457	8.0%
Asia	*	285	246	3 132	1 628	860	10	351	231 157	30.6%
... incl. China	*	7	5	1 789	44	257	1	19	80 030	10.6%
... incl. India	*	18	16	54	160	51	1	4	29 545	3.9%
... incl. Japan	*	4	3	68	17	110	*	3	8 395	1.1%
Oceania	*	7	5	22	4	349	1	*	4 018	0.5%
Subtotal	**3**	**985**	**763**	**5 030**	**8 054**	**2 476**	**988**	**777**	**404 788**	**53.7%**
Unknown	108	*	*	8 256	18	10 900	5	*	66 821	8.9%
Total incoming mobile students	**582**	**1 901**	**1 435**	**27 449**	**9 383**	**22 135**	**1 195**	**1 901**	**754 476**	**100.0%**

3.3 Development over time

As indicated earlier, only eight of the 25 countries which collected mobility data in 2006/07 also possessed such data already in 2002/03. On the development of incoming mobility over time, our base of knowledge is therefore even slimmer than our knowledge of the picture in 2006/07.

In five of the eight countries for which a comparison with 2002/03 is possible, i.e. in Austria, Switzerland, Germany, the UK and Ireland, the numbers of incoming students grew faster than total enrolment (see Table 14), which resulted in an increase of the share of incoming students of all students between 2002/03 and 2006/07. In relative terms, Ireland saw the highest increase in incoming mobile students (of 64.3%), while in absolute figures, the highest increase was observed in the UK, which hosted in 2006/07 about 50 000 more incoming mobile students than four years earlier. Against the growth trend, we note decreases in absolute numbers of incoming mobile students in Latvia, where numbers halved, and in Spain. The findings from our country analysis of Spain (see Volume II of this study) would seem to indicate that the decrease in the case of this country is probably 'artificial', i.e. caused by improvements in the data collection method.

Table 14: Increase/decrease in all students in incoming mobile students between 2002/03-2006/07 by Europe 32 host country (ISCED 5/6)

Host country		All students		Increase/decrease 2002/03-2006/07		Incoming mobile students		Increase/decrease 2002/03-2006/07	
		2002/03	2006/07	Abs.	%	2002/03	2006/07	Abs.	%
AT	Austria p.r.	229 802	260 975	31 173	13.6%	27 309	32 430	5 121	18.8%
CH	Switzerland p.e.	185 965	213 112	27 147	14.6%	22 923	29 777	6 854	29.9%
CY	Cyprus p.r.	18 272	22 227	3 955	21.6%	4 620	5 590	970	21.0%
DE	Germany p.e.	2 242 397	2 278 897	36 500	1.6%	190 782	206 875	16 093	8.4%
ES	Spain p.r.	1 840 607	1 777 498	- 63 109	-3.4%	33 604	32 281	- 1 323	-3.9%
IE	Ireland p.r.	181 557	190 349	8 792	4.8%	10 201	16 758	6 557	64.3%
LV	Latvia p.r.	118 944	129 497	10 553	8.9%	2 930	1 433	- 1 497	-51.1%
UK	United Kingdom p.r.	2 287 833	2 362 815	74 982	3.3%	300 060	351 470	51 410	17.1%
TOTAL		**7 105 377**	**7 235 370**	**129 993**	**1.8%**	**592 429**	**676 614**	**84 185**	**14.2%**

Source: UOE data collection

On top of collecting data on incoming students, 15 of the 32 countries covered by this study also collected data on mobile graduates (see Table 15). In most countries, the share of incoming students is somewhat higher than that of incoming graduates. Given the reasonable assumption that in a majority of countries, the share of incoming students was lower at the time when those graduating in 2006/07 entered higher education, and graduation shares are therefore bound to be lower than incoming student shares, graduation rates are roughly in line with incoming enrolment. But, unlike in the case of students of foreign nationality, we estimate that graduation of incoming students was not above that of home students.

Table 15: All graduates, incoming mobile graduates and incoming mobile students 2006/07 (ISCED 5/6)

Country of graduation	ALL graduates	Incoming mobile graduates		% of incoming mobile students of all students
	Abs.	Abs.	%	
AT Austria	36 429	2 880 (p.e.)	7.9%	*
		3 140 (p.r.)	8.6%	12.4%
BE Belgium	103 970	*	*	8.3%
BG Bulgaria	49 165	*	*	3.5%
CH Switzerland	75 650	5 791	7.7%	14.0%
CY Cyprus	4 445	867	19.5%	25.1%
CZ Czech Republic	77 580	2 958	3.8%	5.6%
DE Germany	376 898	25 884	6.9%	9.1%
DK Denmark	50 849	3 008	5.9%	5.5%
EE Estonia	12 612	121	1.0%	1.4%
ES Spain	279 412	*	*	1.8%
FI Finland	42 296	1 687	4.0	4.1%
FR France	541 930	*	*	*
GR Greece	60 475	*	*	*
HU Hungary	67 224	*	*	3.0%
IE Ireland	59 011	*	*	8.8%
IS Iceland	3 542	*	*	5.2%
IT Italy	400 021	*	*	*
LI Liechtenstein	146	129	88.4%	86.5%
LT Lithuania	43 153	165 (p.e.)	0.4%	1.0%
		159 (p.r.)	0.4%	1.0%
LU Luxembourg	3 818	*	*	*
LV Latvia	22 934	*	*	1.1%
MT Malta	2 729	*	*	*
NL Netherlands	123 321	*	*	4.6%
NO Norway	35 410	462	1.3%	2.2%
PL Poland	532 827	*	*	*
PT Portugal	83 276	*	*	*
RO Romania	205 970	1 371	0.7%	1.0%
SE Sweden	60 243	2 631	4.4%	5.4%
SI Slovenia	16 680	130	0.8%	1.0%
SK Slovakia	202 826	*	*	0.9%
TR Turkey	259 882	*	*	*
UK United Kingdom	732 066	125 593	17.2%	14.9%

Source: UOE

3.4 Outgoing students

As underlined in the introductory section of this chapter, data on outgoing students can only be compiled on the basis of a count of incoming students in other countries of the world, i.e. in the same way that statistics on study abroad are generated from the worldwide data set on foreign students. However, since not all countries are able to collect and report data on incoming mobility, a pure set of statistics on outgoing mobility is impossible to produce at this moment. What is retrievable though, from the UIS online database and what is actually presented in the yearly *Education at Glance* OECD publication, is a mixed data set, based on incoming student data for those countries that collect them and on foreign student data for the countries that do not yet avail of genuine mobility data. This data set, however, poses a number of problems, particularly for interpreting mobility outflows over time. We will present, as an example only, a snapshot (2006/07) of this data in the next section.

4 Comparing genuine mobility and nationality data

In this concluding part, we would like to compare the two data sets – on students with a foreign nationality and on genuine mobility – in order to make an informed estimate of the real level of international student mobility in the Europe 32 region in 2006/07.

Table 16 presents, for the 24 countries where such information is available, the numbers of foreign students and the numbers of incoming students in 2006/07. The number of foreign students amounts to 1 107 000, whereas the number of incoming mobile students is some 285 000 lower, at about 840 000. This is a "loss" of nearly a quarter (24.1%). On the assumption that this same percentage decrease applied also to the remaining eight countries for which we do not have mobility data (which we of course cannot know), the total number of incoming students in the Europe 32 area would be about 363 000 lower than the number of foreign nationality students, and total mobility in the Europe 32 area would drop from 1 507 000 (nationality) to 1 144 172 (mobility). We can anyway conclude that – for the Europe 32 region as a whole – nationality data do overstate the real extent of incoming mobility considerably.

At first glance, the drop in real mobility by about one quarter would appear to reduce Europe's impressive share of over 50% of the global market, referred to earlier. But this would be so only if one assumed that the shares of non-mobile foreign students elsewhere in the world would be lower than in the Europe 32 region. Whether or not this assumption is valid is everybody's best guess.

As a consequence of the lower numbers of incoming students compared to students of foreign nationality, the percentage shares of incoming students of total enrolment are also lower than the percentage shares of foreign nationality students. The average value for the group of 24 countries is 9.2% for students of foreign nationality (considerably above the average for the 32 countries of 6.9%) and only 7% for incoming students.

Once again, the average for the 24 countries and the picture at the national level can diverge markedly. In a majority of countries, the number of foreign nationality students exceeds the number of mobile students. In some countries, like Lithuania and Liechtenstein, the difference is marginal. In countries with little difference between the numbers of incoming and of foreign students, either the vast majority of incoming mobile students have a foreign nationality, i.e. practically every foreign student has been mobile, or the number of 'returners' is roughly the same as that of non-mobile foreign students. In some countries, foreign students far outnumber incoming students. Extreme cases of much higher nationality than mobility rates are Norway and Estonia, where the difference between foreign nationals and incoming students is 69.2% and 56.1% respectively, i.e. where the majority of foreigners appear to be non-mobile. At 46%, the difference is still considerable in the case of Spain. Against the general trend, there are, however, two countries

where, very surprisingly, mobile student numbers are higher than those of foreign nationality students. In Slovenia, the difference is 13.4% and in Finland, 26%. One might try to explain this very atypical pattern by the very high number of 'returners' (home-nationality students) in the case of Finland. Finland recorded about 4 300 'returners' in 2006/07, considerably more than the surplus of mobile over foreign students of approximately 2 600. However, this explanation raises a new question: where do all these Finnish 'returners' come from?

As the above examples showed, data on genuine mobility allow for a differentiation into two sub-groups of mobile students, i.e. those with a foreign nationality and those with the nationality of the country they are studying in - the 'returners'. By comparing the numbers of incoming foreign nationals and the number of foreign nationality students, one can also identify a third group – non-mobile foreigners (resident foreigners).

Amongst the 15 countries for which the shares of *'returners'* among all incoming mobile students can be calculated, Denmark leads by far, with about half of all incoming students being Danes (50.1%). Finland, which we already mentioned, is second, with a returner share of about one-third. Iceland, Switzerland and Norway have 10% or more 'returners'. Seven countries have a share of below 5% of 'returners' amongst incoming students.

In most cases, the earlier mentioned difference between the numbers of foreign students and incoming students is largely (though not only) due to sizeable groups of *resident* foreign students, or, to put it in a different way, non-mobile foreigners. The latter group is usually formed of students with a migration background, i.e. students that were not mobile for purposes of higher education and who should therefore not be included in the mobility statistics. The higher their proportion in a foreign student data set, the less indicative of genuine mobility the data usually are.

In half of the 18 countries which are able to identify the numbers of resident foreign students, their share of all foreign students is below 20%. In five further countries, the share is between 20 and 40%. The countries with the highest shares of residents amongst all foreign students are, in that order, Norway (72.3%), Denmark (69.6%), Sweden (48.2%) and Spain (48.1%). In the case of the three Nordic countries, this is almost certainly an artificial effect, due to the definition of residence. Upon arrival, incoming mobile degree students are asked to register in the country, and thus undergo a status change, from a mobile to a resident foreigner. The still high, but (compared to Norway and Denmark) lower share in Sweden is probably explained by the fact that the Swedish data set contains, against the rules, not only degree mobile, but also credit mobile students, who are not registered as residents in Sweden.

Outgoing (mobile) students vs. study abroad students

As we underlined earlier in this chapter, because the transition to the collection of genuine mobility data is not yet complete, we cannot safely say how many students from the Europe 32 region were outgoing mobile students in 2006/07. What we can present, however, is a mixed data set of genuinely outgoing mobile students, where such data are available, and of study abroad data, where they are not. Table 17, which presents the mixed data, shows that at least some 110 000 of the roughly 773 000 study abroad students with Europe 32 nationalities were not mobile, i.e. they neither resided nor completed their prior education in the country of higher education enrolment. This is a share of 16.2% of all study abroad students with a Europe 32 nationality.

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Table 16 Incoming mobile students as compared to foreign students 2006/07 (ISCED 5/6)

Country of study	*Incoming mobile students*	% incoming mobile among all students	*Foreign students*	% foreign among all students	Difference foreign – mobile students		*Incoming mobile students* with home nationality ('returner')	% returner among all *incoming mobile students*	Resident *foreign students*	% resident foreign among all *foreign students*	Mobile students with foreign nationality	% of mobile foreign among all students
					Absolute	% of *foreign students*						
AT Austria p.r.	32 430	12.4%	43 572	16.7%	11 142	25.6%	1 496	4.6%	12 638	29.0%	30 934	11.9%
BE Belgium p.e.	32 869	8.3%	47 218	12.0%	14 349	30.4%	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
p.r.	25 202	6.4%			22 016	46.6%	825	3.3%	16 974	35.9%	24 377	6.2%
BG Bulgaria p.e.	9 100	3.5%	9 351	3.6%	251	2.7%	72	0.8%	323	3.5%	9 028	3.5%
CH Switzerland p.e. (ISCED 5A/6)	29 777	14.0%	35 140	16.5%	5 363	15.3%	3 705	12.4%	9 068	25.8%	26 072	12.2%
CY Cyprus p.r.	5 590	25.1%	5 973	26.9%	383	6.4%	75	1.3%	458	7.7%	5 515	24.8%
CZ Czech Republic p.r.	20 175	5.6%	24 483	6.8%	4 308	17.6%	105	0.5%	4 413	18.0%	20 070	5.5%
DE Germany p.e.	206 875	9.1%	258 513	11.3%	51 638	20.0%	*	n.a.	*	n.a.	*	n.a.
DK Denmark p.r.	12 695	5.5%	20 851	9.0%	8 156	39.1%	6 366	50.1%	14 522	69.6%	6 329	2.7%
EE Estonia p.r.	966	1.4%	2 200	3.2%	1 234	56.1%	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
ES Spain p.r.	32 281	1.8%	59 814	3.4%	27 533	46.0%	1 257	3.9%	28 790	48.1%	31 024	1.7%
FI Finland p.e.	12 683	4.1%	10 066	3.3%	- 2 617	-26.0%	4 347	34.3%	1 730	17.2%	8 336	2.7%
HU Hungary p.r.	12 946	3.0%	15 110	3.5%	2 164	14.3%		0.0%	2 164	14.3%	12 946	3.0%
IE Ireland p.r.	16 758	8.8%	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
IS Iceland p.e.	823	5.2%	783	4.9%	- 40	-5.1%	122	14.8%	82	10.5%	701	4.4%
LI Liechtenstein p.r.	582	86.5%	594	88.3%	12	2.0%	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
LT Lithuania p.e.	1 991	1.0%	1 920	1.0%	- 71	-3.7%	126	6.3%	55	2.9%	1 865	0.9%
p.r	1 901	1.0%			19	1.0%	5	0.3%	24	1.3%	1 896	0.9%
LV Latvia p.r	1 433	1.1%	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
NL Netherlands p.e./p.r.	27 449	4.7%	37 815	6.4%	10 366	27.4%	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
NO Norway p.r.	4 808	2.2%	15 618	7.3%	10 810	69.2%	482	10.0%	11 292	72.3%	4 326	0.7%
RO Romania p.e.	9 383	1.0%	12 188	1.3%	2 805	23.0%	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
SE Sweden p.r.	22 135	5.4%	42 769	10.3%	20 634	48.2%		0.0%	20 634	48.2%	22 135	2.4%
SI Slovenia p.e.	1 713	1.5%	1 511	1.3%	- 202	-13.4%	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
p.r.	1 195	1.0%			316	20.9%	112	9.4%	428	28.3%	1 083	0.9%
SK Slovakia p.r.	1 901	0.9%	2 010	0.9%	109	5.4%		0.0%	109	5.4%	1 901	n.a.
UK United Kingdom p.r.	351 470	14.9%	459 987	19.5%	108 517	23.6%	30 140	8.6%	138 657	30.1%	321 330	13.6%
TOTAL	**840 558****	**7.0%**	**1 107 486**	**9.2%**	**285 119*****	**24.1%**						

Data legend: * DE cannot identify ISCED 5A students among its foreign students; HU, SE, SK (incoming mobile students with home nationality): unfortunately, it cannot be established whether students with home nationality are not included in the collection of incoming mobile student data or whether there are, in fact, no students with that characteristic; EE, NL: the figures on permanently resident students are too low if compared to numbers of incoming mobile and foreign students by countries of origin/nationality as presented in country profile sheets; in LI, all foreign students are indicated as being resident so that on this basis, all incoming mobile students are identified as returners. This classification is not substantiated by the classification by countries of origin/nationality in the country profile sheet. ** Total calculated taking into account the p.r. totals for BE, LT and SI. *** Total calculated without including IE and LV, as they do not collect data on foreign students. The total of incoming students taken into account for this calculation is 822 365 instead of 840 556 (in table).

Table 17: Study abroad students and student outflows (mixed criteria: foreign nationality vs. country of prior education/prior residence) from Europe 32 countries, by country of origin/nationality in 2006/07

Country of origin/nationality		Study abroad students	Outflows on mixed criteria
AT	Austria	12 965	10 467
BE	Belgium	10 355	10 597
BG	Bulgaria	26 623	24 687
CH	Switzerland	9 850	10 490
CY	Cyprus	22 411	22 900
CZ	CzechRepublic	8 419	7 360
DE	Germany	87 750	77 546
DK	Denmark	6 838	5 036
EE	Estonia	4 020	3 245
ES	Spain	29 027	23 920
FI	Finland	9 838	5 970
FR	France	61 593	54 025
GR	Greece	38 231	32 643
HU	Hungary	8 551	7 218
IE	Ireland	30 204	19 358
IS	Iceland	3 771	2 480
IT	Italy	45 044	35 139
LI	Liechtenstein	747	884
LT	Lithuania	8 532	6 762
LU	Luxembourg	7 148	7 201
LV	Latvia	4 680	3 858
MT	Malta	1 074	1 033
NL	Netherlands	14 433	10 432
NO	Norway	13 646	11 875
PL	Poland	41 896	32 889
PT	Portugal	16 639	11 201
RO	Romania	24 597	22 858
SE	Sweden	15 791	13 726
SI	Slovenia	2 699	2 281
SK	Slovakia	25 466	24 211
TR	Turkey	56 555	36 844
UK	United Kingdom	23 393	24 119
TOTAL Europe 32 countries		**672 786**	**563 255**

Source: UOE

5 Headline findings

Below, we are recapitulating some of the key findings from this chapter. Before doing so, we would like to highlight two points.

First, and at the danger of annoying the careful reader, we stress that this chapter covered only degree study and degree mobility. Temporary mobility (or, as we also call it, credit mobility) is not covered in this chapter. It will be addressed in the following one.

Second, in order to be brief and to display overarching trends, the headline findings use values for the Europe 32 area as a whole. We therefore strongly underline that it is not legitimate to draw conclusions from the Europe 32 values to the situation in single European countries. When comparing numbers and trends between the different countries in the Europe 32 zone, we find only one common characteristic: that of difference. There is no such thing as a dominant Europe 32-wide trend in degree mobility apart from this. This should have become clear in the preceding sections of this chapter and it is also strongly underpinned in the country analyses in Volume II of this study.

Foreign students and incoming mobile students

- In 2006/07, there were about 1.5 million foreign students enrolled in the Europe 32 area. This represents a 'global market share' of 50.9%, meaning that every second foreign student in the world was studying in the Europe 32 area. This is impressive for a region with less than one-tenth of the global population. More amazing, still, is that the Europe 32 countries even slightly increased their share in the nine years since 1998/99, in the face of growing competition worldwide.
- The number of foreign students in the Europe 32 region grew tremendously between 1998/99 and 2006/07. Taking into consideration only those countries for which data for both years were available, growth was about 50%. Taking all countries into the calculation, growth even stood at 82.3%. We estimate that the real growth was closer to the upper than the lower level.
- Total enrolment (i.e. numbers of foreign and own-nationality students combined) also increased in the nine-year reference period, but much less so. As a result, the share of foreign nationals of total enrolment grew, from 4.5% in 1998/99 to 6.9% in 2006/07.
- The strong growth in foreign enrolment over the nine-year span was fuelled mainly by foreign students with a non-Europe 32 nationality. In 2006/07, about 58% of all foreign students were from outside the Europe 32 region. The share of non-Europe 32 students of all foreign students grew over time, and that of Europe 32 students decreased.
- There are strong indications that the completion (i.e. graduation) rates of foreign students are above those for home students. This does not apply to incoming mobile foreign students, though.
- The totals for genuine incoming mobility are about one quarter below those for foreign nationality (in the countries for which we have data on both). In other words, the statistics on foreign students overstate the true numbers of incoming students by about one quarter.
- Warning: Europe 32 averages say little about the situation in each country. The UK, Germany and France together have close to two-thirds of all foreign students in the Europe 32 area. There is a similar, though not quite as heavy, concentration of incoming mobility on these large 'importer' countries. Any European averages are heavily influenced by the values of these countries.

Study abroad and outgoing mobility

- The numbers of Europe 32 study abroad students are considerably lower than those of foreign students studying in the Europe 32 zone. The total number of study abroad students in 2006/07 was 673 000, less than half than that for the study of foreign students in the 32 countries covered by this study (1 507 000).
- In spite of this, study abroad has also grown between 1998/99 and 2006/07, but, at 37.1%, considerably less than the study of non-Europe 32 students in the Europe 32 zone.
- The ratio of study abroad students to home students stood at 0.032 in 2006/07. In other words, for every 1 000 students enrolled in their country of nationality, there were 32 nationals of this country enrolled abroad. However, this average hides very important differences amongst countries. The extremes are Cyprus, where the majority of its citizens are enrolled abroad (138 abroad for ever 100 in Cyprus) and the UK (12 abroad for every 1 000 in the UK), where study abroad is an extremely rare phenomenon.
- The vast majority of study abroad students from the Europe 32 region study in a country in the Europe 32 region (85.5%). Study abroad outside of the region is very rare. The share of Europe 32 study abroad students within the zone has even increased since 1998/99, from 82.2% to 85.5%.
- Due to recording practices in receiving countries, it is difficult to exactly assess the relationship between study abroad and real outgoing mobility. We are sure that study abroad numbers overstate the levels of genuine outgoing mobility. We would estimate that the overcount is below 20%, and possibly considerably less.

Chapter II: Credit mobility in EU Programmes ERASMUS and LEONARDO da VINCI

Irina Ferencz

1 Introduction

Following the analysis of degree mobility trends and patterns in Chapter I, the present chapter aims to provide a comparative overview of credit mobility developments – the second type of cross-border 'movement' of students for the purpose of study. Regrettably though, this objective can be only partly achieved in the analysis to follow. The main precondition for any such endeavour – a comprehensive database on credit mobility at the global and European level, i.e. a UOE-like data collection on temporary mobility – is lacking, thus hindering the cross-border analysis of this type of mobility to a significant extent.

In the absence of an appropriate credit mobility database, we can only make use in the present chapter of the best proxy available in the European higher education landscape – the ERASMUS data collection of the European Commission. While ERASMUS is, to the knowledge of the authors, the biggest programme of this sort in Europe, and also in the world, admittedly, it supports only a share of total credit mobility in Europe. Yet, unlike other regional initiatives in the European landscape (such as the Nordplus and CEEPUS programmes), ERASMUS has the great advantage that it involves almost all the Europe 32 countries of the study (with the exception of Switzerland, who will re-enter the programme in 2011), providing thus the proper country coverage for our comparison. Moreover, it collects data on the same definitions, making cross-country information highly comparable. [16]

ERASMUS will, therefore, constitute the main source of data in the analysis of European credit mobility developments and patterns in this chapter. ERASMUS data presented below cover a time span of eleven years, i.e. the reference period for degree mobility (the academic years 1998/99-2006/07) as well as the two most recent years for which ERASMUS data was available at the time of writing – the years 2007/08 and 2008/09.[17] Concerning the purpose of mobility, ERASMUS has traditionally funded student mobility for studies – *SMS* in ERASMUS terminology – of a minimum duration of 3 months and a maximum length of one academic year. Since 2007/08, a new component has been added to the programme. In addition to student mobility for study purposes (SMS), ERASMUS supports student mobility for work placements (labelled *SMP*), which were funded by the EU LEONARDO da VINCI Programme prior to 2007/08. To enhance the analysis of trends in the SMP component of the programme, the LEORANRO da VINCI mobility data for the years 2000/01-2006/07 will be used, where appropriate, in the analysis.

The purpose of the chapter is twofold:

[16] The EURODATA publication of 2006 addressed, in addition to ERASMUS, the rest of EU and European schemes for student mobility, as well as many national programmes (Kelo, Teichler, Wächter, op. cit., pp. 162-192). Given that the added value of this approach turned to be very limited, amongst others, because of the much smaller number of mobile students supported through these programmes and because of the limited differentiation across mobility descriptors, we decided to exclude this data from the present chapter.

[17] In the 11-year period, ERASMUS was consequently integrated within the Socrates I (1995/96-1999/00), Socrates II (2000/01-2006/07) and Lifelong Learning programmes (2007/08 – present).

to provide an accurate account of trends and patterns in credit mobility supported by the ERASMUS (and LEONARDO da VINCI) Programme; and

to compare these developments with degree mobility trends and patterns, in order to assess the relative importance and role of ERASMUS in supporting intra-European mobility.

To reach these goals, the chapter will provide a historical overview of ERASMUS mobility developments, to then place this information in the wider national and European mobility context. It will further explore similarities and differences between ERASMUS (credit) mobility and degree mobility on a number of mobility descriptors, from the direction of mobility (incoming vs. outgoing), to subject areas or levels of study. The chapter will end with some concluding remarks on the role that the programme plays in the European student mobility context.

2 Incoming and outgoing ERASMUS students

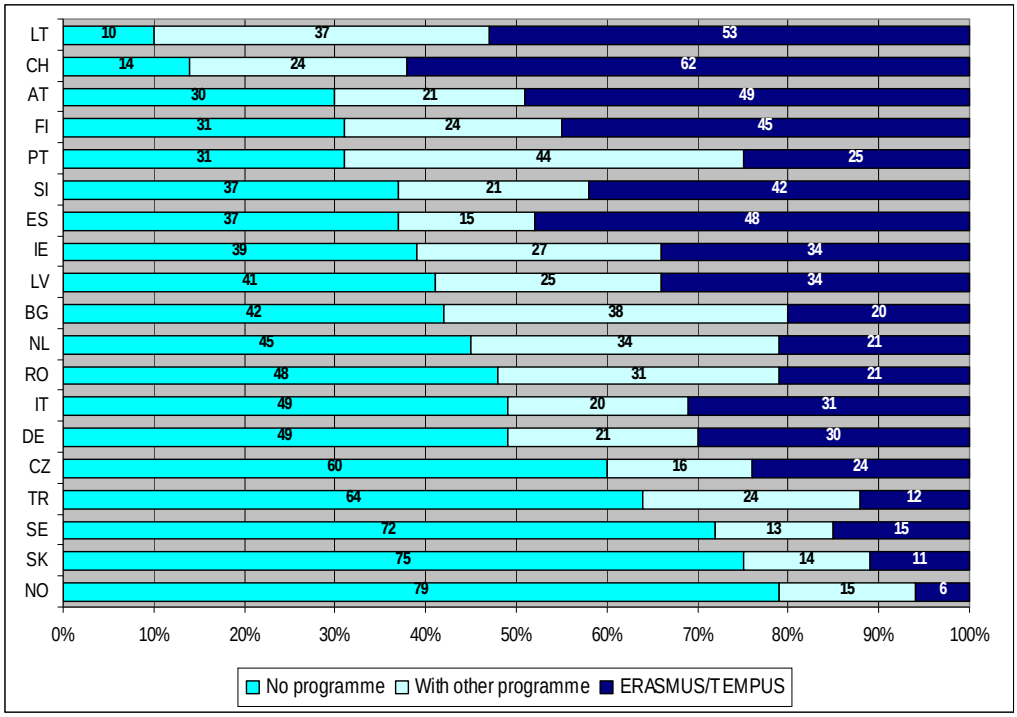
The snapshot picture

In the academic year 2008/09, there were 198 568 students from the Europe 32 countries studying or completing a work placement with ERASMUS in another country of this region. The *top three destinations* in this year were, unsurprisingly, countries with some of the largest student populations in the Europe 32 region, i.e. Spain (16.8%), followed by France (12.5%) and Germany (10.5%). Together, these three countries received more than one-third of the total ERASMUS student population. Over the period 1998/99-2008/09, Spain was in the lead position since the academic year 2001/02, partly as a consequence of the more limited involvement of the UK in the programme. As far as outflows are concerned, the *top three sending countries* of ERASMUS students in 2008/09 coincide with the *top-three destinations*, in the same order. Spanish students accounted for 14.5% of the ERASMUS students in this year, French students for 14.0% and German students, closely following France, for 13.9%. France lost, for the first time, the leading position as the top sending country of ERASMUS students in the academic year 2005/06 to Spain.

Knowing that ERASMUS numbers stand for only a share of total European credit mobility, we cannot help but wonder, in this context, how many more students were credit mobile in 2008/09, on top of the almost 200 000 ERASMUS students[18]? In other words, *how representative are ERASMUS numbers for total European credit mobility*? The only source of information providing a partial (i.e. for only 19 countries) answer to this question is the EUROSTUDENT project (Figure 1). The third edition of the survey, presenting data for the years 2005 and 2006, estimates that out of all the credit mobile students of these countries, between 6% (Norway) and 62% (Switzerland) had been abroad with the ERASMUS or the TEMPUS Programme. Thus, ERASMUS seems to play from a very small to a crucial role in individual Europe 32 countries for outgoing credit mobility. The definition of credit mobility in the EUROSTUDENT project covers, however, not only mobility for studies or placements, but also other types of stays, often of a shorter duration, such as language courses or summer schools. Thus, in reality, the share of students from the Europe 32 regions that went abroad for *stays comparable to ERASMUS* is bound to be smaller.

[18] Data on the share of students that had a study-related experience abroad in the course of studies is also available via national-level graduate surveys. However, given that these studies have been conducted according to nationally-specific definitions, and are thus not immediately comparable across countries, we refrain from presenting these data separately in the present chapter. The data are nevertheless featured in Chapter IV of this volume, as well as in some of the country analyses in Volume II, where available.

Figure 1: Organisation of study-related stays abroad, in percentages, in the years 2005-2006



Source: EUROSTUDENT III (2008), p. 150

ERASMUS trends

Coming back to the analysis of the ERASMUS data, we observe a number of noteworthy developments. At the *macro level*, in the eleven years of analysis, ERASMUS experienced a significant growth in the number of mobile students (by 104%), which is primarily due to a growth in the number of participating countries in the programme, in parallel to the overall increase of the ERASMUS budget. More precisely, the number of ERASMUS students more than doubled in this period: it rose from 97 571 students in 1998/99 to 198 568 students in 2008/09 (Table 1). The remarkable growth rate was, nevertheless, to a certain extent due to the newly-added component of the programme – placement mobility (SMP) – which in the academic year 2008/09 accounted for 30 375 students.

Looking at trends in ERASMUS mobility for studies (SMS) only, the growth rate, though slightly lower, remains nonetheless impressive, at 72.4% (Table 2). While ERASMUS mobility for studies (SMS) increased by close to three-quarters, the number of students that went abroad for work placements with EU mobility programmes almost tripled in only three years. The number grew from 13 270 students in 2006/07, when placements were funded under the LEONARDO da VINCI Programme (Table 5), to 30 375 SMP students in 2008/09 under ERASMUS (Table 4). In the interval 2000/01-2008/09, the number of work placement students quadrupled (Tables 4 and 5).

At the level of *individual countries*, it seems that the new and smaller-size member states are, by and large, the fastest growing systems, while the older EU member states still record the highest increases in absolute terms. More specifically, we observe the following *trends*

- In terms of *inflows*, Slovakia, Portugal, Cyprus and the Czech Republic witnessed the largest *growth rates* between 1998/99-2008/09 in the number of incoming *ERASMUS students for studies* (between 1 000-4 000%, Table 2), while in terms of *absolute growth*, Spain was the

undisputed leader, hosting 15 008 more ERASMUS students in 2008/09 than in 1998/99 for study purposes (*SMS*). In the SMP component of the programme, Spain is also the country with the largest absolute increase in the number of incoming *ERASMUS students for work placements* – it hosted 1 705 more SMP students in 2008/09 than in the previous year (Table 4). In relative terms, however, Slovakia, Malta and Liechtenstein more than doubled their numbers of outgoing SMP ERASMUS students in only one year (2007/08-2008/09) and show the highest growth rates in this type of ERASMUS mobility. The corresponding absolute figures remain, nevertheless, modest in these three countries.

- In terms of *outflows*, the highest *growth rates* in *SMS* were registered in Slovakia, followed by Luxembourg and Poland (Table 3) in the period 1998/99-2008/09. The number of national students going abroad *for studies* with ERASMUS increased 27 times (2 786.4%) in Slovakia, 17 times (1 752.2%) in Luxembourg and 7 times (726.4%) in Poland. Polish students were also the national group with the highest increase in *absolute terms*: 10 358 more Polish students went abroad for studies with ERASMUS in 2008/09 compared to 1998/99. In *work placement mobility* (Table 4), from 2007/08 to 2008/09 the highest absolute increase is observed in the case of German students (1 754 students), followed by French (1 334) and Spanish (1 129) students. In relative terms, Cyprus experienced the strongest growth rate in SMP – 225.0% – though in absolute terms this remains a marginal rise, of only nine students.

The overall increases, while impressive, were neither linear nor continuous over the 11 years of analysis across the Europe 32 countries. More than half of the countries in this region experienced intermittent *downward movements*, either in the number of outgoing or incoming ERASMUS students, or both. Nevertheless, only two Anglophone countries, i.e. the UK and Ireland, as well as two Nordic countries – Sweden and Denmark – sent less students abroad *for studies* on ERASMUS in 2008/09 than they did in 1998/99. The UK is also the only Europe 32 country that received fewer ERASMUS students *for studies* in 2008/09 than in 1998/99. This is, however, not a sign of decreased 'attractiveness' of the UK for the ERASMUS students, but rather a direct consequence of UK's policy to maintain a more limited involvement in the programme and to focus its actions on incoming degree-seeking students.

Mobility balance (reciprocity) in ERASMUS

Student exchanges are usually governed by the principle of reciprocity, i.e. the ideal that *student inflows should balance the outflows*. The same rationale applies to the ERASMUS Programme. Nevertheless, the concept of *balanced mobility* has no commonly agreed definition across the 32 countries of the study. For the purpose of our analysis though, we have defined as *balanced*, a country situation where the difference in the IN:OUT ratio between the numbers of incoming and outgoing ERASMUS students is smaller than 10. Judged against this definition, the only three countries in the Europe 32 region with balanced ERASMUS mobility flows, in 2008/09, were Austria (100:100 ratio), Belgium (104:100) and Estonia (106:100, cf. Table 1). In contrast, the countries with an imbalance between inflows and outflows can be classified as either *net import countries* – ratio equal to or bigger than 110:100 – or *net export countries* – ratio equal to or lower than 90:100. Thus, of the remaining 28 countries with imbalances,

- *15* were *net exporters* of ERASMUS students (the number of outgoing ERASMUS students outbalanced the number of incoming students in the programme), and conversely
- *13* were *net importers* in ERASMUS (they received more ERASMUS students than they sent abroad).

At the country level, still in 2008/09, the differences between total outflows and inflow – the *imbalances* – in *net export countries* spanned from relatively low in France (90:100) and Italy (89:100) for example, to very high, in countries like Bulgaria (37:100) and Romania (37:100), that sent abroad almost three times as many ERASMUS students as they hosted. Similar discrepancies are observed in the case of ERASMUS *net import countries*. While Spain hosted slightly more students than it sent abroad in 2008/09 (113:100), countries like Sweden (290:100) and Denmark (280:100) sent almost three times fewer students abroad with ERASMUS than they received.

Moreover, *over time* we further observe some very interesting *changes* in the 23 countries that participated in the programme already in the academic year 1998/99. Assuming that achieving balanced mobility is a country level objective, we find that

- 11 states were in a 'better' situation in 2008/09 compared to 1998/99. They managed to narrow the gap between inflows and outflows in this timeframe, showing a more balanced ERASMUS mobility picture in the most recent year available; in contrast,
- Five countries, i.e. Germany, Denmark, France, Ireland, and Luxembourg, showed a deteriorating situation in the most recent year available: the gap between inflows and outflows had become wider; while, interestingly
- Seven countries went through a 'profile' change in this interval. Cyprus, Spain, Finland, Iceland, Norway, Portugal, and Sweden all transformed, from *net exporters* of ERASMUS students in 1998/99, sending more students abroad with the programme than they hosted, into *net import countries*. In 2008/09, they all received more students than they sent abroad though the programme.

Table 1: Incoming and outgoing ERASMUS students by country of host and, respectively, home institution, absolute numbers and IN:OUT ratio, in 1998/99 – 2008/09

	1998/99			1999/00			2000/01			2001/02			2002/03			2003/04		
Europe 32 countries	IN	OUT	IN:OUT ratio	IN	OUT	IN:OUT ratio	IN	OUT	IN:OUT ratio	IN	OUT	IN:OUT ratio	IN	OUT	IN:OUT ratio	IN	OUT	IN:OUT ratio
AT Austria	2 196	2 705	81:100	2 503	2 954	85:100	2 431	3 026	80:100	2 465	3 026	81:100	2 834	3 312	86:100	3 158	3 710	85:100
BE Belgium	3 375	4 470	76:100	3 670	4 434	83:100	3 729	4 417	84:100	3 897	4 551	86:100	4 046	4 653	87:100	4 504	4 825	93:100
BG Bulgaria	*	*	n.a.	8	134	6:100	26	398	7:100	51	622	8:100	67	612	11:100	89	751	12:100
CY Cyprus	14	35	40:100	18	42	43:100	4	*	n.a.	37	72	51:100	64	91	70:100	62	64	97:100
CZ Czech Republic	243	879	28:100	461	1 249	37:100	556	2 001	28:100	732	2 533	29:100	970	3 002	32:100	1 298	3 589	36:100
DE Germany	12 940	14 700	88:100	14 686	15 726	93:100	15 118	15 890	95:100	15 506	16 641	93:100	16 113	18 494	87:100	16 856	20 710	81:100
DK Denmark	1 945	1 751	111:100	2 310	1 764	131:100	2 408	1 750	138:100	2 555	1 752	146:100	2 883	1 847	156:100	3 385	1 691	200:100
EE Estonia	*	*	n.a.	53	183	29:100	85	255	33:100	115	274	42:100	171	302	57:100	165	305	54:100
ES Spain	13 167	14 381	92:100	15 188	16 299	93:100	17 008	16 383	104:100	18 830	17 405	108:100	21 297	18 258	117:100	24 039	20 035	120:100
FI Finland	2 423	3 441	70:100	3 026	3 486	87:100	3 542	3 286	108:100	3 757	3 291	114:100	4 427	3 402	130:100	4 930	3 951	125:100
FR France	16 264	16 372	99:100	17 894	16 835	106:100	17 475	17 179	102:100	17 813	18 220	98:100	18 825	19 396	97:100	20 249	21 007	96:100
GR Greece	1 086	1 765	62:100	1 284	1 911	67:100	1 298	1 922	68:100	1 410	1 974	71:100	1 545	2 115	73:100	1 589	2 385	67:100
HU Hungary	277	856	32:100	456	1 627	28:100	624	1 996	31:100	769	1 736	44:100	853	1 830	47:100	951	2 058	46:100
IE Ireland	2 907	1 504	193:100	3 085	1 689	183:100	3 119	1 648	189:100	3 245	1 708	190:100	3 472	1 627	213:100	3 582	1 705	210:100
IS Iceland	112	147	76:100	114	138	83:100	127	134	95:100	132	147	90:100	170	163	104:100	199	221	90:100
IT Italy	6 890	10 869	63:100	8 032	12 409	65:100	8 751	13 249	66:100	9 867	13 968	71:100	10 973	15 224	72:100	12 706	16 829	76:100
LI Liechtenstein	*	*	n.a.	*	*	n.a.	*	*	n.a.	*	*	n.a.	*	*	n.a.	*	*	n.a.
LT Lithuania	*	*	n.a.	36	361	10:100	57	624	9:100	91	823	11:100	132	1 001	13:100	216	1 194	18:100
LU Luxembourg	12	23	52:100	18	24	75:100	34	28	121:100	22	30	73:100	13	33	39:100	14	36	39:100
LV Latvia	*	*	n.a.	23	165	14:100	40	182	22:100	48	209	23:100	45	232	19:100	65	308	21:100
MT Malta	*	*	n.a.	*	*	n.a.	69	92	75:100	173	129	134:100	202	72	281:100	250	119	210:100
NL The Netherlands	5 750	4 332	133:100	5 899	4 418	134:100	5 761	4 162	138:100	6 144	4 244	145:100	6 349	4 241	150:100	6 722	4 380	153:100
NO Norway	983	1 101	89:100	1 010	1 107	91:100	974	1 007	97:100	1 100	970	113:100	1 244	1 010	123:100	1 518	1 152	132:100
PL Poland	213	1 426	15:100	465	2 813	17:100	621	3 691	17:100	792	4 323	18:100	994	5 419	18:100	1 455	6 278	23:100
PT Portugal	1 754	2 179	80:100	2 230	2 471	90:100	2 536	2 569	99:100	2 883	2 825	102:100	3 279	3 171	103:100	3 762	3 646	103:100
RO Romania	116	1 250	9:100	206	1 687	12:100	204	1 899	11:100	275	1 965	14:100	355	2 701	13:100	535	3 005	18:100
SE Sweden	3 623	3 321	109:100	4 201	3 087	136:100	4 412	2 726	162:100	4 901	2 633	186:100	5 320	2 656	200:100	6 078	2 659	229:100
SI Slovenia	*	*	n.a.	9	170	5:100	61	227	27:100	108	364	30:100	129	422	31:100	201	546	37:100
SK Slovakia	20	59	34:100	53	380	14:100	59	505	12:100	111	578	19:100	131	654	20:100	181	682	27:100
TR Turkey	*	*	n.a.	*	*	n.a.	*	*	n.a.	*	*	n.a.	*	*	n.a.	*	*	n.a.
UK United Kingdom	21 261	10 005	213:100	20 689	10 064	206:100	19 142	9 028	212:100	17 660	8 479	208:100	16 987	7 957	213:100	16 618	7 547	220:100
TOTAL	97 571	97 571	100:100	107 627	107 627	100:100	110 271	110 274	100:100	115 489	115 492	100:100	123 897	123 897	100:100	135 388	135 388	100:100

Source: European Commission

Table 1 (continued)

Europe 32 countries	2004/05			2005/06			2006/07			2007/08**			2008/09**		
	IN	OUT	IN:OUT ratio	IN	OUT	IN:OUT ratio	IN	OUT	IN:OUT ratio	IN	OUT	IN:OUT ratio	IN	OUT	IN:OUT ratio
AT Austria	3 534	3 810	**93:100**	3 636	3 971	**92:100**	3 776	4 032	**94:100**	4 419	4 609	**96:100**	4 728	4 742	**100:100**
BE Belgium	4 728	4 865	**97:100**	4 964	4 971	**100:100**	5 308	5 119	**104:100**	6 154	5 386	**114:100**	6 846	6 604	**104:100**
BG Bulgaria	179	779	**23:100**	246	882	**28:100**	296	938	**32:100**	445	1 140	**39:100**	514	1 404	**37:100**
CY Cyprus	95	93	**12:100**	117	133	**88:100**	211	129	**164:100**	314	152	**207:100**	394	304	**130:100**
CZ Czech Republic	1 945	4 178	**47:100**	2 513	4 725	**53:100**	3 059	5 079	**60:100**	3 719	5 587	**67:100**	4 171	5 847	**71:100**
DE Germany	17 265	22 445	**77:100**	16 878	23 838	**71:100**	17 878	23 884	**75:100**	20 823	26 286	**79:100**	21 939	27 624	**79:100**
DK Denmark	3 882	1 793	**217:100**	4 202	1 682	**250:100**	4 293	1 587	**271:100**	5 209	1 996	**261:100**	5 638	2 013	**280:100**
EE Estonia	275	444	**62:100**	358	511	**70:100**	489	572	**85:100**	619	717	**86:100**	709	669	**106:100**
ES Spain	25 501	20 818	**122:100**	25 021	22 885	**19:100**	27 464	22 322	**123:100**	31 129	24 984	**125:100**	33 178	29 402	**113:100**
FI Finland	5 351	3 932	**136:100**	5 514	3 851	**143:100**	5 998	3 773	**159:100**	6 374	3 952	**161:100**	6 606	3 927	**168:100**
FR France	20 512	21 576	**95:100**	19 211	22 501	**85:100**	20 673	22 981	**90:100**	23 171	25 945	**89:100**	24 615	27 220	**90:100**
GR Greece	1 657	2 490	**67:100**	1 859	2 714	**68:100**	1 841	2 465	**75:100**	2 299	2 468	**93:100**	2 851	3 642	**78:100**
HU Hungary	1 297	2 315	**56:100**	1 526	2 669	**57:100**	1 708	3 028	**56:100**	2 160	3 752	**58:100**	2 478	3 791	**65:100**
IE Ireland	3 654	1 572	**232:100**	3 854	1 567	**246:100**	4 012	1 524	**263:100**	4 522	1 817	**249:100**	5 151	2 511	**205:100**
IS Iceland	253	199	**127:100**	243	194	**125:100**	327	189	**173:100**	323	216	**150:100**	414	247	**168:100**
IT Italy	13 373	16 445	**81:100**	13 923	16 389	**85:100**	14 779	17 195	**86:100**	16 277	18 364	**89:100**	17 496	19 720	**89:100**
LI Liechtenstein	*	*	**n.a.**	30	30	**100:100**	31	44	**70:100**	42	45	**93:100**	47	33	**142:100**
LT Lithuania	388	1 473	**26:100**	622	1 910	**33:100**	808	2 082	**39:100**	1 053	2 653	**40:100**	1 224	2 532	**48:100**
LU Luxembourg	16	40	**40:100**	15	*	**n.a.**	24	170	**14:100**	208	371	**56:100**	277	650	**43:100**
LV Latvia	150	607	**25:100**	256	681	**38:100**	373	807	**46:100**	392	1 187	**33:100**	480	1 183	**41:100**
MT Malta	310	130	**238:100**	271	149	**182:100**	331	125	**265:100**	468	117	**400:100**	616	403	**153:100**
NL The Netherlands	6 842	4 743	**144:100**	6 634	4 624	**143:100**	6 914	4 502	**154:100**	7 713	5 986	**129:100**	8 082	6 090	**133:100**
NO Norway	1 841	1 279	**144:100**	2 161	1 412	**153:100**	2 575	1 257	**205:100**	2 847	1 154	**247:100**	3 403	1 679	**203:100**
PL Poland	2 332	8 388	**28:100**	3 006	9 974	**30:100**	3 730	11 219	**33:100**	4 446	12 854	**35:100**	4 928	12 184	**40:100**
PT Portugal	4 165	3 853	**108:100**	4 461	4 312	**103:100**	4 787	4 424	**108:100**	5 583	4 753	**117:100**	6 234	5 336	**117:100**
RO Romania	602	2 961	**20:100**	653	3 260	**20:100**	792	3 347	**24:100**	1 103	3 379	**33:100**	1 206	3 280	**37:100**
SE Sweden	6 625	2 699	**245:100**	6 826	2 530	**270:100**	7 359	2 532	**291:100**	8 162	2 541	**321:100**	8 840	3 047	**290:100**
SI Slovenia	378	742	**51:100**	583	879	**66:100**	752	972	**77:100**	876	1 192	**73:100**	1 078	1 219	**88:100**
SK Slovakia	284	979	**29:100**	483	1 166	**41:100**	655	1 346	**49:100**	745	1 697	**44:100**	1 088	2 004	**54:100**
TR Turkey	299	1 142	**26:100**	823	2 854	**29:100**	1 321	4 438	**30:100**	1 983	7 119	**28:100**	2 486	7 046	**35:100**
UK United Kingdom	16 260	7 220	**225:100**	16 375	*	**n.a.**	16 508	7 235	**228:100**	19 120	10 279	**186:100**	20 851	12 215	**171:100**
TOTAL	**144 010**	**144 010**	**100:100**	**147 264**	**147 264**	**100:100**	**159 072**	**159 072**	**100:100**	**182 698**	**182 698**	**100:100**	**198 568**	**198 568**	**100:100**

Data legend: ** Data for studies (SMS) and placements (SMP) combined

Source: European Commission

Table 2: Incoming ERASMUS students for studies (SMS) by country of host institution, absolute numbers and share of the total SMS ERASMUS student population, in 1998/99-2008/09

Country of host institution	1998/99		1999/00		2000/01		2001/02		2002/03		2003/04		2004/05		2005/06		2006/07		2007/08		2008/09		Increase/decrease 1998/99-2008/09	
	Abs.	% of all	Abs.	% of all	Abs.	% of all	Abs.	% of all	Abs.	% of all	Abs.	% of all	Abs.	% of all	Abs.	% of all	Abs.	% of all	Abs.	% of all	Abs.	% of all	Abs.	%
AT Austria	2 196	**2.3%**	2 503	**2.3%**	2 431	**2.2%**	2 465	**2.1%**	2 834	**2.3%**	3 158	**2.3%**	3 534	**2.5%**	3 636	**2.5%**	3 776	**2.4%**	3 983	**2.4%**	4 039	**2.4%**	1 843	**83.9%**
BE Belgium	3 375	**3.5%**	3 670	**3.4%**	3 729	**3.4%**	3 897	**3.4%**	4 046	**3.3%**	4 504	**3.3%**	4 728	**3.3%**	4 964	**3.4%**	5 308	**3.3%**	5 254	**3.2%**	5 283	**3.1%**	1 908	**56.5%**
BG Bulgaria		**0.0%**	8	**0.0%**	26	**0.0%**	51	**0.0%**	67	**0.1%**	89	**0.1%**	179	**0.1%**	246	**0.2%**	296	**0.2%**	367	**0.2%**	393	**0.2%**	n.a.	**n.a.**
CY Cyprus	14	**0.0%**	18	**0.0%**	4	**0.0%**	37	**0.0%**	64	**0.1%**	62	**0.0%**	95	**0.1%**	117	**0.1%**	211	**0.1%**	228	**0.1%**	234	**0.1%**	220	**1 571.4%**
CZ Czech Republic	243	**0.2%**	461	**0.4%**	556	**0.5%**	732	**0.6%**	970	**0.8%**	1 298	**1.0%**	1 945	**1.4%**	2 513	**1.7%**	3 059	**1.9%**	3 408	**2.1%**	3 764	**2.2%**	3 521	**1 449.0%**
DE Germany	12 940	**13.3%**	14 686	**13.6%**	15 118	**13.7%**	15 506	**13.4%**	16 113	**13.0%**	16 856	**12.5%**	17 265	**12.0%**	16 878	**11.5%**	17 878	**11.2%**	17 801	**10.9%**	17 722	**10.5%**	4 782	**37.0%**
DK Denmark	1 945	**2.0%**	2 310	**2.1%**	2 408	**2.2%**	2 555	**2.2%**	2 883	**2.3%**	3 385	**2.5%**	3 882	**2.7%**	4 202	**2.9%**	4 293	**2.7%**	4 966	**3.1%**	5 273	**3.1%**	3 328	**171.1%**
EE Estonia		**0.0%**	53	**0.0%**	85	**0.1%**	115	**0.1%**	171	**0.1%**	165	**0.1%**	275	**0.2%**	358	**0.2%**	489	**0.3%**	546	**0.3%**	591	**0.4%**	n.a.	**n.a.**
ES Spain	13 167	**13.5%**	15 188	**14.1%**	17 008	**15.4%**	18 830	**16.3%**	21 297	**17.2%**	24 039	**17.8%**	25 501	**17.7%**	25 021	**17.0%**	27 464	**17.3%**	27 831	**17.1%**	28 175	**16.8%**	15 008	**114.0%**
FI Finland	2 423	**2.5%**	3 026	**2.8%**	3 542	**3.2%**	3 757	**3.3%**	4 427	**3.6%**	4 930	**3.6%**	5 351	**3.7%**	5 514	**3.7%**	5 998	**3.8%**	6 064	**3.7%**	6 115	**3.6%**	3 692	**152.4%**
FR France	16 264	**16.7%**	17 894	**16.6%**	17 475	**15.8%**	17 813	**15.4%**	18 825	**15.2%**	20 249	**15.0%**	20 512	**14.2%**	19 211	**13.0%**	20 673	**13.0%**	20 502	**12.6%**	20 955	**12.5%**	4 691	**28.8%**
GR Greece	1 086	**1.1%**	1 284	**1.2%**	1 298	**1.2%**	1 410	**1.2%**	1 545	**1.2%**	1 589	**1.2%**	1 657	**1.2%**	1 859	**1.3%**	1 841	**1.2%**	1 811	**1.1%**	1 946	**1.2%**	860	**79.2%**
HU Hungary	277	**0.3%**	456	**0.4%**	624	**0.6%**	769	**0.7%**	853	**0.7%**	951	**0.7%**	1 297	**0.9%**	1 526	**1.0%**	1 708	**1.1%**	1 980	**1.2%**	2 205	**1.3%**	1 928	**696.0%**
IE Ireland	2 907	**3.0%**	3 085	**2.9%**	3 119	**2.8%**	3 245	**2.8%**	3 472	**2.8%**	3 582	**2.6%**	3 654	**2.5%**	3 854	**2.6%**	4 012	**2.5%**	3 877	**2.4%**	4 061	**2.4%**	1 154	**39.7%**
IS Iceland	112	**0.1%**	114	**0.1%**	127	**0.1%**	132	**0.1%**	170	**0.1%**	199	**0.1%**	253	**0.2%**	243	**0.2%**	327	**0.2%**	274	**0.2%**	353	**0.2%**	241	**215.2%**
IT Italy	6 890	**7.1%**	8 032	**7.5%**	8 751	**7.9%**	9 867	**8.5%**	10 973	**8.9%**	12 706	**9.4%**	13 373	**9.3%**	13 923	**9.5%**	14 779	**9.3%**	14 982	**9.2%**	15 530	**9.2%**	8 640	**125.4%**
LI Liechtenstein	*	**n.a**	*	**n.a**	*	**n.a**	*	**n.a**	*	**n.a.**	*	**n.a.**	*	**n.a.**	30	**0.0%**	31	**0.0%**	36	**0.0%**	34	**0.0%**	n.a.	**n.a.**
LT Lithuania	*	**n.a**	36	**0.0%**	57	**0.1%**	91	**0.1%**	132	**0.1%**	216	**0.2%**	388	**0.3%**	622	**0.4%**	808	**0.5%**	989	**0.6%**	1 117	**0.7%**	1 117	**n.a.**
LU Luxembourg	12	**0.0%**	18	**0.0%**	34	**0.0%**	22	**0.0%**	13	**0.0%**	14	**0.0%**	16	**0.0%**	15	**0.0%**	24	**0.0%**	45	**0.0%**	53	**0.0%**	41	**341.7%**
LV Latvia	*	**n.a**	23	**0.0%**	40	**0.0%**	48	**0.0%**	45	**0.0%**	65	**0.0%**	150	**0.1%**	256	**0.2%**	373	**0.2%**	354	**0.2%**	401	**0.2%**	n.a.	**n.a.**
MT Malta	*	**n.a**	*	**n.a**	69	**0.1%**	173	**0.1%**	202	**0.2%**	250	**0.2%**	310	**0.2%**	271	**0.2%**	331	**0.2%**	367	**0.2%**	355	**0.2%**	n.a.	**n.a.**
NL The Netherlands	5 750	**5.9%**	5 899	**5.5%**	5 761	**5.2%**	6 144	**5.3%**	6 349	**5.1%**	6 722	**5.0%**	6 842	**4.8%**	6 634	**4.5%**	6 914	**4.3%**	7 002	**4.3%**	6 894	**4.1%**	1 144	**19.9%**
NO Norway	983	**1.0%**	1 010	**0.9%**	974	**0.9%**	1 100	**1.0%**	1 244	**1.0%**	1 518	**1.1%**	1 841	**1.3%**	2 161	**1.5%**	2 575	**1.6%**	2 648	**1.6%**	3 041	**1.8%**	2 058	**209.4%**
PL Poland	213	**0.2%**	465	**0.4%**	621	**0.6%**	792	**0.7%**	994	**0.8%**	1 455	**1.1%**	2 332	**1.6%**	3 006	**2.0%**	3 730	**2.3%**	4 135	**2.5%**	4 528	**2.7%**	4 315	**2 025.8%**
PT Portugal	1 754	**1.8%**	2 230	**2.1%**	2 536	**2.3%**	2 883	**2.5%**	3 279	**2.6%**	3 762	**2.8%**	4 165	**2.9%**	4 461	**3.0%**	4 787	**3.0%**	5 267	**3.2%**	5 732	**3.4%**	3 978	**226.8%**
RO Romania	116	**0.1%**	206	**0.2%**	204	**0.2%**	275	**0.2%**	355	**0.3%**	535	**0.4%**	602	**0.4%**	653	**0.4%**	792	**0.5%**	934	**0.6%**	990	**0.6%**	874	**753.4%**
SE Sweden	3 623	**3.7%**	4 201	**3.9%**	4 412	**4.0%**	4 901	**4.2%**	5 320	**4.3%**	6 078	**4.5%**	6 625	**4.6%**	6 826	**4.6%**	7 359	**4.6%**	7 751	**4.8%**	8 206	**4.9%**	4 583	**126.5%**
SI Slovenia	*	**n.a**	9	**0.0%**	61	**0.1%**	108	**0.1%**	129	**0.1%**	201	**0.1%**	378	**0.3%**	583	**0.4%**	752	**0.5%**	825	**0.5%**	991	**0.6%**	n.a.	**n.a.**
SK Slovakia	20	**0.0%**	53	**0.0%**	59	**0.1%**	111	**0.1%**	131	**0.1%**	181	**0.1%**	284	**0.2%**	483	**0.3%**	655	**0.4%**	693	**0.4%**	787	**0.5%**	767	**3 835.0%**
TR Turkey	*	**n.a**	*	**n.a**	*	**n.a**	*	**n.a**	*	**n.a**	*	**n.a**	299	**0.2%**	823	**0.6%**	1 321	**0.8%**	1 799	**1.1%**	2 360	**1.4%**	n.a.	**n.a.**
UK United Kingdom	21 261	**21.8%**	20 689	**19.2%**	19 142	**17.4%**	17 660	**15.3%**	16 987	**13.7%**	16 618	**12.3%**	16 260	**11.3%**	16 375	**11.1%**	16 508	**10.4%**	15 975	**9.8%**	16 065	**9.6%**	-5 196	**-24.4%**
TOTAL	**97 571**	**100%**	**107 627**	**100%**	**110 271**	**100%**	**115 489**	**100%**	**123 897**	**100%**	**135 388**	**100%**	**144 010**	**100%**	**147 264**	**100%**	**159072**	**100%**	**162 694**	**100%**	**168 193**	**100%**	**70 622**	**72.4%**

Source: European Commission

Table 3: Outgoing ERASMUS students for studies (SMS) by country of home institution, absolute numbers and share of the total SMS ERASMUS student population, in 1998/99-2008/09

Country of home institution	1998/99		1999/00		2000/01		2001/02		2002/03		2003/04		2004/05		2005/06		2006/07		2007/08		2008/09		Increase/decrease 1998/99-2008/09	
	Abs.	% of all	Abs.	% of all	Abs.	% of all	Abs.	% of all	Abs.	% of all	Abs.	% of all	Abs.	% of all	Abs.	% of all	Abs.	% of all	Abs.	% of all	Abs.	% of all	Abs.	%
AT Austria	2 705	2.8%	2 954	2.7%	3 026	2.7%	3 026	2.6%	3 312	2.7%	3 710	2.7%	3 810	2.6%	3 971	2.7%	4 032	2.5%	4 133	2.5%	4 053	2.4%	1 348	49.8%
BE Belgium	4 470	4.6%	4 434	4.1%	4 417	4.0%	4 551	3.9%	4 653	3.8%	4 825	3.6%	4 865	3.4%	4 971	3.4%	5 119	3.2%	4 781	2.9%	5 041	3.0%	571	12.8%
BG Bulgaria	*	n.a	134	0.1%	398	0.4%	622	0.5%	612	0.5%	751	0.6%	779	0.5%	882	0.6%	938	0.6%	1 078	0.7%	1 283	0.8%	n.a.	n.a.
CY Cyprus	35	0.0%	42	0.0%	*	n.a	72	0.1%	91	0.1%	64	0.0%	93	0.1%	133	0.1%	129	0.1%	148	0.1%	144	0.1%	109	311.4%
CZ Czech Republic	879	0.9%	1 249	1.2%	2 001	1.8%	2 533	2.2%	3 002	2.4%	3 589	2.7%	4 178	2.9%	4 725	3.2%	5 079	3.2%	5 335	3.3%	5 440	3.2%	4 561	518.9%
DE Germany	14 700	15.1%	15 726	14.6%	15 890	14.4%	16 641	14.4%	18 494	14.9%	20 710	15.3%	22 445	15.6%	23 838	16.2%	23 884	15.0%	23 553	14.5%	23 407	13.9%	8 707	59.2%
DK Denmark	1 751	1.8%	1 764	1.6%	1 750	1.6%	1 752	1.5%	1 847	1.5%	1 691	1.2%	1 793	1.2%	1 682	1.1%	1 587	1.0%	1 674	1.0%	1 648	1.0%	- 103	-5.9%
EE Estonia	*	n.a	183	0.2%	255	0.2%	274	0.2%	302	0.2%	305	0.2%	444	0.3%	511	0.3%	572	0.4%	595	0.4%	551	0.3%	n.a.	n.a.
ES Spain	14 381	14.7%	16 299	15.1%	16 383	14.9%	17 405	15.1%	18 258	14.7%	20 035	14.8%	20 818	14.5%	22 885	15.5%	22 322	14.0%	23 107	14.2%	24 399	14.5%	10 018	69.7%
FI Finland	3 441	3.5%	3 486	3.2%	3 286	3.0%	3 291	2.8%	3 402	2.7%	3 951	2.9%	3 932	2.7%	3 851	2.6%	3 773	2.4%	3 265	2.0%	3 436	2.0%	- 5	-0.1%
FR France	16 372	16.8%	16 835	15.6%	17 179	15.6%	18 220	15.8%	19 396	15.7%	21 007	15.5%	21 576	15.0%	22 501	15.3%	22 981	14.4%	22 556	13.9%	23 560	14.0%	7 188	43.9%
GR Greece	1 765	1.8%	1 911	1.8%	1 922	1.7%	1 974	1.7%	2 115	1.7%	2 385	1.8%	2 490	1.7%	2 714	1.8%	2 465	1.5%	2 308	1.4%	2 737	1.6%	972	55.1%
HU Hungary	856	0.9%	1 627	1.5%	1 996	1.8%	1 736	1.5%	1 830	1.5%	2 058	1.5%	2 315	1.6%	2 669	1.8%	3 028	1.9%	3 292	2.0%	3 518	2.1%	2 662	311.0%
IE Ireland	1 504	1.5%	1 689	1.6%	1 648	1.5%	1 708	1.5%	1 627	1.3%	1 705	1.3%	1 572	1.1%	1 567	1.1%	1 524	1.0%	1 514	0.9%	1 421	0.8%	- 83	-5.5%
IS Iceland	147	0.2%	138	0.1%	134	0.1%	147	0.1%	163	0.1%	221	0.2%	199	0.1%	194	0.1%	189	0.1%	210	0.1%	186	0.1%	39	26.5%
IT Italy	10 869	11.1%	12 409	11.5%	13 249	12.0%	13 968	12.1%	15 224	12.3%	16 829	12.4%	16 445	11.4%	16 389	11.1%	17 195	10.8%	17 562	10.8%	17 754	10.6%	6 885	63.3%
LI Liechtenstein	*	n.a	*	n.a	*	n.a	*	n.a	*	n.a	*	n.a	*	n.a.	30	0.0%	44	0.0%	30	0.0%	20	0.0%	n.a.	n.a.
LT Lithuania	*	n.a	361	0.3%	624	0.6%	823	0.7%	1 001	0.8%	1 194	0.9%	1 473	1.0%	1 910	1.3%	2 082	1.3%	2 392	1.5%	2 425	1.4%	n.a.	n.a.
LU Luxembourg	23	0.0%	24	0.0%	28	0.0%	30	0.0%	33	0.0%	36	0.0%	40	0.0%	*	n.a.	170	0.1%	366	0.2%	426	0.3%	403	1 752.2%
LV Latvia	*	n.a	165	0.2%	182	0.2%	209	0.2%	232	0.2%	308	0.2%	607	0.4%	681	0.5%	807	0.5%	968	0.6%	1 104	0.7%	n.a.	n.a.
MT Malta	*	n.a	*	n.a	92	0.1%	129	0.1%	72	0.1%	119	0.1%	130	0.1%	149	0.1%	125	0.1%	107	0.1%	142	0.1%	n.a.	n.a.
NL The Netherlands	4 332	4.4%	4 418	4.1%	4 162	3.8%	4 244	3.7%	4 241	3.4%	4 380	3.2%	4 743	3.3%	4 624	3.1%	4 502	2.8%	4 699	2.9%	4 902	2.9%	570	13.2%
NO Norway	1 101	1.1%	1 107	1.0%	1 007	0.9%	970	0.8%	1 010	0.8%	1 152	0.9%	1 279	0.9%	1 412	1.0%	1 257	0.8%	1 103	0.7%	1 317	0.8%	216	19.6%
PL Poland	1 426	1.5%	2 813	2.6%	3 691	3.3%	4 323	3.7%	5 419	4.4%	6 278	4.6%	8 388	5.8%	9 974	6.8%	11 219	7.1%	11 879	7.3%	11 784	7.0%	10 358	726.4%
PT Portugal	2 179	2.2%	2 471	2.3%	2 569	2.3%	2 825	2.4%	3 171	2.6%	3 646	2.7%	3 853	2.7%	4 312	2.9%	4 424	2.8%	4 471	2.7%	4 834	2.9%	2 655	121.8%
RO Romania	1 250	1.3%	1 687	1.6%	1 899	1.7%	1 965	1.7%	2 701	2.2%	3 005	2.2%	2 961	2.1%	3 260	2.2%	3 347	2.1%	2 953	1.8%	3 064	1.8%	1 814	145.1%
SE Sweden	3 321	3.4%	3 087	2.9%	2 726	2.5%	2 633	2.3%	2 656	2.1%	2 659	2.0%	2 699	1.9%	2 530	1.7%	2 532	1.6%	2 348	1.4%	2 413	1.4%	- 908	-27.3%
SI Slovenia	*	n.a	170	0.2%	227	0.2%	364	0.3%	422	0.3%	546	0.4%	742	0.5%	879	0.6%	972	0.6%	1 018	0.6%	1 132	0.7%	n.a.	n.a.
SK Slovakia	59	0.1%	380	0.4%	505	0.5%	578	0.5%	654	0.5%	682	0.5%	979	0.7%	1 166	0.8%	1 346	0.8%	1 452	0.9%	1 703	1.0%	1 644	2 786.4%
TR Turkey	*	n.a	*	n.a	*	n.a	*	n.a	*	n.a	*	n.a	1 142	0.8%	2 854	1.9%	4 438	2.8%	6 274	3.9%	6 920	4.1%	n.a.	n.a.
UK United Kingdom	10 005	10.3%	10 064	9.4%	9 028	8.2%	8 479	7.3%	7 957	6.4%	7 547	5.6%	7 220	5.0%	*	n.a.	7 235	4.5%	7 523	4.6%	7 429	4.4%	-2 576	-25.7%
TOTAL	97 571	100%	107 627	100%	110 274	100%	115 492	100%	123 897	100%	135 388	100%	144 010	100%	147 264	100%	159 072	100%	162 694	100%	168 193	100%	70 622	72.4%

Source: European Commission

Table 4: Incoming ERASMUS students for placements (SMP) by country of host institution and outgoing ERASMUS students for placements (SMP) by country of home institution, absolute numbers and share of total SMP ERASMUS student population, in 2007/08 and 2008/09

	INCOMING						OUTGOING					
	2007/08		2008/09		Increase/decrease 2007/08-2008/09		2007/08		2008/09		Increase/decrease 2007/08-2008/09	
Europe 32 country	Abs.	% of all ERASMUS students	Abs.	% of all ERASMUS students	Abs.	%	Abs.	% of all ERASMUS students	Abs.	% of all ERASMUS students	Abs.	%
AT Austria	436	2.2%	689	2.3%	253	58.0%	476	2.4%	886	2.9%	410	86.1%
BE Belgium	900	4.5%	1 563	5.1%	663	73.7%	605	3.0%	904	3.0%	299	49.4%
BG Bulgaria	78	0.4%	121	0.4%	43	55.1%	62	0.3%	137	0.5%	75	121.0%
CY Cyprus	86	0.4%	160	0.5%	74	86.0%	4	0.0%	13	0.0%	9	225.0%
CZ Czech Republic	311	1.6%	407	1.3%	96	30.9%	252	1.3%	605	2.0%	353	140.1%
DE Germany	3 022	15.1%	4 217	13.9%	1 195	39.5%	2 733	13.7%	4 487	14.8%	1 754	64.2%
DK Denmark	243	1.2%	365	1.2%	122	50.2%	322	1.6%	478	1.6%	156	48.4%
EE Estonia	73	0.4%	118	0.4%	45	61.6%	122	0.6%	210	0.7%	88	72.1%
ES Spain	3 298	16.5%	5 003	16.5%	1 705	51.7%	1 877	9.4%	3 006	9.9%	1 129	60.1%
FI Finland	310	1.5%	491	1.6%	181	58.4%	687	3.4%	975	3.2%	288	41.9%
FR France	2 669	13.3%	3 660	12.0%	991	37.1%	3 389	16.9%	4 723	15.5%	1 334	39.4%
GR Greece	488	2.4%	905	3.0%	417	85.5%	160	0.8%	292	1.0%	132	82.5%
HU Hungary	180	0.9%	273	0.9%	93	51.7%	460	2.3%	539	1.8%	79	17.2%
IE Ireland	645	3.2%	1 090	3.6%	445	69.0%	303	1.5%	417	1.4%	114	37.6%
IS Iceland	49	0.2%	61	0.2%	12	24.5%	6	0.0%	12	0.0%	6	100.0%
IT Italy	1 295	6.5%	1 966	6.5%	671	51.8%	802	4.0%	1 622	5.3%	820	102.2%
LI Liechtenstein	6	0.0%	13	0.0%	7	116.7%	15	0.1%	2	0.0%	- 13	-86.7%
LT Lithuania	64	0.3%	107	0.4%	43	67.2%	261	1.3%	575	1.9%	314	120.3%
LU Luxembourg	163	0.8%	224	0.7%	61	37.4%	5	0.0%	0	0.0%	- 5	-100.0%
LV Latvia	38	0.2%	79	0.3%	41	107.9%	219	1.1%	370	1.2%	151	68.9%
MT Malta	101	0.5%	261	0.9%	160	158.4%	10	0.0%	9	0.0%	- 1	-10.0%
NL The Netherlands	711	3.6%	1 188	3.9%	477	67.1%	1 287	6.4%	2 103	6.9%	816	63.4%
NO Norway	199	1.0%	362	1.2%	163	81.9%	51	0.3%	97	0.3%	46	90.2%
PL Poland	311	1.6%	400	1.3%	89	28.6%	975	4.9%	1 618	5.3%	643	65.9%
PT Portugal	316	1.6%	502	1.7%	186	58.9%	282	1.4%	562	1.9%	280	99.3%
RO Romania	169	0.8%	216	0.7%	47	27.8%	426	2.1%	680	2.2%	254	59.6%
SE Sweden	411	2.1%	634	2.1%	223	54.3%	193	1.0%	271	0.9%	78	40.4%
SI Slovenia	51	0.3%	87	0.3%	36	70.6%	174	0.9%	178	0.6%	4	2.3%
SK Slovakia	52	0.3%	301	1.0%	249	478.8%	245	1.2%	317	1.0%	72	29.4%
TR Turkey	184	0.9%	126	0.4%	- 58	-31.5%	845	4.2%	890	2.9%	45	5.3%
UK United Kingdom	3 145	15.7%	4 786	15.8%	1 641	52.2%	2 756	13.8%	3 397	11.2%	641	23.3%
TOTAL	20 004	100.0%	30 375	100.0%	10 371	51.8%	20 004	100.0%	30 375	100.0%	10 371	51.8%

Source: European Commission

Table 5: Outgoing and incoming LEONARDO da VINCI students by home and host country, absolute numbers and percentages in 2000/01 – 2006/07

Direction of mobility	INCOMING														OUTGOING													
Year	2000/01		2001/02		2002/03		2003/04		2004/05		2005/06		2006/07		2000/01		2001/02		2002/03		2003/04		2004/05		2005/06		2006/07	
Europe 32 country	Abs.	%	Abs.	%	Abs.	%	Abs.	%	Abs.	%	Abs.	%	Abs.	%	Abs.	%	Abs.	%	Abs.	%	Abs.	%	Abs.	%	Abs.	%	Abs.	%
AT Austria	173	2.4%	186	2.3%	281	2.9%	221	2.2%	268	2.2%	316	2.6%	383	2.9%	213	3.0%	364	4.4%	383	4.0%	444	4.4%	543	4.5%	472	3.9%	348	2.6%
BE Belgium	407	5.8%	434	5.3%	591	6.1%	590	5.8%	691	5.7%	787	6.5%	674	5.1%	157	2.2%	282	3.4%	305	3.2%	335	3.3%	357	2.9%	405	3.4%	407	3.1%
BG Bulgaria	16	0.2%	2	0.0%	18	0.2%	40	0.4%	26	0.2%	21	0.2%	30	0.2%	132	1.9%	145	1.8%	182	1.9%	179	1.8%	189	1.6%	107	0.9%	102	0.8%
CY Cyprus	8	0.1%	7	0.1%	10	0.1%	30	0.3%	132	1.1%	30	0.2%	75	0.6%	*	n.a.	*	n.a.	1	0.0%	6	0.1%	3	0.0%	4	0.0%	11	0.1%
CZ Czech Republic	59	0.8%	94	1.1%	135	1.4%	158	1.6%	128	1.1%	207	1.7%	154	1.2%	52	0.7%	68	0.8%	128	1.3%	63	0.6%	172	1.4%	198	1.6%	32	0.2%
DE Germany	1 395	19.7%	1 483	17.9%	1 739	18.0%	1 755	17.3%	1 920	15.9%	1 857	15.4%	1 610	12.1%	1 334	18.9%	1 564	18.9%	1 884	19.5%	1 890	18.6%	2 340	19.3%	2 279	18.9%	2 451	18.5%
DK Denmark	59	0.8%	60	0.7%	82	0.9%	76	0.7%	70	0.6%	119	1.0%	99	0.7%	125	1.8%	161	1.9%	124	1.3%	142	1.4%	152	1.3%	85	0.7%	169	1.3%
EE Estonia	11	0.2%	11	0.1%	12	0.1%	11	0.1%	16	0.1%	13	0.1%	21	0.2%	29	0.4%	29	0.4%	23	0.2%	24	0.2%	49	0.4%	25	0.2%	48	0.4%
ES Spain	1 070	15.1%	1 282	15.5%	1 589	16.5%	1 617	15.9%	1 435	11.8%	2 109	17.5%	2 269	17.1%	316	4.5%	347	4.2%	807	8.4%	497	4.9%	981	8.1%	627	5.2%	968	7.3%
FI Finland	114	1.6%	126	1.5%	146	1.5%	127	1.3%	102	0.8%	160	1.3%	134	1.0%	151	2.1%	132	1.6%	182	1.9%	125	1.2%	151	1.2%	100	0.8%	135	1.0%
FR France	714	10.1%	1 118	13.5%	969	10.0%	1 356	13.4%	998	8.2%	1 406	11.7%	1 053	7.9%	1 910	27.0%	1 948	23.6%	1 986	20.6%	2 027	20.0%	2 155	17.8%	2 387	19.8%	2 726	20.5%
GR Greece	113	1.6%	114	1.4%	165	1.7%	110	1.1%	114	0.9%	141	1.2%	153	1.2%	100	1.4%	39	0.5%	153	1.6%	98	1.0%	186	1.5%	79	0.7%	116	0.9%
HU Hungary	35	0.5%	70	0.8%	100	1.0%	96	0.9%	88	0.7%	118	1.0%	138	1.0%	70	1.0%	136	1.6%	126	1.3%	153	1.5%	265	2.2%	248	2.1%	273	2.1%
IE Ireland	264	3.7%	336	4.1%	307	3.2%	339	3.3%	404	3.3%	462	3.8%	461	3.5%	269	3.8%	171	2.1%	204	2.1%	149	1.5%	113	0.9%	166	1.4%	151	1.1%
IS Iceland	20	0.3%	6	0.1%	13	0.1%	30	0.3%	17	0.1%	15	0.1%	23	0.2%	10	0.1%	3	0.0%	*	n.a.	14	0.1%	7	0.1%	6	0.0%	2	0.0%
IT Italy	348	4.9%	497	6.0%	603	6.3%	615	6.1%	595	4.9%	701	5.8%	655	4.9%	339	4.8%	438	5.3%	535	5.5%	554	5.5%	596	4.9%	658	5.5%	561	4.2%
LI Liechtenstein	3	0.0%	8	0.1%	2	0.0%	3	0.0%	41	0.3%	6	0.0%	4	0.0%	3	0.0%	9	0.1%	9	0.1%	20	0.2%	*	n.a.	22	0.2%	*	n.a.
LT Lithuania	13	0.2%	18	0.2%	34	0.4%	22	0.2%	24	0.2%	38	0.3%	45	0.3%	18	0.3%	26	0.3%	35	0.4%	29	0.3%	65	0.5%	66	0.5%	56	0.4%
LU Luxembourg	47	0.7%	106	1.3%	73	0.8%	45	0.4%	43	0.4%	124	1.0%	67	0.5%	*	n.a.	31	0.4%	12	0.1%	22	0.2%	26	0.2%	29	0.2%	21	0.2%
LV Latvia	8	0.1%	16	0.2%	26	0.3%	10	0.1%	27	0.2%	26	0.2%	29	0.2%	16	0.2%	32	0.4%	52	0.5%	39	0.4%	71	0.6%	140	1.2%	40	0.3%
MT Malta	2	0.0%	22	0.3%	40	0.4%	50	0.5%	32	0.3%	89	0.7%	120	0.9%	68	1.0%	10	0.1%	*	n.a.	1	0.0%	1	0.0%	*	n.a.	*	n.a.
NL The Netherlands	371	5.2%	346	4.2%	380	3.9%	435	4.3%	353	2.9%	445	3.7%	487	3.7%	682	9.6%	749	9.1%	853	8.8%	885	8.7%	1 053	8.7%	1 133	9.4%	1 179	8.9%
NO Norway	59	0.8%	76	0.9%	77	0.8%	87	0.9%	84	0.7%	131	1.1%	124	0.9%	61	0.9%	51	0.6%	51	0.5%	61	0.6%	38	0.3%	51	0.4%	25	0.2%
PL Poland	76	1.1%	98	1.2%	103	1.1%	151	1.5%	144	1.2%	213	1.8%	217	1.6%	335	4.7%	291	3.5%	313	3.2%	494	4.9%	967	8.0%	643	5.3%	897	6.8%
PT Portugal	102	1.4%	104	1.3%	139	1.4%	105	1.0%	238	2.0%	181	1.5%	157	1.2%	147	2.1%	110	1.3%	188	1.9%	516	5.1%	182	1.5%	174	1.4%	176	1.3%
RO Romania	109	1.5%	124	1.5%	133	1.4%	155	1.5%	142	1.2%	167	1.4%	179	1.3%	174	2.5%	175	2.1%	187	1.9%	156	1.5%	309	2.6%	332	2.8%	490	3.7%
SE Sweden	30	0.4%	55	0.7%	48	0.5%	104	1.0%	108	0.9%	154	1.3%	138	1.0%	55	0.8%	112	1.4%	170	1.8%	118	1.2%	147	1.2%	151	1.3%	141	1.1%
SI Slovenia	10	0.1%	6	0.1%	13	0.1%	15	0.1%	32	0.3%	48	0.4%	35	0.3%	29	0.4%	36	0.4%	71	0.7%	70	0.7%	86	0.7%	109	0.9%	89	0.7%
SK Slovakia	8	0.1%	8	0.1%	28	0.3%	32	0.3%	49	0.4%	33	0.3%	122	0.9%	95	1.3%	79	1.0%	134	1.4%	108	1.1%	238	2.0%	237	2.0%	300	2.3%
TR Turkey	*	n.a.	*	n.a.	*	n.a.	13	0.1%	33	0.3%	75	0.6%	102	0.8%	*	n.a.	*	n.a.	*	n.a.	*	n.a.	182	1.5%	372	3.1%	646	4.9%
UK United Kingdom	1 359	19.2%	1 414	17.1%	1 571	16.3%	1 591	15.7%	1 677	13.8%	1 899	15.8%	2 070	15.6%	182	2.6%	726	8.8%	544	5.6%	923	9.1%	486	4.0%	747	6.2%	710	5.4%
TOTAL	7 072	100%	8 264	100%	9 642	100%	10 142	100%	12 110	100%	12 052	100%	13 270	100%	7 072	100%	8 264	100%	9 642	100%	10 142	100%	12 110	100%	12 052	100%	13 270	100%

Source: European Commission

3 ERASMUS students in the national and the Europe 32 context

In order to assess the role of the ERASMUS Programme in supporting European student mobility, we need to refer again to the academic year 2006/07 – the latest year (at the time of this study) for which UOE data on foreign/incoming students and total enrolment were available. While this approach facilitates the comparison of the two data sets, we should nevertheless point out two remaining limits of comparability.

Primarily, there is an overlap, in several Europe 32 countries, between data on incoming ERASMUS students and those on incoming degree students. As already discussed in Chapter I, credit mobile students, i.e. including ERASMUS students, should not be reported by individual countries to the UOE data collection. The latter international statistics were meant to cover degree/diploma mobility only. Evidence shows, however, that a number of Europe 32 countries, more precisely five out of the 17 European countries surveyed, cf. Chapter IV - included some or all their incoming credit students in the statistical reporting to UOE. As a result, in these countries, some or all ERASMUS students are counted twice. While acknowledging this limitation, we presume that, in the respective countries, the overlap is *not significant enough* to distort the observed mobility patterns and make the comparison between the two data sets misleading.

Secondly, we would like to underline that developments in mobility that take place within programmes and non-programme, self-organised mobility, are not easily comparable. The non-programme ("free") mobility can be more closely regarded as an expression of the true preference of mobile students. While, in contrast, programme mobility takes place by definition within a more regulated, and, thus, less flexible framework. Student choice plays a role here still, but the options of programme mobile students are usually more limited (e.g. in terms of countries, institutions of destination, fields of study, duration of stay, etc.). This is because, in general, such programmes are characterised by an increased pressure for reciprocity, i.e. for balance between inflows and outflows. This observation applies to the ERASMUS Programme as well, where student mobility can take place only between those European institutions taking part in the programme (around 2 500 in 2007/08), and which had previously signed bilateral agreements of cooperation. This is an important observation when comparing patterns within the two types of mobility. In this context, the distribution of ERASMUS students across countries of destination cannot be completely taken as an indicator of the genuine attractiveness of the respective countries for ERASMUS students, given that there are additional factors that pre-determine student choice.

Participation in ERASMUS

Despite the impressive increase of the number of ERASMUS students over the 11 years of analysis, we note that still a very small share of students enrolled in the Europe 32 region take part in the programme. On average, less than 1.0% of students in this area went abroad with ERASMUS in 2006/07 (Table 6).

A number of *individual countries* show, however, a participation rate higher than average in outgoing ERASMUS mobility (Table 6). Ten out of the 31 participating countries record a participation rate in the programme higher than 1% of their total student population. The countries in question are Austria (1.5%), the Czech Republic (1.4%), Belgium (1.3%), Spain (1.3%), Malta (1.3%), Finland (1.2%),

Iceland (1.2%), Portugal (1.2%) and France (1.1%). The highest participation rate is, nevertheless, observed in Liechtenstein (6.5%), which is, however, an atypical country example. Given the small size of the higher education system in this country – a single higher education institution offering courses in only 2 subject areas – this percentage corresponds to only 44 students. This is also the lowest absolute number recorded by country in the Europe 32 region. The lowest participation rates, 0.2% and 0.3%, are recorded in the 2 countries with the highest total enrolment in the Europe 32 area – Turkey and the UK, respectively.

As far as *inflows* are concerned, ERASMUS incoming students have a higher presence than average (0.7%, cf. Table 7) in countries like Ireland (2.1%), Spain (1.9%), Denmark (1.8%) and Sweden (1.8%), and certainly in smaller-size higher education systems like Liechtenstein (4.6%), Malta (3.4%) and Iceland (2.1%). In countries such as Romania (0.1%) and Turkey (0.1%), ERASMUS students have an extremely small share of total enrolment.

Country profiles – net export vs. net import countries

By comparing the profiles of Europe 32 countries – expressed through the IN:OUT ratios – in both the ERASMUS and the UOE data sets, we come to a number of highly interesting findings (Table 8)

- The large majority of Eastern European countries (eight states in total) are *net exporters, i.e. suppliers of mobile students*. They send more students abroad than they receive, both in the framework of ERASMUS, as well as for degree studies. The only two exceptions in the region are the Czech Republic (60:100 ratio in ERASMUS vs. 291:100 in UOE) and Hungary (56:100 ratio in ERASMUS vs. 177:100 in UOE). While the two countries are clearly exporter countries of ERASMUS students (sending more students abroad through the programme than they host), they are the opposite for degree-seeking students: the number of foreign students outbalances the number of study abroad students of these countries. We note that this situation – with *higher* outflows than inflows in credit mobility combined with a *lower* outflow than inflow in degree mobility – perfectly reflects the top two policy priorities of Europe 32 countries discussed in Chapter V of this volume. According to this chapter, the top two national-level priorities, as far as the type and direction of mobility are concerned, are incoming degree mobility and outgoing credit mobility. We further take this as a sign of progress in national-level approaches to mobility.
- In addition, three other countries – Greece, Liechtenstein and Turkey – are *net export countries of mobile students* of both types, according to available statistics presented in Table 8.
- In contrast, nine, mainly Western and Northern European countries – Belgium, Denmark, Spain, Finland, the Netherlands, Norway, Portugal, Sweden and the UK – are primarily *net import countries of students from abroad*, sending fewer students abroad than they host both in ERASMUS and for degree mobility.
- In the remaining eight countries of the Europe 32 region, a *mismatch is observed between the 'country profile' in ERASMUS and in degree mobility*. Of these, the four largest countries in terms of net inflows and outflows – Germany, France, Italy and Austria – show the same phenomenon observed in the Czech Republic and Hungary. In all these four countries, the outflows outbalance the inflows in ERASMUS mobility, while the inflows outbalance the outflows in degree mobility.

Importance of ERASMUS in supporting student mobility

Concerning the *role of the programme in supporting outgoing mobility*, we observe, still in Table 6, that ERASMUS plays an important part in this respect in the Europe 32 context. The programme has a crucial role in supporting the outflows of three countries in particular, i.e. of Spain (ratio 77:100), the Czech Republic (60:100) and Belgium (49:100). More specifically, for every 100 domestic students studying abroad for a degree, there are 77 Spanish students, 60 Czech students and 49 Belgian students going abroad for a short stay with ERASMUS. In eight other countries ERASMUS funds more than 30 students to go abroad for a short stay for every 100 national students going abroad for a degree. On average, and assuming that the overlap between the ERASMUS and the study abroad student numbers is marginal, we can say that *ERASMUS students comprise about one-fourth of Europe 32 study abroad student numbers* (ratio 24:100). ERASMUS students thus account *for about one-fifth of all Europe 32 students going abroad*[19]. Or, to express this relation differently, if we leave the ERASMUS students aside, we would have an undercount of outgoing student mobility of about 20% for the Europe 32 region.

Looking at the *impact of ERASMUS on total incoming student mobility* in the Europe 32 region, we observe that this is more limited than in the case of outflows (Table 7). This is mainly due to the fact that the Europe 32 region attracts more students for degree studies from outside of the region than it manages to send abroad. Based on figures presented in Table 7, we conclude that the number of incoming ERASMUS students is about nine times smaller than the number of foreign students studying in the Europe 32 region for a degree (ratio 11:100). ERASMUS in this manner is responsible for *supporting about one-tenth of the total number of students coming to the Europe 32 countries*[20] (again, assuming that the double counting of ERASMUS students as foreign degree-seeking students in the UOE data collection is minimal). Furthermore, the programme seems *crucial for supporting student inflows* in Finland, where the number of incoming ERASMUS students is more than half the number of foreign degree-seeking students (ratio 60:100), but also in Malta (55:100), Slovenia (50:100) and Spain (46:100), where the programme supports about one-third of all inflows.

ERASMUS and intra-Europe 32 degree mobility

If we assess, in contrast to the previous section, the role of ERASMUS in the intra-Europe 32 context only, we observe that the impact of the programme is even greater. We do in this context refer to degree mobility (UOE data) that takes place only amongst the 32 European countries, and exclude from the analysis those students that go abroad beyond this region. Even so, this lowers the total number of study abroad students only slightly, as the large majority of students from the Europe 32 countries go abroad to other countries in this area (cf. Chapter I). We will, as a result, cover in this analysis as many as 575 493 (Table 9) of the 662 938 (Table 6) study abroad students referred to in the previous section. ERASMUS student numbers are about 2.8 times smaller than the number *of the Europe 32 students that study towards a degree in other countries of this region* and account for close to a *quarter of all outflows*[21] to the Europe 32 area.

According to data presented in Table 9, the *top five study destinations of students from the Europe 32 region going for a degree to other countries of this area were* the UK (27.9%), followed by Germany

[19] Share calculated against the total of 831 858 students, which includes 672 786 study abroad students and 159 072 ERASMUS students.

[20] Share calculated against the total of 1 666 535 students, which includes 1 507 473 foreign students and 159 072 ERASMUS students.

[21] Share calculated against the total of 734 565 students, which includes 575 493 study abroad students and 159 072 ERASMUS students.

(19.5%), France (8.2%), Austria (5.4%) and Belgium (5.3%). These countries enrolled about two-thirds of Europe 32 students that went abroad for a degree to other countries in this region in 2006/07. The ERASMUS mobility patterns show some similarities with the intra-Europe 32 degree mobility distribution, as well as some differences. The largest cohorts of ERASMUS students went to Spain (17.3%), followed by France (13.0%), Germany (11.0%), the UK (10.4%) and Italy (9.3%) in 2006/07. Interestingly, Spain, the top destination in the ERASMUS Programme, does not feature as a top host country for degree-seeking students in the Europe 32 area.

Comparing intra-Europe 32 degree and ERASMUS mobility patterns we come to some interesting findings (Table 9)

- In *relative terms*, some countries seem more *attractive* for ERASMUS-type of mobility than for degree studies. They manage to host higher *shares* of ERASMUS students than of Europe 32 degree-mobile students. Some of the Mediterranean countries – Spain (2.9% vs. 17.3%), Italy (3.2% vs. 9.3%) and France (8.2% vs. 13.0%) – as well as the Nordic countries – Denmark (1.9% vs. 2.7%), Finland (0.6% vs. 3.8%), Iceland (0.1% vs. 0.2%), Norway (0.9% vs. 1.6%) and Sweden (3.4% vs. 4.6%) – are clearly such examples.
- Nevertheless, in *absolute terms*, the large majority of Europe 32 countries host more degree-seeking students coming from other countries of this region than ERASMUS students; but this with a few notable exceptions.
- Spain, Finland, Malta, Poland, Portugal and Slovakia all host more ERASMUS students than degree-seeking students coming from other Europe 32 countries. This seems to be an indication that Europe 32 students prefer these countries for ERASMUS-type of stays (credit mobility) than for degree studies. Had we had data on self-organised credit mobility as well, this discrepancy would have certainly been even larger.

We would like to further point out that the imbalances between inflows and outflows are, in the majority of countries, higher in degree than in ERASMUS mobility. This is an indication that the programme, which by definition aims for reciprocity, is relatively successful in taming disparities between inflows and outflows.

Table 6: All students, study abroad students and ERASMUS outgoing students, in 2006/07

Home country	All students	All study abroad students	Outgoing ERASMUS students	% of ERASMUS of all students	% of outgoing ERASMUS of all study abroad students
	1	2	3	4	5
AT Austria	260 975	12 965	4 032	1.5%	31:100
BE Belgium	393 687	10 355	5 119	1.3%	49:100
BG Bulgaria	258 513	26 623	938	0.4%	4:100
CH Switzerland	213 112	9 850	*	*	*
CY Cyprus	22 227	22 411	129	0.6%	1:100
CZ Czech Republic	362 630	8 419	5 079	1.4%	60:100
DE Germany	2 278 897	87 750	23 884	1.0%	27:100
DK Denmark	232 194	6 838	1 587	0.7%	23:100
EE Estonia	68 767	4 020	572	0.8%	14:100
ES Spain	1 777 498	29 027	22 322	1.3%	77:100
FI Finland	309 163	9 838	3 773	1.2%	38:100
FR France	2 179 505	61 593	22 981	1.1%	37:100
GR Greece	602 858	38 231	2 465	0.4%	6:100
HU Hungary	431 572	8 551	3 028	0.7%	35:100
IE Ireland	190 349	30 204	1 524	0.8%	5:100
IS Iceland	15 821	3 771	189	1.2%	5:100
IT Italy	2 033 642	45 044	17 195	0.8%	38:100
LI Liechtenstein	673	747	44	6.5%	6:100
LT Lithuania	199 855	8 532	2 082	1.0%	24:100
LU Luxembourg	*	7 148	170	n.a.	2:100
LV Latvia	129 497	4 680	807	0.6%	17:100
MT Malta	9 811	1 074	125	1.3%	12:100
NL The Netherlands	590 121	14 433	4 502	0.8%	31:100
NO Norway	215 237	13 646	1 257	0.6%	9:100
PL Poland	2 146 926	41 896	11 219	0.5%	27:100
PT Portugal	366 729	16 639	4 424	1.2%	27:100
RO Romania	928 175	24 597	3 347	0.4%	14:100
SE Sweden	413 710	15 791	2 532	0.6%	16:100
SI Slovenia	115 944	2 699	972	0.8%	36:100
SK Slovakia	217 952	25 466	1 346	0.6%	5:100
TR Turkey	2 453 664	56 555	4 438	0.2%	8:100
UK United Kingdom	2 362 815	23 393	7 235	0.3%	31:100
TOTAL	**21 782 519**	**672 786**	**159 072**	**0.7%**	**24:100**

Data legend:* Missing data

Source: Columns 1 and 2: UOE data collection; Column 3: European Commission

Table 7: All students, foreign students and incoming ERASMUS students by host country, in 2006/07

Host country	All students	All foreign students	ERASMUS incoming students	% of foreign students of all students	% of ERASMUS of all students	Ratio ERASMUS students to foreign students
AT Austria	260 975	43 572	3 776	16.7%	1.4%	9:100
BE Belgium	393 687	47 218	5 308	12.0%	1.3%	11:100
BG Bulgaria	258 513	9 351	296	3.6%	0.1%	3:100
CH Switzerland	213 112	41 058	*	19.3%	n.a.	n.a.
CY Cyprus	22 227	5 973	211	26.9%	0.9%	4:100
CZ Czech Republic	362 630	24 483	3 059	6.8%	0.8%	12:100
DE Germany	2 278 897	258 513	17 878	11.3%	0.8%	7:100
DK Denmark	232 194	20 851	4 293	9.0%	1.8%	21:100
EE Estonia	68 767	2 200	489	3.2%	0.7%	22:100
ES Spain	1 777 498	59 814	27 464	3.4%	1.5%	46:100
FI Finland	309 163	10 066	5 998	3.3%	1.9%	60:100
FR France	2 179 505	246 612	20 673	11.3%	0.9%	8:100
GR Greece	602 858	21 160	1 841	3.5%	0.3%	9:100
HU Hungary	431 572	15 110	1 708	3.5%	0.4%	11:100
IE Ireland	190 349	16 758	4 012	8.8%	2.1%	24:100
IS Iceland	15 821	783	327	4.9%	2.1%	42:100
IT Italy	2 033 642	57 271	14 779	2.8%	0.7%	26:100
LI Liechtenstein	673	594	31	88.3%	4.6%	5:100
LT Lithuania	199 855	1 920	808	1.0%	0.4%	42:100
LU Luxembourg	*	*	24	n.a.	n.a.	n.a.
LV Latvia	129 497	1 433	373	1.1%	0.3%	26:100
MT Malta	9 811	607	331	6.2%	3.4%	55:100
NL The Netherlands	590 121	37 815	6 914	6.4%	1.2%	18:100
NO Norway	215 237	15 618	2 575	7.3%	1.2%	16:100
PL Poland	2 146 926	13 021	3 730	0.6%	0.2%	29:100
PT Portugal	366 729	17 950	4 787	4.9%	1.3%	27:100
RO Romania	928 175	12 188	792	1.3%	0.1%	6:100
SE Sweden	413 710	42 769	7 359	10.3%	1.8%	17:100
SI Slovenia	115 944	1 511	752	1.3%	0.6%	50:100
SK Slovakia	217 952	2 010	655	0.9%	0.3%	33:100
TR Turkey	2 453 664	19 257	1 321	0.8%	0.1%	7:100
UK United Kingdom	2 362 815	459 987	16 508	19.5%	0.7%	4:100
TOTAL	**21 782 519**	**1 507 473**	**159 072**	**6.9%**	**0.7%**	**11:100**

Data legend: * Missing data.

Source: Columns 1 and 2: UOE data collection; Column 3: European Commission.

Table 8: IN:OUT ratio in ERASMUS and UOE (degree mobility) data, in 2006/07

Europe 32 countries	ERASMUS IN:OUT ratio	UOE data IN:OUT ratio
AT Austria	94:100	336:100
BE Belgium	104:100	456:100
BG Bulgaria	32:100	35:100
CH Switzerland	*	417:100
CY Cyprus	164:100	27:100
CZ Czech Republic	60:100	291:100
DE Germany	75:100	295:100
DK Denmark	271:100	305:100
EE Estonia	85:100	55:100
ES Spain	123:100	206:100
FI Finland	159:100	102:100
FR France	90:100	400:100
GR Greece	75:100	55:100
HU Hungary	56:100	177:100
IE Ireland	263:100	55:100
IS Iceland	173:100	21:100
IT Italy	86:100	127:100
LI Liechtenstein	70:100	80:100
LT Lithuania	39:100	23:100
LU Luxembourg	14:100	n.a.
LV Latvia	46:100	31:100
MT Malta	265:100	57:100
NL The Netherlands	154:100	262:100
NO Norway	205:100	114:100
PL Poland	33:100	31:100
PT Portugal	108:100	108:100
RO Romania	24:100	50:100
SE Sweden	291:100	271:100
SI Slovenia	77:100	56:100
SK Slovakia	49:100	8:100
TR Turkey	30:100	34:100
UK United Kingdom	228:100	1 966:100
TOTAL	**100:100**	**221:100**

Source: European Commission

Table 9: Europe 32 students studying towards a degree in other countries of this region, by host country, in 2006/07

Host country	Europe 32 students studying abroad in other countries of this region by host country		ERASMUS students by host country	
	Abs.	%	Abs.	%
	1	2	3	4
AT Austria	31 321	5.4%	3 776	2.4%
BE Belgium	30 653	5.3%	5 308	3.3%
BG Bulgaria	3 550	0.6%	296	0.2%
CH Switzerland	27 985	4.9%	*	*
CY Cyprus	848	0.1%	211	0.1%
CZ Czech Republic	18 780	3.3%	3 059	1.9%
DE Germany	112 352	19.5%	17 878	11.2%
DK Denmark	10 831	1.9%	4 293	2.7%
EE Estonia	786	0.1%	489	0.3%
ES Spain	16 461	2.9%	27 464	17.3%
FI Finland	3 500	0.6%	5 998	3.8%
FR France	47 374	8.2%	20 673	13.0%
GR Greece	13 275	2.3%	1 841	1.2%
HU Hungary	9 275	1.6%	1 708	1.1%
IE Ireland	5 766	1.0%	4 012	2.5%
IS Iceland	572	0.1%	327	0.2%
IT Italy	18 156	3.2%	14 779	9.3%
LI Liechtenstein	471	0.1%	31	0.0%
LT Lithuania	922	0.2%	808	0.5%
LU Luxembourg	670	0.1%	24	0.0%
LV Latvia	*	n.a.	373	0.2%
MT Malta	188	0.0%	331	0.2%
NL The Netherlands	24 603	4.3%	6 914	4.3%
NO Norway	5 345	0.9%	2 575	1.6%
PL Poland	3 604	0.6%	3 730	2.3%
PT Portugal	2 747	0.5%	4 787	3.0%
RO Romania	1 672	0.3%	792	0.5%
SE Sweden	19 422	3.4%	7 359	4.6%
SI Slovenia	1 165	0.2%	752	0.5%
SK Slovakia	205	0.0%	655	0.4%
TR Turkey	2 646	0.5%	1 321	0.8%
UK United Kingdom	160 348	27.9%	16 508	10.4%
TOTAL	**575 493**	**100.0%**	**159 072**	**100.0%**

Data legend: * Missing data.

Source: Columns 1 and 2: UOE data collection; Columns 3 and 4: European Commission.

Subject areas

Until recently, student mobility under the ERASMUS Programme on the one hand, and mobility in the UOE data collection, on the other hand, were recorded according to two different classifications of subject areas. ERASMUS used its tailor-made classification, while UOE made use of the international ISCED 97 taxonomy. This divergent practice made it almost impossible to draw meaningful comparisons on this descriptor between the two data sets. Very recently though, a 'translation' system of the ERASMUS fields of study was set up, which now allows the former data set to be expressed according to the ISCED 97 classification, also retrospectively. This enables us to gain further insights into the mobility behaviour of students mobile through the ERASMUS Programme, in comparison to the enrolment pattern of national and of foreign students.

In the academic year 2008/09, more than one-third of ERASMUS students were undertaking studies in the field of *social sciences, business and law* (39.1%) (Table 10). Students in the fields of *humanities and arts* (23.0%) and *engineering, manufacturing and construction* (14.6%) were the second and third largest groups to take part in the programme. At the other end of the spectrum, only a small minority of ERASMUS students – 2.3% and 2.4% – were enrolled in the fields of *services* and *agriculture and veterinary* studies respectively, in the same academic year. The situation seemed relatively stable over time, with only marginal changes. Slightly smaller shares of ERASMUS students were enrolled in the first three fields of study presented in Table 10 in 2008/09 compared to 1998/99; in contrast, slightly higher proportions of students were enrolled in the next four subject areas, over the same period.

Having observed the distribution of ERASMUS students across the eight different fields of study, we could not help but ask ourselves in this context: are students in certain subject fields more likely to go abroad on ERASMUS than students in the other disciplines? This is a question with no easy answer, which we have however tried to address in Table 11. To explore the question, we had to revert once more to the academic year 2006/07 – the latest year for which the UOE data were available. For the purpose of this assessment, we departed from the assumption that, if students in the eight subject fields were equally likely to go abroad on ERASMUS, we would find a strong correlation between the shares of total enrolment (i.e. of all students) and of ERASMUS students. In contrast, big differences between the two shares would indicate that some groups of students are more or less likely than others to go abroad for ERASMUS-type of stays.

According to Table 11, on average, the students in the fields of *humanities and arts*, *social sciences, business and law*, and *engineering, manufacturing and construction* are overrepresented in ERASMUS compared to total enrolment, all showing positive percent points results. In other words, these students more often go abroad with ERASMUS than those in the other five areas of study. In the case of students in the field of *humanities and arts,* the difference is significant – 11.1 percentage points. Given that students in this subject field are, by definition, better equipped with the linguistic skills necessary to study abroad, it is certainly not a complete surprise that they are also the ones to more frequently go abroad with ERASMUS. In the other two subject fields, a positive difference is also observed, though of smaller values – of 5.6 percentage points for *social sciences, business and law* students and of 0.8 percentage points for students in *engineering, manufacturing and construction.* In contrast, students in the remaining five fields of study are all underrepresented in ERASMUS, showing negative percentage differences compared to total enrolment. Of these, students in *health and welfare* studies seem to go abroad least often with the programme (-5.9 percentage points). Nevertheless, given the diversity of higher education systems in the Europe 32 region, this macro-level picture is certainly subject to variation at the country level. This notwithstanding, we would like to draw again attention to the fact that these are the average values. In reality, stark differences exist at the level of individual countries,

and they should be sensibly taken into account if any policy measures are to be designed to increase the participation of students in certain disciplines.

A comparison between the distribution of *ERASMUS students* and that of *degree-seeking students* across fields of study is only possible for *inflows.* For study abroad students, as pointed out in Chapter I of this volume, the breakdown by field of study is not yet available in the UOE data collection. The comparison with the distribution of foreign students brings some interesting findings at the level of *individual countries* (cf. Vol. I, Chapter I and Table 12 below), as follows

- Those Europe 32 countries with special programmes in the field of *health and welfare* targeting foreign degree-seeking students also show a much higher concentration of foreign students in this field compared to incoming ERASMUS students. The countries in question are Belgium, Bulgaria, Hungary, Poland, Romania and Slovakia.
- The Nordic countries, with no exception, and against the general trend, show a higher concentration of *foreign students* in *humanities and arts* than of ERASMUS students in the same field of study, a phenomenon for which we have no clear explanation however.
- The highest concentration per subject field in the entire Europe 32 region is registered in Cyprus, both for foreign and incoming ERASMUS students – 74.1% and 70.8% respectively – in the field *social sciences, business and law*. This is nevertheless due to the education provision in the country, which is largely limited to the field of *social sciences, business and law.*

Table 10: ERASMUS students by ISCED 97 subject areas in 1998/99, 2002/03, 2006/07 and 2008/09

Year	1998/99		2002/03		2006/07		2008/09	
Subject Area	**Abs.**	**%**	**Abs.**	**%**	**Abs.**	**%**	**Abs.**	**%**
Teacher training and education science	3 920	4.0%	4 418	3.6%	4 955	3.2%	6 314	3.2%
Humanities and arts	25 500	26.1%	30 567	24.7%	36 646	23.4%	45 626	23.0%
Social sciences, business and law	39 272	40.2%	50 382	40.7%	64 354	41.1%	77 605	39.1%
Science, mathematics and computing	8 160	8.4%	10 405	8.4%	13 492	8.6%	17 549	8.8%
Engineering, manufacturing and construction	13 134	13.5%	17 610	14.2%	22 878	14.6%	28 907	14.6%
Agriculture and veterinary	1 670	1.7%	2 640	2.1%	3 027	1.9%	4 810	2.4%
Health and Welfare	5 088	5.2%	6 565	5.3%	9 286	5.9%	12 495	6.3%
Services	531	0.5%	1 013	0.8%	1 516	1.0%	4 577	2.3%
Unknown	296	0.3%	297	0.2%	339	0.2%	640	0.3%
Total	**97 571**	**100%**	**123 897**	**100%**	**156 493***	**100%**	**198 523**	**100%**

Source: European Commission; * Total only for non-imputed data – EE, LT and LU missing.

Table 11: ERASMUS and all students in Europe 32 countries by subject areas, absolute numbers and percentages, in 2006/07

Types of students / Subject Area	ERASMUS		All students		Difference between the shares of ERASMUS and of All students in percentage points
	Abs.	%	Abs.	%	
	1	2	3	4	4-2
Teacher training and education science	4 955	3.2%	1 943 282	8.9%	-5.7
Humanities and arts	36 646	23.4%	2 669 867	12.3%	11.1
Social sciences, business and law	64 354	41.1%	7 739 927	35.5%	5.6
Science, mathematics and computing	13 492	8.6%	2 218 184	10.2%	-1.6
Engineering, manufacturing and construction	22 878	14.6%	3 013 190	13.8%	0.8
Agriculture and veterinary	3 027	1.9%	452 309	2.1%	-0.2
Health and Welfare	9 286	5.9%	2 575 883	11.8%	-5.9
Services	1 516	1.0%	885 242	4.1%	-3.1
Unknown	339	0.2%	277 305	1.3%	n.a.
Total	156 493	100.0%	21 775 189	100.0%	n.a.

Source: Columns 1 & 2: European Commission; Columns 3 & 4: UOE data collection.

Table 12: Incoming ERASMUS students by host country and field of study, absolute numbers and percentages, in 2006/07

Host country	Teacher training and education science		Humanities and arts		Social sciences, business and law		Science, mathematics and computing		Engineering, manufacturing and construction		Agriculture and veterinary		Health and Welfare		Services		Unknown		Total	
	Abs.	%	Abs.	%	Abs.	%	Abs.	%	Abs.	%	Abs.	%	Abs.	%	Abs.	%	Abs.	%	Abs.	%
AT Austria	198	5.4%	861	23.4%	1 468	39.9%	272	7.4%	608	16.5%	114	3.1%	123	3.3%	35	1.0%	2	0.1%	**3 681**	**100%**
BE Belgium	221	4.3%	880	17.0%	2 400	46.3%	407	7.8%	654	12.6%	110	2.1%	466	9.0%	32	0.6%	18	0.3%	**5 188**	**100%**
BG Bulgaria	17	6.3%	99	36.8%	100	37.2%	10	3.7%	21	7.8%	1	0.4%	16	5.9%	5	1.9%	*	0.0%	**269**	**100%**
CY Cyprus	9	4.6%	25	12.8%	138	70.8%	7	3.6%	14	7.2%	*	0.0%	2	1.0%	*	0.0%	*	0.0%	**195**	**100%**
CZ Czech Republic	111	3.7%	605	20.3%	1 080	36.2%	246	8.2%	593	19.9%	130	4.4%	171	5.7%	44	1.5%	7	0.2%	**2 987**	**100%**
DE Germany	421	2.4%	5 046	29.0%	6 119	35.1%	1 439	8.3%	3 176	18.2%	286	1.6%	757	4.3%	129	0.7%	36	0.2%	**17 409**	**100%**
DK Denmark	192	4.5%	383	8.9%	1 815	42.3%	491	11.4%	1 158	27.0%	82	1.9%	160	3.7%	6	0.1%	6	0.1%	**4 293**	**100%**
EE Estonia	16	3.4%	147	30.8%	223	46.8%	15	3.1%	33	6.9%	9	1.9%	26	5.5%	8	1.7%	*	0.0%	**477**	**100%**
ES Spain	685	2.5%	7 593	27.8%	11 056	40.5%	1 901	7.0%	3 322	12.2%	532	2.0%	1 792	6.6%	333	1.2%	58	0.2%	**27 272**	**100%**
FI Finland	240	4.2%	617	10.8%	2 527	44.1%	606	10.6%	938	16.4%	146	2.5%	579	10.1%	72	1.3%	9	0.2%	**5 734**	**100%**
FR France	406	2.0%	5 832	28.5%	8 957	43.8%	1 513	7.4%	2 322	11.4%	172	0.8%	1 093	5.3%	133	0.7%	25	0.1%	**20 453**	**100%**
GR Greece	100	5.6%	353	19.7%	710	39.6%	168	9.4%	224	12.5%	71	4.0%	135	7.5%	28	1.6%	4	0.2%	**1 793**	**100%**
HU Hungary	84	5.0%	257	15.2%	812	48.1%	78	4.6%	251	14.9%	52	3.1%	119	7.0%	28	1.7%	8	0.5%	**1 689**	**100%**
IE Ireland	105	2.6%	856	21.5%	1 969	49.4%	397	10.0%	524	13.2%	26	0.7%	82	2.1%	18	0.5%	7	0.2%	**3 984**	**100%**
IS Iceland	21	6.5%	85	26.5%	105	32.7%	66	20.6%	25	7.8%	*	0.0%	18	5.6%	1	0.3%	*	0.0%	**321**	**100%**
IT Italy	361	2.5%	4 019	27.5%	5 212	35.7%	1 043	7.1%	2 176	14.9%	344	2.4%	1 329	9.1%	81	0.6%	28	0.2%	**14 593**	**100%**
LI Liechtenstein	*	0.0%	*	0.0%	14	45.2%	*	0.0%	17	54.8%	*	0.0%	*	0.0%	*	0.0%	*	0.0%	**31**	**100%**
LT Lithuania	35	4.3%	152	18.7%	369	45.4%	39	4.8%	134	16.5%	15	1.8%	46	5.7%	20	2.5%	3	0.4%	**813**	**100%**
LU Luxembourg	4	16.7%	3	12.5%	2	8.3%	4	16.7%	11	45.8%	*	0.0%	*	0.0%	*	0.0%	*	0.0%	**24**	**100%**
LV Latvia	8	2.5%	48	15.0%	201	63.0%	20	6.3%	19	6.0%	1	0.3%	15	4.7%	7	2.2%	*	0.0%	**319**	**100%**
MT Malta	13	4.0%	61	18.5%	136	41.3%	17	5.2%	18	5.5%	4	1.2%	65	19.8%	14	4.3%	1	0.3%	**329**	**100%**
NL The Netherlands	263	3.8%	815	11.9%	3 592	52.5%	569	8.3%	881	12.9%	276	4.0%	388	5.7%	31	0.5%	23	0.3%	**6 838**	**100%**
NO Norway	161	6.4%	323	12.9%	997	39.8%	334	13.3%	362	14.5%	35	1.4%	216	8.6%	63	2.5%	14	0.6%	**2 505**	**100%**
PL Poland	112	3.1%	712	19.7%	1 834	50.7%	196	5.4%	465	12.9%	92	2.5%	139	3.8%	57	1.6%	7	0.2%	**3 614**	**100%**
PT Portugal	218	4.7%	788	16.9%	1 558	33.4%	415	8.9%	903	19.4%	167	3.6%	460	9.9%	137	2.9%	19	0.4%	**4 665**	**100%**
RO Romania	29	3.7%	148	19.0%	254	32.5%	86	11.0%	157	20.1%	23	2.9%	44	5.6%	34	4.4%	6	0.8%	**781**	**100%**
SE Sweden	296	4.1%	598	8.3%	3 054	42.4%	1 096	15.2%	1 594	22.1%	123	1.7%	395	5.5%	31	0.4%	23	0.3%	**7 210**	**100%**
SI Slovenia	43	5.9%	109	14.9%	369	50.3%	39	5.3%	105	14.3%	17	2.3%	39	5.3%	11	1.5%	2	0.3%	**734**	**100%**
SK Slovakia	52	8.2%	118	18.6%	257	40.4%	46	7.2%	76	11.9%	22	3.5%	43	6.8%	22	3.5%	*	0.0%	**636**	**100%**
TR Turkey	48	3.8%	246	19.5%	714	56.7%	71	5.6%	99	7.9%	17	1.3%	53	4.2%	10	0.8%	2	0.2%	**1 260**	**100%**
UK United Kingdom	486	3.0%	4 867	29.7%	6 312	38.5%	1 901	11.6%	1 998	12.2%	160	1.0%	515	3.1%	126	0.8%	31	0.2%	**16 396**	**100%**
Total	**4 955**	**3.2%**	**36 646**	**23.4%**	**64 354**	**41.1%**	**13 492**	**8.6%**	**22 878**	**14.6%**	**3 027**	**1.9%**	**9 286**	**5.9%**	**1 516**	**1.0%**	**339**	**0.2%**	**156 493***	**100%**

Source: European Commission * Total only for non-imputed data – EE, LT and LU missing

Levels of study

Although the distribution of students by level of study is available both in the ERASMUS and the UOE statistics, there is very little comparison we can draw between the two data sets on this descriptor. This situation is not only due to different classifications in the two data sets, but also to inconsistent practice in each data collection. The ERASMUS data delineates between students at undergraduate, graduate and doctoral level. Data in Table 13 shows that in the academic year 2008/09, more than two-thirds of ERASMUS students were registered at the undergraduate level, whereas less than 2% of students were pursuing doctoral level education. This differentiation was, curiously enough, also available for the years prior to the implementation of the Bologna-type study programmes in many Europe 32 countries. Besides, there are no comprehensive guidelines within the programme on how to classify students according to the three levels, and, as a result, there is a variety of national practices, preventing any sound conclusions for this mobility aspect. However, if we were to look at the doctoral level data – the ones that should pose fewer classification problems in this context – the shares presented in Table 13 point to a downward trend. Whether the decreasing share of PhD students is a sign of declining interest in the programme, or whether doctoral students simply prefer the alternative type of ERASMUS stays abroad – funded under the *Staff mobility for teaching assignments* action – is difficult to conclude from existing data.

The UOE distribution of students by levels of study is not problem-free either, as highlighted in several chapters of this volume. The classification of PhD students (ISCED 6) is known as one of the most controversial elements of the UOE data collection, given the various statuses and recording systems of doctoral students world-wide. Nevertheless, data presented in Table 14 seems to suggest that a higher share of PhD students comes for degree studies in Europe 32 countries than goes abroad, for shorter stays with ERASMUS – 8.4% of foreign students to 1.3% of ERASMUS students. In absolute terms, the difference is also significant.

Table 13: ERASMUS students by level of study, in 1998/99-2008/09

Level of study	Undergraduate		Graduate		Doctoral		Total	
Year	Abs.	%	Abs.	%	Abs.	%	Abs.	%
2008/09	128 984	65.0%	66 878	33.7%	2 661	1.3%	**198 523**	**100%**
2007/08	103 296	56.5%	76 208	41.7%	3 175	1.7%	**182 679**	**100%**
2006/07	92 077	58.8%	62 433	39.9%	1 983	1.3%	**156 493**[22]	**100%**
2005/06	75 250	51.1%	68 625	46.6%	3 389	2.3%	**147 264**	**100%**
2004/05	75 684	52.6%	66 208	46.0%	2 118	1.5%	**144 010**	**100%**
2003/04	72 003	53.2%	61 701	45.6%	1 684	1.2%	**135 388**	**100%**
2002/03	70 499	56.9%	51 429	41.5%	1 969	1.6%	**123 897**	**100%**
2001/02	66 117	57.2%	47 936	41.5%	1 439	1.2%	**115 492**	**100%**
2000/01	64 187	58.2%	41 218	37.4%	4 869	4.4%	**110 274**	**100%**
1999/00	64 537	60.0%	37 647	35.0%	5 443	5.1%	**107 627**	**100%**
1998/99	58 654	60.1%	34 049	34.9%	4 868	5.0%	**97 571**	**100%**

Source: European Commission

[22] Total only for non-imputed data – EE, LT and LU missing.

Table 14: Distribution of foreign students in Europe 32 countries by ISCED 97 level of study, in 2006/07

ISCED 5A		ISCED 5B		ISCED 6		All foreign students	
Abs.	%	Abs.	%	Abs.	%	Abs.	%
1 170 660	80.7%	153 292	10.6%	121 648	8.4%	**1 451 467**[23]	**100%**

Source: UOE data collection

4 Conclusions

The analysis of student mobility developments in the framework of the ERASMUS Programme and the comparison with the evolution of total enrolment – foreign students and study abroad student numbers of the Europe 32 region – led to two interesting, yet paradoxical, findings:

Despite the *spectacular growth* in the number of ERASMUS students, which more than doubled in the 11 years of analysis, still only a very small share (of less than 1.0%) of Europe 32 students participated in the programme in the most recent academic year with available data - 2008/09;

Still, in spite of this relatively low participation in the programme, ERASMUS plays a very important role in supporting student mobility in the European context. ERASMUS incoming students accounted for, in the academic year 2006/07, about one-tenth of all foreign students in the Europe 32 region, while as many as one quarter of all Europe 32 students that went abroad to other countries of this region did so with ERASMUS.

Nonetheless, while this is the macro-level picture, important national-level differences exist, in all these respects, amongst the Europe 32 countries. On the positive side, countries such as Spain, Finland, Malta, Poland, Portugal and Slovakia seem to be more *'attractive'*, in the Europe 32 area, for ERASMUS rather than for degree-type of studies. They all hosted more ERASMUS students than foreign students with nationalities of other Europe 32 countries in the academic year 2006/07. At the other end of the spectrum, in countries such as the UK, Bulgaria, Cyprus and Romania, ERASMUS seems to play, in relative terms, only a marginal role for supporting student inflows.

Interesting similarities further exist between the profiles of Europe 32 countries in degree and ERASMUS mobility. 21 of the Europe 32 countries were either *net exporters* (particularly the Eastern European countries) or *net importers* (particularly countries from Western and Northern Europe) of both ERASMUS and degree-seeking students. In contrast, only ten countries had, in 2006/07, systems showing convergence with the national-level policy priorities identified in Chapter V; these countries were *net import countries* of degree-seeking students, while they were *net exporters* of ERASMUS students. Countries with such systems were main student destinations like Germany and France, but also the Czech Republic and Hungary in Eastern Europe.

As far as the subject area analysis is concerned, the results show that students in *humanities and arts*, *social sciences, business and law*, and *engineering, manufacturing and construction* more often go abroad on ERASMUS than students in the other five subject fields. In contrast, problematic data on the distribution of students by level of study does not allow us to draw very sound conclusions on mobility patterns along this descriptor.

[23] Total does not include Switzerland (CH)

Chapter III: Academic staff mobility

Ulrich Teichler

1 Introduction: the public discourse about mobility of academic staff and researchers

In recent decades, the mobility of scholars – academic staff, teachers, researchers or however they might be called (see section three below), notably for teaching purposes, has been *less in the limelight of the public debate* on internationalisation of higher education *than student mobility*. Many reasons might help to explain this phenomenon.

First, the absolute *numbers* might play a role. The mobility figures for academic staff are bound to be substantially lower than those for students. In most economically advanced countries, the student-academic staff ratio ranges from 10:1 to 20:1. Across the EU-27 countries, it was 16:1 in 2003/04 (see European Commission 2007a, p. 98). There are also estimates according to which the number of students is about 13 times as high as the number of full-time equivalent researchers (see UNESCO, 2005, p. 97).

Second, we note that international mobility has *not yet become a normal option* for academic staff in Europe. While we have reason to believe that study in other European countries became a normal option in the 1990s and ceased to be the exceptional choice it was in the previous decades, this holds true for the academic profession only with respect to doctoral training, a short research phase after the award of the doctoral degree and for visits abroad. In contrast, longer stays abroad for teaching purposes, as well as long periods of employment in another country, have not become normal options. Therefore, a major study of academic staff in various European countries suggests: "Academic labor markets in Europe … are far from international" (Enders 2001, p. 11).

Third, academic staff mobility seems to be *less frequently an integral part of a concerted strategic effort on the part of individual institutions of higher education*, for instance in the framework of internationalisation strategies and support mechanisms. While large-scale student mobility is often based on concerted institutional efforts, academic staff mobility tends to be taken for granted. It is expected to happen anyway – either in the traditional forms of visits, exchanges and sabbaticals or in the case of long-term staff migration – and it is seen as the responsibility of the individual staff.

Fourth, while reports on internationalisation of the education function always address figures of students and in this context student mobility, reports on the internationalisation – *with regard to the research function* of higher education – do not emphasize mobility. Rather, they concentrate on output measures such as joint publications, citations or patents (see for example Vincent-Lancrin, 2010a, b).

Fifth, while student mobility, in spite of occasional references made to its "dark side", by and large has been hailed as positive, academic staff mobility has been met with *more ambivalent value judgements.* For example, the term "brain drain" is frequently employed to depict the negative effects of the mobility of scholars for the institutions and countries of origin.

Sixth, *factual information available* on academic staff mobility and related issues is *incomplete and incoherent.* In comparison, information on foreign students, study abroad and student mobility seems to be abundant, even though we note major information gaps and methodological weaknesses of statistics on student mobility as well (see Kelo, Teichler and Wächter, 2006; Adelman, 2009, as well as the present study).

Certainly, this does not mean that academic staff mobility is viewed as a less important element than student mobility in the process of internationalisation and globalisation of higher education. We observe that the *arguments about the relevance of academic staff mobility* and those about the importance of student mobility differ and cannot be compared easily.

First, one might argue that the higher education systems have *adapted* more readily *to traditional modes of academic staff mobility* than to student mobility. *Visits, exchanges and sabbaticals* of academics for research purposes are so much a standard feature in higher education that most higher education institutions feel they need to take less targeted action to make them happen than is necessary for student mobility. These modes of short-term academic staff mobility seem to be the single smoothest element of mobility in higher education.

Second, in relative terms, *mobility in the framework of academic training* seems to be a relatively *frequent mode* of mobility in higher education. While the rate of foreign or mobile students in Europe, measured as current students at the time of inquiry, is less than 10% on average, and the event of European students having studied abroad at least for some period in the course of study is believed to be somewhat higher than 10% on average in Europe, it is widely assumed that about 20% of doctoral students and about the same proportion of persons conferred a doctoral degree in Europe are foreigners.

Third, *public funds made available* by national and supra-national agencies in Europe for mobility of academic staff and researchers seem to be higher than public funds made available for student mobility. This is due to the fact that the amount of money provided for the individual mobile academic staff – for example the allowance or remuneration per month – is on average several times as high as the amount provided for the individual mobile student, because mobility of academic staff and researchers often comprises salaries, fellowships or allowances for persons accustomed to a higher living standard than that of students and because academic staff and researchers are not expected to be mobile at their own expense or on the basis of fellowships covering only part of their costs.

The popularity of the ERASMUS programme and its initial emphasis on student mobility might have created the misleading impression that European policies have put a stronger emphasis on student mobility than on academic staff mobility (see the overview on the discussion of student mobility in Europe in Wächter, 2008). A closer look, however, reveals, fourth, that *European policies* have been putting a considerable emphasis on mobility of academic staff and researchers already for a long time. The European Commission has been supporting the mobility of junior researchers already since the 1960s under changing names, e.g. “Sectoral Grants” (see Teichler et al, 1990), for much longer than student mobility, funding for which was first provided under the Joint Study Programmes that started in 1976. In the framework of the Lisbon Strategy calling for the establishment of a European Research Area by 2010, the mobility and cooperation of researchers has obviously been one of the key issues (see Liberali, 2006). Also, the Bologna Declaration and the subsequent ministerial communiqués adopted by the governments involved in the Bologna Process have consistently named teaching staff mobility as an aim, even though the key measures proposed clearly have focussed on student mobility.

Fifth, academic mobility also plays a considerable role in *rankings* relating to the internationalisation of higher education or in rankings relating to the quality of higher education institutions that take international aspects into consideration. For example, the Times Higher Education Supplement Rankings (WUR) – the only one of the internationally well-known rankings studies on universities that includes criteria regarding the international dimension of higher education – have put an equal weight (5% each) on the “percentage of international staff” and the “percentage of international students” (cf. the overview on the ranking literature in Kehm and Stensaker, 2009; Shin, Toutkoushian and Teichler, 2011).

Sixth, international mobility of academic staff is often *just one of the various modes of border-crossing collaboration in the domain of research*. In a recent overview of internationalisation in higher education, Marginson and van der Wende (2010) do not only refer to the growing mobility of researchers, whereby they notably point at the flows from academically less prestigious institutions and countries to the more prestigious ones, with US research universities clearly at the apex. They also underscore that international research collaboration grows at a fast pace; surveys and bibliometric analyses provide evidence of a trend of increasing collaboration of academic staff and researchers in international research projects, increasing citations of foreign scholars and increasing numbers of joint publications with scholars from other countries. This suggests that other means of internationalisation might not be of less importance than that of physical mobility.

Undoubtedly, academic staff mobility is such a frequent and relevant phenomenon that transparency of the frequency of its major modes would be desirable. However, the available information base on academic staff mobility is more problematic than that on student mobility. The OECD writes in a report on "Tertiary Education for the Knowledge Society": "By contrast with student mobility which is fairly well documented, data are scarce when it comes to the international mobility of academic staff. The situation is further complicated by the multiple forms of academic mobility - from short-term moves of a few days/weeks to longer movements of over one year" (Santiago et al., 2008, p. 245). Although one might challenge the authors' view that student mobility is "fairly well documented", obviously the information base on mobility of academic staff and researchers is considerably weaker.

For this reason, this chapter does not (and could not) aim to establish a more or less comprehensive data set on academic staff mobility for a particular year, let alone a time series measuring growth of academic staff mobility over time. Rather, all we can and will present are varied data from different sources with different definitions of scholars, different modes of mobility at different points at time in recent years and often only for a select number of countries. This select presentation of findings, along with a discussion of the strengths and limitations of various sources, is made in the hope that future action might be taken with the aim of improving the collection of data on mobility of academic staff and researchers, which could lead to the creation of a more comprehensive information base.

2 A glance at major data reports

2.1 The data provided by UNESCO. OECD and EUROSTAT

As pointed out in the various chapters on student mobility, three supranational organisations – *UNESCO, OECD and the European Union through EUROSTAT, its statistical agency* – cooperate in the collection of international data on higher education, concentrating on numbers of students, staff and institutions. These same three organisations are also involved in collecting data on science and, in this framework, they collect information on researchers. What information do these data provide on the international mobility of scholars?

In the framework of the joint UOE collection of higher education statistics, more detailed information is collected on students than on teachers and institutions. No information is collected on the citizenship and the mobility of academic staff. As a consequence, statistics of academic staff mobility feature less prominently or are not provided at all in the recent annual publications:

- The annual report of *UNESCO* statistics (see UNESCO Institute for Statistics, 2009) provides information on the absolute number of teaching staff and the percentage of women among teaching staff, but – in contrast to the student statistics provided – the

report does not contain any information on the nationality or the mobility of tertiary education teachers.

- The UNESCO Science Report 2010 (UNESCO, 2010), drawing extensively from international statistics on science, does not provide any information on mobility of academic staff and researchers at all. In regards border-crossing activities in science, information is provided only on "scientific publications in international collaboration" and "international trade in high-tech products".
- The annual report of *OECD* on education indicators, "Education at a Glance" (see OECD 2009), does not provide any data on academic staff at all. However, it provides figures of the number of advanced students and doctoral awards and the proportion of foreign and 'international' students among them, i.e. on categories referred to as "young researchers" in science statistics. In a recent OECD publication "Higher Education to 2030. Volume 2: Globalisation", the two chapters discussing available statistics actually focus exclusively on student mobility (Vincent-Lacrin, 2010b; McBurnie and Ziguras, 2010). The two chapters discussing overarching issues of globalisation, internationalisation and Europeanisation consider academic staff mobility ("faculty mobility") as a key issue, but refer only occasionally to available researchers' statistics (Marginson and van der Wende, 2007, 2010).
- *EUROSTAT* also publishes UOE data on students and academic staff in general, but, as one might expect, data on citizenship and mobility are only published for students. In the framework of the European Labour Force Survey (LFS), data are collected on the number and the citizenship of "higher education teaching professionals"; however, the available data on foreigners among them are not published. Information provided to us by EUROSTAT shows that the available information is not sufficiently complete in order to justify its publication. As will be pointed out below, the LFS provides reasonable information about the proportions of foreign researchers.

2.2 Data collections and publications of the European Commission

The European Commission is involved in various ways with the collection and dissemination of data on mobility of academic staff and researchers. The following sources are worth mentioning in this regard.

- The European Commission supports teaching staff mobility as one of the actions of the *ERASMUS* sub-programme within the Lifelong Learning Programme. The Commission publishes annually statistics on mobile teachers, sub-divided by country of origin and country of destination (other descriptors such as the duration of the stay abroad, the field and the level of study at which teaching takes place, as well as the country of origin and the country of teaching abroad are also available). The data for 2008/09 are presented below (see section 5.3 below).
- The report "The Bologna Process in Higher Education in Europe: Key Indicators on the Social Dimension and Mobility", jointly produced by EUROSTAT and the EUROSTUDENT project team (a team coordinated by the German Hochschul Informations System GmbH – also known as HIS -- undertaking surveys in various countries on life and study of students), contains data on *mobility in the framework of the Bologna Process*. The only data on the mobility of scholars in this report are on teaching staff mobility in the ERASMUS Programme (EUROSTAT and Hochschul Informations System GmbH, 2009).
- In the framework of EU science policies, the single largest activity of promotion of mobility of academic staff and researchers is the *Marie Curie Programme* for mobility of young researchers. Statistics on mobile researchers (from "early-stage" to "very experienced")

through the major of the Marie Curie actions are available from the European Commission since the late 1990s on a number of descriptors, e.g. nationality, country of home and host institutions, duration of research stay as well as field of research (see also section 5.3 below).

- In 2005, the Centre for Research on Higher Education and Work of the University of Kassel, in cooperation with researchers from other European countries, completed the so-called *"MOMO"* feasibility study on data available in nine European countries on career paths and mobility of researchers. It discussed the various potentials of large-scale statistics, representative surveys and registers for improved information on the international mobility of researchers in all sectors of higher education and research (Le Mouillour, Lenecke and Schomburg, 2005).
- The 2008 report by the European Commission on *Lisbon indicators* in the area of education and training contained data on foreign and non-resident tertiary education students by host country, on students studying abroad by country of nationality as well as the number of outgoing and incoming ERASMUS students by country, but it did not offer any information on the mobility of academic staff researchers (Commission of the European Communities, 2008).
- In the report of the European Commission on "A More Research-intensive and Integrated European Research Area" (European Commission, 2008), some information is provided on *researchers' mobility*, i.e. the absolute number and percentage of "non-nationals" among "human resources in science and technology core (HRSTC)" (cf. the definition below), the number and percentage of foreign doctoral candidates, the percentage of foreign citizens among "doctorate holders" and the flows of Marie Curie fellows.
- An expert group set up by the European Commission to consider improvements of indicators and monitoring suggested taking the following as the single *indicator for mobility of researchers and research careers*: the "percentage of doctoral degree holders who obtained their doctorate in another EU country and/or have worked in another EU country" (European Commission, 2009, p. 48).

2.3 Examples of national collections and publications in Europe

In individual European countries, the information base on mobility and on foreigners among academic staff and researchers is often more developed than at the European or global level. This was demonstrated most visibly in the aforementioned *MOMO project*, which provided an *overview on data sources in nine European countries on career paths and mobility flows of researchers* (Le Mouillour, Lenecke and Schomburg, 2005; see also ERAWATCH, 2006; Moguérou and di Pietrogiacomo, 2007). This Commission-funded study identified the statistics and surveys available, it assessed their strengths and weaknesses for analysing both career mobility and cross-border mobility and it made recommendations for the improvement of the data collection. Up to the present, however, no proposal has been made to revamp the statistical data collection system on researchers in such a way that satisfactory data on this occupational group in general as well as on the international researchers' mobility could be collected, both at the national level in all European countries and at the international level. At most, as already pointed out, the proposal has been made to select certain indicators as the single most important ones for demonstrating the extent of mobility (e.g. European Commission, 2009).

The various national data sources named in the MOMO study and the assessment of these sources can be interpreted for this study as follows:

- *Regularly collected statistical data collections* (census, micro-census, and other large-scale surveys): These data collections, as a rule, are obligatory and, therefore, cover the target

population or a sample of the target group completely. However, relevant data on academic staff and researchers are only addressed as small sub-groups within micro-censuses or large-scale surveys (for example, in labour force surveys) and turn out to be too small for solid information. Moreover, the number of themes addressed and variables included is often very small.

- *Regularly undertaken representative surveys*: Current surveys available in individual countries, as a rule, do not address academic staff, researchers and doctorate holders as target groups, but rather university graduates some years after graduation. The questionnaires vary. Many surveys have low response rates, and the representativeness of responses is not always ensured sufficiently. In principle, surveys of that kind have the highest potential for identifying any mobility and change of citizenship during the respondents' prior life-course (see the arguments in Le Mouillour, Lenecke and Schomburg, 2005).
- *Ad hoc surveys*: Amongst surveys undertaken once or, at best, occasionally by various institutions and scholars, a substantial number has addressed academic staff, researchers, former graduates etc. and has thus often provided more detailed information on educational and professional mobility, change of residence and change of citizenship than other types of surveys. However, the surveys of this type are often limited to individual educational institutions or professions, and the survey instruments are often so specific that the potential for comparison with other studies is limited.
- *Registers*: In a few countries, data are collected on all employees or all university and R&D laboratory staff (for example, through information provided by employers). The readiness to collect data of this kind and the related views of data protection and confidentially vary across countries. Definitions and actual data collected vary across countries all well. As a rule, registers are confined to very small sets of "hard facts", in which respect they are similar to regular statistical data collections. They are an interesting source of information, because data over various years might be merged and thus provide information on life-course mobility.

The potentials of more targeted data collections on the mobility of academic staff and researchers might be illustrated by two studies undertaken in the UK and in Germany.

In the *UK*, the Higher Education Statistics Agency (HESA) annually collects data on the *nationality of academic staff* as well as on the *international movements of the academic staff since the previous year*. Thus, information is not only provided on the number and proportion of "non-UK" academic staff, but also on the recent "immigration" and "emigration" of academic staff. Further, a distinction is made into UK and foreign immigrants and emigrants. This makes it possible, for example, to establish the number of UK "returners" among the immigrants.

In *Germany*, "Wissenschaft weltoffen", a very detailed national report on international activities in the area of higher education, is published annually by the German Academic Exchange Service (DAAD) and the Hochschul Informations System GmbH (see DAAD and HIS, 2009). It provides three sets of information on academic staff mobility: (a) the absolute number of *academic staff with a foreign nationality* at German higher education institutions, broken down by individual country of citizenship; (b) the absolute number of *foreign academic staff staying temporarily in Germany with the support of fellowships* provided by about 30 sponsoring German public or private agencies, broken down into three categories: doctoral candidates (*Graduierte*), "post-docs" and scholars/professors (*Wissenschaftler/Hochschullehrer*); and (c) the number of *German academic staff staying abroad temporarily with the support of fellowships* provided by the approximately 30 sponsoring German public or private agencies mentioned above.

The value of such initiatives in individual European countries could be enhanced if the most promising ones were taken at the European level with the support of European institutions. The same could be achieved if networks of countries were formed, to jointly undertake such data collection.

3 Terms, definitions and classifications of foreign or mobile scholars

3.1 The variety of terms and measures

In analysing the available literature on the international mobility of scholars, we note an enormous heterogeneity of concepts, definitions and corresponding factual information. Obviously, one has to define the aims of the analysis and the persons to be addressed according to the following dimensions:

- the *target group of analysis* as a whole, for example, academic staff at higher education institutions, researchers, etc.;
- major *sectors of academics' employment and work*, for example, higher education institutions, universities, public research institutes, private R&D or other types of institutions;
- major classifications of *specialization*, for example, disciplines or science and technology sectors;
- major *stages of learning/training and career*, for example, doctorate holders, junior academic staff, etc.; and
- frequent modes of *mobility*, as well as changes of citizenship and residence.

It is not possible to provide a complete picture of the discourse on the various terms, concepts and measures employed in Europe. However, an overview of frequently employed measures might help to illustrate current practices and give indications for an improvement of data collection.

3.2 The definitions of the target group: academic staff and researchers

A quantitative analysis of the mobility of scholars has to cope, first of all, with fact that the available resources vary substantially as far as the definition of persons is concerned. As a consequence, it is difficult to compare the data available from different sources.

In many national governments and most supra-national organisations, we note a divided administrative responsibility for the higher education system, often viewed as part of the educational system on the one hand, and for the research system on the other hand. In higher education sector (or tertiary education sector), person-related statistics are collected primarily on students and only additionally on *academic staff* at higher education or tertiary education institutions, while in the research system, *"researchers"* or *"scientists"* are the prime categories of person-related data collection. We would like to point out that most data available on scholars have been collected as data of researchers for the research system, and that these data are not compatible with those on academic staff in higher or tertiary education.

In the framework of respective statistics and surveys, the definition of the sub-system matters. Some data collections focus on *universities* only, i.e. institutions both in charge of teaching and research. Many national data collections view *higher education* as the natural unit, i.e. they include

academics not only at institutions both in charge of teaching and learning, but also at institutions predominantly in charge of teaching which are officially recognized in the individual countries as institutions of higher education. Finally, some data collections cover *tertiary education*, i.e. they also include shorter and more practically oriented programmes (ISCED 5B) below the bachelor level. The international UOE data collection aims to collect data on academic staff in tertiary education; however, data presented for some countries might only comprise academic staff in higher education.

Statistics in individual countries and individual surveys might vary concerning the extent to which they include categories of staff not employed full-time, not employed on a regular basis and not funded through the regular university budget. Inclusion or exclusion might vary for the following categories:

- Academics employed *part-time* – while in some cases persons might be included who work less than half-time, persons who work less than half-time might be excluded in other cases.
- The term part-time might refer to regularly employed persons, while in other instances persons might also be include those who (a) have a *second employment*, (b) who work on a *fee basis* or who (c) *are regularly employed but without remuneration.*
- In some countries, *doctoral candidates* might be included in the category of academic staff, if they are employed partly or completely for the purpose of working on their dissertation. In other countries, doctoral candidates are only considered as academics if the contract states a regular work function in teaching and research – irrespective of whether or not they are officially entitled to spend part of the work-time on their dissertation. In some countries, more or less all doctoral candidates are viewed as students and, as a rule, are not included in statistics of academic staff.
- The inclusion or exclusion in academic staff statistics of scholars who are *paid through funds originating from research contracts or consultancy work* varies; the respective information is often unclear.
- In some countries, persons who are employed as *"auxiliary staff"* are not viewed and counted as "academic staff" (recent graduates hired on short-term basis for auxiliary work in research projects, as tutors of students, etc.).
- In some countries, *high-level administrators* (rectors, deans, etc.) are counted as academic staff, while they are excluded in others. Similarly, *higher education trained administrators* and *higher education professionals* (i.e. persons in charge of service and management-support functions directly linked to teaching and learning, for example guidance counsellors; cf. Meek et al., 2010) might or might not be included in statistics of academic staff or researchers.

We have reason to assume that higher education institutions are generally more likely to support short-term academic mobility for regularly and full-time employed persons than for persons employed part-time or not in regular positions or on regular salaries. As a consequence, the rates (percentages) of mobility are higher if staff statistics only include regular and full-time staff.

In the broader area of research and development, definitions of researchers have varied substantially in the past. Various supra-national bodies have been establishing generally accepted classifications.

- In 1987, the International Labour Office put forward the *International Classification of Occupations (ISCO).* ISCO-88 aims to group all occupations according to "skill level" and "skill specialization". Scholars, researchers or scientists do not form a specific group of their own, but they are *included in larger categories of managers, professionals and*

associate professionals (e.g. “production and operation department managers”, “life science and health professionals”, etc.).

- The *Frascati Manual,* developed by the OECD in cooperation with other supra-national agencies, has become the internationally most frequently used categorisation for collecting R&D statistics. Often, data are provided on *R&D personnel*: “All persons employed directly on R&D should be counted, as well as those providing direct services such as R&D managers, administrators, and clerical staff”. The value of this measure for comparative studies focusing on the number and composition of scholars is questionable because the proportion of associate professionals, such as laboratory staff, administrators, clerical staff etc., varies substantially by country and sector.
- In 1995, EUROSTAT and OECD developed jointly the *Canberra Manual*. It aims to measure the *“Human Resources devoted to Science and Technology (HRST)”.* Persons might be counted as HRST because they have completed tertiary education or because they are employed in *S&T occupations*, even though they do not hold any degree. The Canberra Manual is also criticized for not making a clear distinction between researchers and other staff supporting research.

Statistics of researchers and R&D personnel might include persons who work in the research sectors or as researchers only for one hour per week. This shows the important difference between “*head counts*” and counts of *“full-time equivalents”.*

The importance of the various definitions can be illustrated by the figures of persons included in each of the definitions. The number of persons aged 25 and above with a tertiary education degree in the EU around 2005 was almost 100 million. UNESCO statistics (UNESCO Institute for Statistics, 2009, pp. 196-207) show that the ratio of tertiary education trained persons is about 20% on average in the EU-27 countries. According to the available statistics in EU-27 countries in 2006 (see European Commission, 2008)

- the *“active population”* was more than 210 million,
- total human resources in science and technology *(HRST)* were 85.4 million,
- the *HRST Core* (persons with both tertiary-level education and S&T occupations, possibly including technicians and associate professionals) was 34.5 million,
- the total number of *scientists and engineers* (including professionals in mathematics, physics, engineering and life sciences, as well as health professionals) was 10.3 million,
- the total *R&D personnel in head count* (HC) amounted to 3.1 million,
- the total *R&D personnel in full-time equivalent* (FTE) amounted to 2.2 million in head count (HC),
- the total number of *researchers in head count* (HC) was 1.9 million, and
- the total number of *researchers in full-time equivalent* (FTE) was 1.3 million.

One might add here that the number of “teaching staff” in EU tertiary education in the academic year 2006/07 was about 1.3 million (see UNESCO Institute of Statistics, 2009, pp. 128-137).

According to the aforementioned “MOMO” study on national data sources of career mobility and international mobility in selected European countries, the national definitions and modes of data collected for the European statistics on researchers and HRST are so diverse that European statistics can hardly be regarded as trustworthy (Le Mouillour, Lenecke and Schomburg, 2005). Obviously, major steps towards the harmonisation of data collection across European countries are needed in order to be able to develop valuable statistics on the numbers of scholars in Europe.

3.3 Classifications: types of scholars and sectors of employment and work

Various terms are used for the classification of the persons professionally active in the higher education and research system. For example, Moguéro and di Pietrogiacomo (2007, p. 8) name eight categories they consider useful to classify researchers:

scientists,

- qualified personnel,
- highly skilled workers,
- human resources in science and technology (HRST),
- brains,
- engineers,
- R&D personnel, and
- researchers.

With reference to higher and tertiary education, we might add

- academics,
- academic staff,
- higher education teaching professionals,
- teaching staff,
- teachers.

In some cases, the terms seem to be used as synonyms, but mostly there are different underlying meanings with regard to different sub-groups. The following dimensions might play a role in different definitions and classifications.

First, the *discipline or field of study*: Some analyses are confined to “science”, “science and technology”, “scientists and engineers”, or “science, engineering and technology”, possibly with the disciplinary areas either stated (e.g. “SET professionals”) or implied (e.g. “R&D personnel”). Other analyses might cover all disciplines and fields of study. In many instances, the borderlines between science and engineering on the one hand, and humanities and social science on the other, are not clear (for example, social scientists are included in the US statistics in science and engineering). Most statistics and surveys on higher education include scholars from all disciplines, whereas many studies on the research sector are confined to natural sciences and engineering.

Second, the *functions*: Scholars covered in the statistics might be sub-divided according to functions, i.e. research, teaching, both research and teaching and other functions (administration, etc.). In some analyses, all highly qualified persons are included (e.g. doctorate holders) without exclusion of those outside higher education and research. In other analyses, all persons or all highly qualified persons are included who work in higher education or research institutions – irrespective of whether or not they perform academic work.

Third, *sectors of the employment system*: As already pointed out, many analyses make a distinction between scholars in higher or tertiary education institutions on the one hand, and researchers in other institutions – research institutes, industry, etc. – on the other hand. The Frascati Manual names five institutional sectors:

- business enterprises (BES),
- government (GOV),
- private non-profit sector (PNP),

- higher education sector (HE; including other tertiary education), and
- (employment) abroad.

Again, this classification cannot claim to be based on a clear consensus amongst experts. In some countries, it makes sense to make a distinction between research institutions close to general governmental functions, such as a health institute supervising the health system or a labour institute supporting labour market adaptations on the one hand, and public sponsorship of major research institutes outside or beside higher education on the other hand – for example the CNRS in France or the Max Planck Society in Germany. One might also distinguish between business enterprises focussing on production and services, where research is a means of enhancement of these prime functions of production and services on the one hand, and commercial enterprises focussing on research, i.e. private research institutions, on the other hand.

Fourth, *occupational groups*: As already indicated above, persons working in organisations concentrating on academic work and research or in organisations comprising units active in academic work and research might be classified into the following occupational groups: (a) scholars as such (academic staff, researchers etc.), (b) managers and high-level administrators in the higher education and research system, (c) associate professionals and (d) other (e.g. clerical) staff. One has to take into account that the definitions of and the borderlines between these occupational groups are not necessarily consistent across countries and institutions.

Fifth, *employment and work:* Regarding employment and work, we note distinctions into persons who are

- permanently employed (with employee or civil service status) vs. fixed-term employed (with "tenure track" employment as a possible category between these two categories);
- regularly employed vs. non-regularly employed (e.g. ancillary staff) or employed on working service contracts (e.g. per course to be taught); and
- full-time vs. part-time employed.

According to the Canberra Manual, HRST comprises any employment in terms of *remunerated work.* This can include fee-based work (i.e. work not based on an employment contract), and also work of as little as one hour per week. Other studies include only persons on an *employment contract* or persons employed at least half-time. The more part-time employment spreads, the more likely – and useful for statistics measuring the capacities available – it becomes that statistics record not solely the number of persons active as researchers *("head count"),* but, in addition, the FTEs (*full-time equivalent*). However, this could pose a problem in the particular area of mobility, for it is always a person who is mobile. Therefore, mobility statistics must address individual persons. As a consequence, a threshold for the inclusion of persons will be needed (e.g. persons working at least half or a third of the normal working time).

In conclusion, we note that there is no single term customary which covers all categories of scholars. As a consequence, we mostly employ "academic staff" in this report in referring exclusively to higher education. The term "researcher" often is used if reference is made to research sectors outside higher education. In discussing both higher education and research outside higher education, we employ "researchers", "academic staff or researchers" or umbrella terms such as "scholars".

3.4 Qualifications and career stages

We note quite a variety of classifications of career stages of scholars, both developed both at a national level and by supra-national organizations, amongst them the European Commission. They often address the education and training level, the length of experience and positions on the career ladder.

Scholars (academic staff, researchers, etc.; cf. above) might be defined and classified according to *education and training levels*. Measures and levels possibly employed are

- years of schooling (e.g. 15 years and more), tertiary education credential (at least ISCED 5 B),
- academically based degree (at least ISCED 5 A), e.g. bachelor, master, etc.,
- advanced and doctoral study (ISCED 6), and
- advanced degree (e.g. *licentiate* degree in Finland) or doctoral degree holders, and holders of advanced or second level doctorates (*doctor scientiae*, *Habilitation*, etc.).

Also, distinctions might be made according to *career stages*. As will be pointed out below, classifications in that area are more diverse than those of education and training levels.

In addressing education and training levels, we note, first, that views differ whether *doctoral candidates* are to be *considered as students or as first-stage scholars*. Educational statistics collected by UNESCO, OECD and EUROSTAT as well as by national agencies include the category of advanced students (ISCED 6), mainly referring to doctoral students. However, these statistics include only those doctoral candidates who are registered as doctoral students. This might cover more or less all doctoral candidates in some countries (for example in the US, where doctoral programmes are a common feature), but only a minority of doctoral candidates in other countries, such as Germany, where the majority of doctoral candidates are employed in higher education institutions or in other organisations involved in research, or in countries such as the Netherlands, where specific employment categories exist at universities for persons working on their dissertation (assistants in teaching and assistants in research). Therefore, international comparative statistics on doctoral students or doctoral candidates are not as comprehensive as on students at earlier stages of study. In contrast, statistics on doctoral awards tend to be regarded as valuable comparative sources of academic mobility; but even in that case, one has to be aware of the fact that some countries do not include all doctoral awards in their statistics. US statistics, for example, exclude doctoral awards with a strong professional emphasis that are not seen as an entry qualification for subsequent academic career stages. In contrast, no distinction is made between academic and professional doctorates in many European countries, and even where such a distinction is made, the professional doctorates might be included in the general statistics of doctoral awards.

The statistics might provide information on the number or rate of

- doctoral candidates,
- recent doctoral awards or persons recently awarded a doctoral degree, and
- persons holding a doctoral degree (irrespective of the year of award).

Classifications of careers not based on formal levels of qualification might *underscore periods of experience*.

- In some studies, the career stage is measured by the *years of experience* as a researcher. For example, the Marie Curie Programme of the European Union uses the category of “early-stage researchers” (with less than four years’ experience) to delineate the group from persons with an experience of four years and more.
- Terms and possible titles such as *“senior researchers”* are customary as well and used to underscore that persons mature in their academic work and progress to more demanding academic tasks.

Terms and titles of this kind might be employed to characterize the middle stage or stages between the doctoral stage and the professorial stage according to the prototypical university careers. But

they are also used to characterize careers where long periods of academic and research work do not lead to major supervisory positions of academic work, i.e. those of a professor and director, but rather to a position of a highly experienced scholar and researcher without a major decision-making function in the academic or research institution.

The different notions of "students" and "researchers" or of "early-stage researchers" and "experienced researchers" reflect the fact that long periods of academic careers can be viewed as the "*formative years of scholars*" (see Teichler, 2007). Over a long period (possibly 10 years or even more), learning and productive work are linked and scholars gradually progress from a dominance of learning to a dominance of productive work.

Career patterns vary amongst countries, but there is no doubt that in economically advanced countries there are, as a rule, three major career stages at universities (which engage both in teaching and research) and that a classification according to these three stage could be used in international studies on scholars.

- At the first stage, the link between learning and productive work is more strongly shaped by the former, and supervision plays a major role. Scholars usually are doctoral candidates and *head towards a doctoral award irrespective of their formal status and the mode of funding.*
- At the second stage, i.e. that *between a doctorate and a professor or director position,* productive work of research and/or teaching prevails. Most scholars at this stage earn their living from their academic activities. Yet, they are not yet regarded as having fully completed the process of formation; they might be responsible for individual research projects, but, as a rule, their influence on the institution and their rights to supervise others are limited. This stage might be called the *post-doctoral stage* of an academic and research career. However, the term as such is misleading, because "post-doc" positions have spread in recent years: positions often funded through fellowships, which comprise a few years of academic work immediately upon the award of a doctoral degree and which are viewed as a new intermediate stage before the academics are employed in a typical middle-level position requiring as a rule a doctoral award, e.g. the position of an assistant professor or a lecturer in the US.
- Finally, scholars reach the third stage of *the fully matured, independent and influential scholar*. Positions at this stage are characterised by full independence of academic activities together with the right and opportunity to supervise the academic work of others. Often at the age about 40 years, scholars are believed to have matured to their full academic capabilities and to have reached the status and power of academics being viewed as the prototypes of the academic profession and mostly named "*professor*" at institutions of higher education. At other institutions, titles such as "director" are used.

As a consequence of the differences of career patterns in different types of institutions across different countries, past efforts at creating a common classification of scholars' career stages have faced insurmountable problems.

4 The varying concepts and definitions of "mobility" of scholars

4.1 Examples of classifications

The mobility of scholars (academic staff, researchers, etc.) is obviously a more complex phenomenon than the mobility of students. This might be illustrated by the diversity of terms and types suggested in various analyses.

Of course, there are also efforts to define mobility in this framework in a clear and simple way. For example, a study published by the European Commission (2008, p. 18) defined a "mobile researcher" as "someone who works as a researcher in a country where s/he is not a citizen or permanently resides". Various other publications employ *the term "mobile" as a synonym of "foreign"* as well. Moreover, we note various other studies using the terms "foreign", "international" and "mobile" without any clear distinctions.

An expert study conducted jointly by various consulting firms and research institutes (IDEA, 2008, p. 19) offers a more complex typology:

- Persons "recruited in one country to work on local terms and conditions for specific periods of time in another" country. As a rule, these persons are *employed at home and sent abroad* by their employers for some time.
- Persons who "move to live and work in a foreign country either long term … or short term … but always with the intention of returning 'home', i.e. persons in *temporary academic employment abroad*.
- Persons who "commute across borders" i.e., who combine *work abroad with residence 'at home'*.
- Finally, the expert study names two types of *border-crossing academic workers not linked to "physical mobility*": the "virtual worker … not needing to relocate" and the "teleworker".

In a report on the Bologna Process, written for Education International, Cradden (2007) classified academic staff mobility, first, according to *types of individual mobility*, whereby the terms employed refer partly to individual and partly to institutional and societal perspectives:

- traditional academic exchange (e.g. short visits),
- early career training and experience (e.g. doctoral training abroad),
- import of cheap academic labour (i.e. recruitment of academic staff from abroad), and
- targeting the international labour market (i.e. employment abroad).

Second, Cradden classified academic mobility according to its *institutional anchoring* into the following categories:

- visits, exchanges and sabbaticals,
- grants and fellowships,
- untenured employment, and
- tenured employment.

Third, Cradden (2007, p. 39) pointed out that a distinction could be made for the group of those employed in another country, into stays of a temporary nature and "indefinite migration".

There are also various studies which classify according to the motives of mobile scholars. We are pointing out three examples.

- In classifying decision-making regarding the purpose and notably the duration of mobility, Daneher et al. (2008, p. 262) point out that a distinction is appropriate into *"teleological" and "ateleological" decision-making*.
- In a study undertaken by William Solesbury & Associates (2005) to summarize the available information on international mobility linked to academic research in the UK, the following typology is presented, which primarily reflects the motives of the mobile scholars: *"intellectual tourists", "career opportunists", "expatriates and exiles", "mature returners" and "international networkers".*
- Dervin (see Dervin/Dirba, 2008, pp. 240-241) differentiates between "solid", "liquid" and "fizzy strangers". "Solid strangers are people who have moved to a different country and plan to stay there" (Dervin names the example of persons getting employed abroad and becoming "attached")… "Liquid strangers are just passing and they usually have a scheduled return home" (Dervin names temporary arrangements)… "Fizzy strangers may be just passing and/or staying" (Dervin names degree-mobile students who may wish to stay in the host country).

4.2 A tentative overview of the issues involved in defining the "mobility" of scholars

The available analyses, first, suggest *differentiating between short-term and long-term mobility of academic staff and researchers*. While many data sets provide information on long-term mobility, only few sources report on short-term mobility. There are publications discussing both short-term and long-term academic staff mobility, but there is not one single data set comprising both short-term and long-term academic staff mobility.

Although terms such as long-term or short-term mobility are frequently used, the actual analyses do not try to distinguish clearly according to the duration of the period in another country. Long-term academic mobility is often viewed as mobility for a period from at least one year to the entire professional life, while short-term academic mobility is, as a rule, regarded as lasting one year at most. But long-term mobility, in essence, is understood as *mobility comprising the move to another workplace*, while short-term mobility is understood as *interruption of the work at a given workplace for a temporary stay in another country*. We have to bear in mind, though, that there is not always a clear distinction in that respect. For example, in some cases a move to another work place might be made under the condition that the old work place is kept open for a period of a year or more for a possible return. In reverse, an interruption of the work for a temporary stay in another country might last longer than one year and might eventually lead to a move to a workplace in this country.

Second, short-term international mobility of academic staff (and possibly researchers outside higher education as well) is often described not in terms of duration, but rather by a list of terms naming the possible reasons for being away from the home institutions for a while, e.g. *visits, exchanges and sabbaticals*. These are terms explaining the interruption of work in the logic of the home institution where the mobile person has worked when she or he took off, but they neither explain the modes of funding nor the purposes of the stay abroad, e.g. information gathering, research, teaching, etc.

Certainly, there is the question of a minimum threshold of short-term mobility for being included in any data set of international mobility: should the attendance at a two-day or three-day conference already be included? When the Finnish Ministry of Education awarded special funds for highly internationalised universities in the 1990s, it included visits abroad of academic staff of at least two weeks as a threshold. In contrast, teaching staff mobility in the ERASMUS Programme has an

average duration of only about six working days. In other words, the ERASMUS stays are in some cases not longer than a visit abroad for the purpose of attending a single conference.

There are various possible modes of gathering information on short-term mobility, for example

- statistics of fellowships awarded (e.g. in the framework of the ERASMUS Programme or of nationally financed programmes run by various internationalisation agencies),
- statistics of institutions of higher education registering visitors or stays abroad of their academic staff, and
- analyses of biographical accounts (CVs) of individual scholars.

Third, long-term international mobility of scholars is best characterized by *work mobility*. Even though some analyses of long-term mobility make use of *employment data* (labour force surveys and collections of data from employers, amongst others), most analyses take into account that *work in another country can be undertaken with the help of fellowships* (e.g. a post-doctoral fellowship) and on a *self-paying basis* (e.g. for doctoral study). Moreover, work in another country might be undertaken upon the initiative and with financial support of and continuous employment by the "home" employers. These cases of being sent abroad by one's employer cannot be traced with the help of employment statistics.

As a consequence, sources other than labour statistics are useful in this context, for example statistics on long-term fellowships (e.g. Marie Curie). It should be added that many analyses include periods of academic training and learning periods, if these are viewed as at least in part academically productive (e.g. doctoral study, but not the study periods preceding doctoral study).

Fourth, most studies on work mobility of scholars actually focus on *current mobility* (or on mobility in the immediate past, if the analyses collect information over a certain period of time or if the award of academic qualifications is analysed). No information on the possible occurrence ('event') of multiple moves over time is collected in this framework. The data base for these studies are, as a rule, current employment or work statistics comprising information on current location as well as at least a single item which helps to define mobility (for example, current citizenship, or place of prior work or study).

Fifth, analyses of current or very recent work mobility need, as already pointed out, at least a single *previous point of reference, i.e. a country* other than the present one, from which the move to another country has started. In regular employment and work statistics, the reference point most often used is the current citizenship; one less frequently finds data sets where the reference point is the current permanent residence or the citizenship or the permanent residence at birth. Such measures, however, would not indicate 'genuine mobility' because they could include persons with a foreign citizenship or residence by virtue of the migration of their parents or ancestors who were never mobile for the purpose of study or academic work. Analyses aimed at measuring 'genuine' current mobility would have to include information on the country of study or work at more than a single reference of their career.

Sixth, analyses can be designed in such a way that they identify possible *multiple events of mobility in the life course*. This might comprise mobility during the entire life-course up to the moment of data collection, mobility in the course of study as well as mobility in the course of academic work. Such studies might provide information on both work mobility and short-term mobility in the form of visits, exchanges and sabbaticals. Mobility can be defined in respect to various reference points starting with citizenship (or permanent residence) at birth, education or residence immediately prior to study in higher education, location of the university awarding the degree, or citizenship at that time, location of doctoral award or citizenship through various career stages to a current stable employment position, citizenship or permanent residence. Multiple-event mobility is analysed, as a rule, either by means of graduate surveys (former university graduates, former awardees of a

doctoral degree), surveys of current workers (e.g. a survey of the academic profession) or the analysis of CVs.

Seventh, in many analyses, the intention is expressed to get to know whether mobility is *temporary or permanent* (e.g. “migration”). In some cases, the *contracts and the funding base* are taken as proxies: persons staying in another country on a fixed-term contract or those staying there on a fellowship are regarded as temporarily mobile, while persons employed in another country on a contract of unlimited duration are viewed as permanently mobile. Other experts suggest that intentions should be surveyed in order to differentiate between permanent and temporary mobility. Yet others, finally, argue that permanent mobility of academic staff and researchers (similar to degree mobility of students) can only be established post-hoc, i.e. at the end of the academic career.

5 A glance at available data

The following overview of available data does not follow the same systematic logic which has characterised this chapter so far. Rather, it pragmatically picks those areas which are best covered by the available data. Mobility data will be presented for

- doctoral candidates and persons awarded a doctoral degree,
- academics and researchers in general,
- mobility in the framework of EU funding programmes, and
- selected examples of national data collections on different themes or collections from those data addressed in the preceding sections.

5.1 Foreign and mobile doctoral candidates and persons awarded a doctoral degree

Statistics of doctoral students/candidates

In the framework of education statistics, doctoral candidates and persons awarded a doctoral degree are regarded, as already pointed out, as students and graduates of advanced studies (classified as ISCED 6). However, in the framework of science statistics, doctoral candidates and persons having been awarded a doctoral degree are seen as the first category of young researchers.

According to a report published by the European Commission (2007b, pp. 56-57; see also European Commission, 2008, p. 121), about 28 400, i.e. 5.8%, of the total of 487 000 doctoral candidates in 2007 in the 21 EU countries for which data were available had the nationality of another EU member state. Further, 5 300 persons, i.e. 1.1%, had the nationality of another European country, and 62 600 persons, i.e. 13%, had the nationality of other states. Thus, altogether about 20% of the doctoral candidates in Europe are foreigners.

Statistics of doctoral awards

UOE statistics also collect data on doctoral awards. According to information provided by EUROSTAT, data are available on the number of mobile students defined by prior education abroad for six countries, of mobile students defined by prior residence abroad for nine countries and of foreign students defined by citizenship for 21 countries.

Table 1: Doctoral awards* to foreign and mobile persons in Europe 2006/07**

Country**	Total doctoral awards	Prior education abroad		Prior residence abroad		Foreign citizenship		Graduation rate***	
		Abs.	%	Abs.	%	Abs.	%	All	For./Int.
Austria	2 085	462	22.2	323	15.5	470	22.5	1.9	0.4
Belgium	1 716	.	.	.		. 477	27.8	1.3	0.4
Bulgaria	621	.	.	.	.	21	3.4	.	.
Czech Republic	2 272	.	.	102	4.5	133	5.9	1.4	0.1
Denmark	973	.	.	59	6.1	191	19.6	1.3	0.1
Estonia	153	.	.	7	4.6	6	3.9	0.8	0.0
Finland	1 925	196	10.2	.	.	204	10.6	2.9	0.3
France	10 650	.	.	.	.	3 065	28.8	2.9	0.3
Germany	23 843	3 487	14.6	.	.	3 499	14.7	2.3	0.3
Hungary	1 059	.	.	.	.	58	5.5	0.7	0.0
Iceland	10	.	.	.	.	3	30.0	0.2	0.0
Italy	10 188	.	.	.	.	356	3.5	1.3	0.1
Liechtenstein	4	.	.	4	100.0	4	100.0	.	.
Lithuania	367	23	6.3	20	5.4	20	5.4	.	.
Norway	980	.	.	55	5.6	216	22.0	1.5	0.1
Portugal	6 038	.	.	.	.	507	8.4	3.7	0.3
Romania	2 983	58	1.9	.	.	.	.	.	.
Slovakia	1 371			.	.	26	1.9	1.6	0.0
Slovenia	415	.	.	15	3.6	15	3.6	1.4	0.1
Sweden	3 904	.	.	209	5.4	857	22.0	3.3	0.2
Switzerland	3 428	1 451	42.3	.	.	1 461	42.6	3.3	1.4
Turkey	3 357	.	.	.	.	100	3.0	0.3	0.0

* Graduates of ISCED 6

** No data available on Greece, Ireland, Latvia, Luxembourg, Malta, the Netherlands, Poland, Spain and the United Kingdom

*** Additional information provided in OECD, 2009, p. 75

Source: Data provided by EUROSTAT

As Table 1 shows, altogether

- 12% of all doctoral awards were granted in 2006/07 to mobile persons in the six countries where mobility is defined by prior education,
- 7% in the nine countries where mobility is defined by prior residence, and
- 16% in the 21 countries where data were available on (foreign) nationality of students.

It should be noted that some of the countries which did not provide EUROSTAT with data on doctoral awards were such with relatively high quotas of foreign students. This holds true, for example, for the UK and the Netherlands.

Table 1 indicates that the proportion of foreign doctoral candidates in select European countries who had not been mobile for the purpose of work on dissertation is quite small. In contrast to study in bachelor, master or similar programmes, where data on mobile students differ substantially from data on foreign students, the number on doctoral awards in Europe for foreign incoming persons – according to incomplete available statistics – differ only marginally from the number of all foreign persons. Therefore, we can estimate that almost 20% of doctoral titles in the 32 European countries addressed in this study are awarded to foreign mobile persons and only slightly more to all foreign persons.

OECD data show that the number of doctoral awards to foreign and/or mobile persons in European countries in 2007 corresponds to slightly more than 0.2% (country average) of the respective age group. The total rate of doctoral awards (home country citizens and foreigners) of the respective age group is 1.5% (country average).

5.2 Foreign and mobile scholars

Foreign scholars

As already pointed out, UOE statistics (jointly collected by UNESCO, OECD and EUROSTAT) do not provide information on foreign citizenship and on mobility of teaching staff in higher education. The EUROSTAT science data also provide little information in this respect. In 2004 or 2005, information on the proportion of foreign researchers (HC) was made available only by a few countries – all of them new EU member states (European Commission, 2007b, p. 80). The proportion of foreign researchers was

- 3.2% in the Czech Republic,
- 1.8% in Hungary,
- 1.4% in Estonia,
- 1.1% in Malta,
- 1.0% in Slovakia.

These countries certainly have smaller proportions of foreign scholars than the average of European countries. In the early years of the 21st century, the proportion of foreigners among all persons with a higher education degree had already surpassed 5%, and it is generally assumed that the rate of academic mobility in higher education is higher than mobility among all graduates from higher education.

Foreign human resources in S&T

The European Commission (2008, p. 120) shows, in this context, that the ratio of "non-nationals" in the "Human Resources in Science and Technology Core (HRSTC)" (including technicians and associate professionals, the degree of whose actual involvement in research is unknown) in 2006

- with another EU-27 citizenship was 2.9%, and
- with citizenship of a non-EU country was 2.2%.

Foreign and foreign born doctorate holders

The OECD has started a project aiming at collecting information on all doctorate holders in the adult population. Only three European countries provided data for 2004: Portugal reported a rate of 4.5% of foreign doctorate holders, Germany of 7.4% and Switzerland of even 30.1% (see Table 2).

Table 2: OECD survey of doctorate holders 2004 (percentage of foreign nationals)

	Foreign citizens			Foreign born		
Country	**Men**	**Women**	**Total**	**Men**	**Women**	**Total**
Germany	**5.6%**	**9.4%**	**7.4%**	**11.4%**	**14.4%**	**12.6%**
Portugal	**4.2%**	**5.0%**	**4.5%**	**15.2%**	**14.1%**	**14.7%**
Switzerland	*	*	**30.1%**	*	*	*

Source: Auriol, 2007, p. 22

Table 2 shows that "the stock of people foreign-born is larger than that of foreign nationality … The reason for this is that the foreign-born reflect the cumulative entries of immigrants into the country across the years, a part of whom has acquired the nationality/citizenship of the recipient country" (Auriol, 2007, pp. 21-22). Actually, as Table 2 indicates, about 5% of the doctoral degree holders in Germany are Germans who were born abroad, and about 10% of doctoral degree holders in Portugal are Portuguese born abroad.

Foreign citizenship and residence abroad of scholars at various life stages

More detailed information is provided by the comparative survey "The Changing Academic Profession" (see basic information on this study in RIHE 2008, 2009). This survey was undertaken in 2007 and 2008 and yielded responses from more than 25 000 academics employed at higher education institutions in 18 countries, among them six European countries (Finland, Germany, Italy, Norway, Portugal and the UK). The respondents were asked to provide information on both the country of citizenship and the country of residence at three points in their life-course: at birth, at the time of the first degree and at the time the survey was conducted. Table 3 indicates an enormous variation by country.

- More than 40% of the responding academics from the UK were foreigners. A substantial proportion of them, however, had been British citizens at birth, spent some period abroad and changed citizenship, and eventually returned to the UK.
- Almost 20% of Norwegian academics were foreigners. The large figure of first degrees abroad amongst the junior academic staff suggest that degree study abroad has, in recent decades, become popular with those Norwegian students who eventually decide to embark on an academic career.
- In Germany, about 6% of academics at universities and a smaller percentage at other institutions of higher education were foreigners. A clearly smaller proportion of the present

academics had been foreigners at earlier stages and a smaller proportion of German academics had been abroad for degree study.

- In Portugal, only very few university professors had a foreign nationality and studied abroad for a degree. Amongst professors from other (non-university) higher education institutions, a noteworthy proportion had lived abroad at birth. Amongst junior academic staff, we note larger proportions of mobile and foreign persons than amongst professors.
- The proportion of foreign and mobile scholars in Italy was exceptionally small.

Table 3: Foreign citizenship and residence abroad at various life stages of academic staff in six European Countries 2007 (percentage)

Citizenship / residence	FI	DE	IT	NO	PT	UK
a. University professors						
Foreign citizenship at birth	6	8	1	19	1	17+++
Other country of residence at birth	4	9	2	19	2	18+++
Foreign citizenship at time of 1st degree	5	8	1	22	2	41
Other country of residence at time of 1st degree	5	12	1	24	3	34
Foreign current citizenship	4	6	0	19	1	41
Other current country of residence	1	0	0	10++	0	2
b. Junior academic staff at universities						
Foreign citizenship at birth	12	8	1	22	5	22+++
Other country of residence at birth	9	9	2	24	10	22+++
Foreign citizenship at time of 1st degree	11	6	1	54 +	6	51
Other country of residence at time of 1st degree	12	9	1	54	4	44
Foreign current citizenship	10	6	1	22	3	47
Other current country of residence	0	1	0	17++	1	2
c. Professors at other HEIs						
Foreign citizenship at birth	4	4	*	22	7	**
Other country of residence at birth	2	5	*	28	11	**
Foreign citizenship at time of 1st degree	4	4	*	20	0	**
Other country of residence at time of 1st degree	2	3	*	28	0	**
Foreign current citizenship	3	2	*	18	0	**
Other current country of residence	0	1	*	10++	0	**
a. Junior academic staff at other HEIs						
Foreign citizenship at birth	2	5	*	7	5	32+++
Other country of residence at birth	1	7	*	18	6	24+++
Foreign citizenship at time of 1st degree	2	5	*	48+	4	52
Other country of residence at time of 1st degree	3	7	*	48	2	45

Citizenship / residence	FI	DE	IT	NO	PT	UK
Foreign current citizenship	2	5	*	15	1	44
Other current country of residence	0	0	*	11	0	0

Legend:

FI=Finland, DE=Germany, IT=Italy, NO=Norway, PT=Portugal, UK=United Kingdom

* No other higher education institutions, ** Absolute number of respondents too low

+ Possibly wrong responses ++ Distinct concept of residence +++ If the responses are correct, many British citizens take up foreign citizenship during the life course, but later work at higher education institutions in the UK

Source: Unpublished survey data of the study "The Changing Academic Profession" (CAP) provided by International Centre for Higher Education Research, University of Kassel (INCHER-Kassel), Germany

Life-course mobility of well-known researchers

An analysis of the CVs of highly-cited researchers (Gurney and Addams, 2005) suggests that the best known researchers are, by far, more mobile than academics on average, as Table 4 shows.

- Of the highly-cited researchers born in Germany, as many as 43% moved to other countries. The respective figures ranged from 0% from Switzerland, 7% to 10% from France, the UK and the Netherlands and 19% of those from Italy.
- Of the highly-cited researchers working in Switzerland, 64% were born in another country. The respective figures were 0% in Italy, 10% in the Netherlands, almost 20% in both France and the UK and as many as 27% in Germany.
- 88% of researchers in Switzerland had some kind of foreign work experience. In most other countries, the percentage was about half of the Swiss figure; in France, it was only 22%.

Table 4: Patterns of highly-cited scientific researcher mobility in selected European countries (percentage)

Country	Highly-cited researchers born in this country and working elsewhere	Highly-cited researchers working in this country and born elsewhere	Highly-cited researchers with any experience non-home work
France	7	18	22
Germany	43	27	53
Italy	19	0	61
The Netherlands	10	10	50
Switzerland	0	64	88
United Kingdom	9	19	45

Source: Adapted from Gurney and Adams 2005, Tables 3.2 and 3.6.

"Mobility situation"

In 2007/08, a survey was undertaken on present mobility as well as on the intention to become mobile (IDEA Consult, 2008). Of the more than 3 000 respondents, 24% reported that they were currently mobile and 22% reported that they had been mobile in the past. 35% stated an intention to become mobile in the future, while only 18% expressed no interest in mobility at all. These findings cannot be viewed as representative, however, because the announcement of the study and the search for respondents was obviously bound to stimulate more responses from mobile researchers than from non-mobile ones.

In an analysis of the data files collected in the framework of the "MOMO" project, various data could be compared for the countries included in the study. Table 5 shows that the proportion of foreign doctorate holders is higher than that of foreigners among all researchers, in all countries for which information is available in both respects. This suggests that foreigners are more highly qualified than home country researchers and, eventually, more frequently awarded doctoral degrees. In contrast, there is no consistent pattern across countries in the differences between all researchers and professions in science and engineering institutes. Finally, we note that the proportion of foreigners amongst science, engineering and technology (SET) professionals in higher education is, in most cases, higher than the respective proportion of SET professionals in R&D institutes; it is also – in most cases – higher than the respective proportion amongst all researchers.

Table 5: Key figures on foreign and mobile researchers in selected European countries around 2005 (percentages)

	FR	DE	NL	NO	PL	UK
Foreigners among all doctorate holders	*.	6.0	6.2	15.2	*	11.7
Foreigners among all researchers	4.8	6.2	4.5	8.4	0.2	10.2
Foreigners among SET* professionals in R&D institutions	7.3	18.5	*	6.7	0.4	5.8
Foreigners among SET* professionals in higher education	8.1	13.6	4.1	9.4	0.7	15.5

Legend:

FR=France, DE=Germany, NL=the Netherlands, NO=Norway, PL=Poland, UK=United Kingdom

* Professionals in science, engineering and technology

Source: ERAWATCH Network ASBL (2006), pp. 18, 23-33, 73-78

5.3 Mobility of scholars in the framework of EU Programmes

ERASMUS teaching staff mobility

In the framework of the ERASMUS Programme, academic staff from institutions of higher education can be granted travel subsidies for a period of teaching in another eligible European country. Such grants for teaching staff mobility were available from the beginning of the programme in 1987/88. An analysis of coordinator reports showed that more than 1 400 teachers were mobile in the framework of ERASMUS in 1990/91 and spent on average 24 days in the host country (Teichler and Maiworm, 1997, pp. 172-178).

With the launch of SOCRATES in 1995, support for teaching staff mobility increased. Statistical data were collected on the number of "expected" mobile teachers, i.e. the numbers stated in the successful applications (approvals). This figure increased from 13 886 in 1995/96 to 40 891 in 1999/2000 (Teichler 2002, p. 47). According to a survey undertaken at that time, the average duration of the teaching period abroad was eight days.

From 2000/01 onwards, statistics were collected on the actual numbers of mobile teachers. This figure increased (according to the count of outgoing teachers) from 14 356 in 2000/01 to 15 872 in

2001/02, 16 934 in 2002/03, 18 414 in 2003/04, 20 877 in 2004/05, 23 449 in 2005/06, 25 805 in 2006/07, 32 040 in 2007/08, and eventually 36 389 in 2008/09. The average duration reported for 2004/05 was six days. Since 2007/08, the ERASMUS staff numbers include both staff mobile for teaching as well as for training purposes. Table 6 indicates that the numbers of outgoing and incoming mobile teachers in 2008/09 were fairly balanced in the majority of countries. In Germany, the country with the highest numbers, there were 3 134 outgoing and 3 777 incoming staff members. However, in some Central and Eastern European countries as well as in Turkey, the numbers of outgoing teachers were considerably higher than those of incoming teachers.

An OECD study provided information on the actual share of mobile ERASMUS teachers amongst all academic staff in selected European countries for the academic year 2004/05 (see Santiago et al., 2008, p. 247). According to this study, the ratio of incoming ERASMUS teachers to home academic staff ranged from 1.1:100 in Poland and the UK to 6.5:100 in Finland. The percentage of outgoing teachers ranged from 1.1 in the UK to 5.6 in Spain. The respective range of percentages were

- relatively high in Spain (4.9% and 5.6%), Finland (6.5% and 3.0%) and the Czech Republic (3.0% and 5.0%),
- about average in Belgium (3.2% and 3.4%) , Iceland (2.6% and 3.0%) as well as – at least for incoming academic staff – in Greece (2.3% and 1.5%) and Portugal (2.6% and 1.6%), and
- relatively low in France (1.7% and 1.5%), Sweden (1.5% and 1.4%), the Netherlands (1.2% and 1.5%), Poland (1.1% and 1.5%) and in the UK (both 1.1%).

Matrix 1: ERASMUS staff mobility in 2008/09 by country of home and host institution (European Commission)

Country of home institution	Country of host institution																														
	AT	BE	BG	CY	CZ	DE	DK	EE	ES	FI	FR	GR	HU	IE	IS	IT	LI	LT	LU	LV	MT	NL	NO	PL	PT	RO	SE	SI	SK	TR	UK	Total
AT	0	24	12	4	36	109	17	9	73	71	51	18	24	18	3	55	0	25	0	17	3	29	24	27	25	30	33	32	12	38	59	878
BE	29	0	20	5	21	48	21	17	130	116	175	30	20	17	2	66	2	29	0	6	8	83	26	70	79	45	57	10	10	43	39	1 224
BG	28	29	0	0	37	97	5	4	23	8	67	26	19	2	0	44	0	14	0	9	1	11	1	45	23	26	10	14	14	32	50	639
CY	5	7	1	0	3	7	1	2	7	8	5	30	3	3	0	3	0	8	0	2	1	7	0	1	3	1	1	0	4	0	8	121
CZ	91	46	44	6	0	324	30	15	167	132	175	52	42	22	3	100	2	40	0	20	41	61	32	236	131	26	29	43	398	114	158	2 580
DE	153	45	62	8	124	0	52	39	339	205	281	62	150	55	12	221	0	70	3	61	6	114	57	276	70	124	95	23	40	139	248	3 134
DK	8	12	3	3	2	41	0	2	39	18	18	4	4	5	8	13	0	14	0	4	4	24	33	6	10	7	11	1	2	30	39	365
EE	12	17	9	0	4	56	18	0	26	83	19	3	4	2	2	42	0	25	0	22	11	19	8	10	21	2	16	4	4	9	26	474
ES	90	123	15	2	68	374	47	14	0	131	480	61	29	75	8	937	0	16	0	5	6	82	25	135	453	54	82	21	16	44	302	3 695
FI	74	102	8	9	59	216	40	88	166	0	105	21	58	25	13	81	0	50	2	16	9	112	28	54	48	23	71	26	16	24	174	1 718
FR	42	109	62	9	116	243	34	16	434	65	0	87	97	46	8	346	0	38	0	12	8	43	28	229	83	340	59	9	28	58	191	2 840
GR	14	20	8	26	14	62	11	4	56	23	78	0	18	4	0	50	0	5	0	6	2	14	6	23	11	15	8	1	4	28	51	562
HU	57	42	12	2	26	212	7	6	45	82	106	11	0	8	1	88	0	9	0	0	6	57	10	35	29	94	23	12	52	57	58	1 147
IE	14	9	2	2	3	34	7	2	21	10	43	1	2	0	1	9	0	1	0	1	3	13	0	12	2	1	6	2	3	3	10	217
IS	7	1	1	0	1	4	13	3	7	11	12	1	0		0	8	0	1	0	3	0	6	0	3	0	0	9	1	1	0	7	100
IT	53	56	12	7	29	146	17	21	487	40	289	41	45	23	7	0	0	28	0	16	19	45	17	99	88	63	44	14	25	63	126	1 920
LI	0	2	0	0	0	2	0	0	0	1	0	0	1	0	0	0	0	0	0	0	1	2	0	0	0	0	2	0	0	0	2	13
LT	33	33	16	13	43	96	37	27	62	81	53	12	22	4	2	54	0	0	0	87	1	21	15	120	78	12	28	13	12	62	53	1 090
LU	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	2	0	0	0	0	0		0	0	0	0	0	0	0	0	0	3
LV	24	16	9	9	26	90	10	35	33	62	27	18	6	3	3	19	0	111	0	0	0	16	32	59	14	6	22	4	5	21	17	697
MT	1	8	0	2	3	1	1	1	6	3	3	0	0	5	0	10	0	0	0	1	0	1	0	3	3	0	4	0	0	1	19	76
NL	29	56	7	0	13	106	14	6	45	88	49	7	13	12	4	40	0	10	0	12	3	0	31	39	28	17	44	10	19	43	97	842
NO	18	14	0	0	20	68	32	7	36	30	14	7	7	11	0	14	0	12	0	12	3	19	0	8	20	1	28	0	10	0	79	470
PL	95	82	48	15	349	634	70	33	466	121	276	64	74	19	14	393	1	208	0	65	12	74	78	0	221	41	87	72	275	211	242	4 340
PT	7	45	11	3	28	39	11	11	246	48	54	22	8	12	1	93	0	15	1	3	3	33	20	32	0	30	16	19	7	32	37	887
RO	42	43	16	0	20	134	19	0	120	9	360	61	95	1	0	154	0	7	0	1	6	20	4	26	53	0	1	6	5	33	25	1 261
SE	26	16	7	0	22	71	11	9	67	27	51	16	20	6	18	56	0	22	0	8	0	43	25	28	11	1	0	7	2	30	84	684
SI	22	8	11	2	28	34	7	2	33	27	20	3	14	5	1	14	0	15	0	0	0	10	8	18	34	1	3	0	3	15	20	358
SK	12	10	9	7	245	42	2	5	27	25	29	10	44	2	1	24	0	5	0	6	1	23	6	95	10	4	3	12	0	14	14	687
TR	38	41	24	2	110	252	29	9	101	52	57	37	104	7	0	159	0	48	0	26	4	62	0	138	52	62	46	7	36	0	92	1 595
UK	45	33	40	17	76	235	61	17	183	144	181	61	37	6	6	128	0	33	0	14	18	98	47	77	31	34	93	8	8	40	1	1 772
Total	1 069	1 049	469	153	1 526	3 777	624	404	3 445	1 721	3 078	766	961	398	118	3 223	5	859	6	435	180	1 142	561	1 904	1 631	1 060	931	371	1 011	1 184	2 328	36 389

As the number of students in Europe is about 15 to 20 times higher than the number of teaching staff, a comparison of ERASMUS data on student mobility and staff mobility allows us to conclude that the rate of teaching staff mobility in 2008/09 was more than twice as high as the rate of student mobility in the framework of ERASMUS. Of course, we have to bear in mind in the comparison that the average duration of ERASMUS teaching staff mobility is less than ten days, while that of ERASMUS student mobility is more than half a year.

Marie Curie fellowships

According to a report published by the European Commission in 2008, the number of Marie Curie Fellowships corresponds to 4% of annual doctoral awards in the EU (measured as country average). A rate of Marie Curie doctoral fellowships above 8% was reported for Denmark and Belgium. In contrast, a rate of less than 1% was reported for the following countries: Turkey, Slovakia, Lithuania, Romania, Estonia and Latvia.

Tables 6 and 7 contain the numbers of Marie Curie Fellows who were mobile up to 2008 in the 7th Framework Programme of the European Union (FP7). There was a total of 4 218 fellows, of whom 2 382 on "individual fellowships" and 1 836 in the framework of the "host-driven actions". 1 602 of the total were "early stage researchers", 2 008 "experienced researchers" and 852 "MERs" (researchers with at least ten years of experience). The average stay in the "individual fellowships" was 31 months, and in the host-driven actions, 47 months.

Table 6: Marie Curie mobile researchers by type of researcher, duration of stay abroad and type of Marie Curie action (European Commission)

a. Individual fellowships

Duration / Type of Researcher	0 - 12 months		12 - 24 months		24 - 36 Months		36 - 48 months		TOTAL	
	Abs.	%	Abs.	%	Abs.	%	Abs.	%	Abs.	%
ESR	8	2.7%	171	57.4%	73	24.5%	46	15.4%	**298**	**100%**
ER	18	1.1%	962	59.7%	393	24.4%	238	14.8%	**1 611**	**100%**
MER	30	6.3%	197	41.6%	119	25.2%	127	26.8%	**473**	**100%**
TOTAL	**56**	**2.4%**	**1 330**	**55.8%**	**585**	**24.6%**	**411**	**17.3%**	**2 382**	**100%**

b. Host-driven actions

Duration / Type of Researcher	24 - 36 months		36 - 48 months		TOTAL	
	Abs.	%	Abs.	%	Abs.	%
ESR	34	2.6%	1 270	97.4%	**1 304**	**100%**
ER	30	7.6%	367	92.4%	**397**	**100%**
MER	16	4.0%	119	30.0%	**397**	**100%**
TOTAL	**80**	**4.4%**	**1 756**	**95.6%**	**1 836**	**100%**

Table 7: Marie Curie mobile researchers, by country of home and host institution and by type of researcher (individual and host-driven actions combined)

Type of researcher*		ESR		ER		MER		Total	
Direction of mobility		Out	In	Out	In	Out	In	Out	In
Country									
AT	Austria	31	54	33	49	10	20	**74**	**123**
BE	Belgium	20	46	45	45	8	6	**73**	**97**
BG	Bulgaria	16	4	6	4	3	3	**25**	**11**
CH	Switzerland	29	119	67	122	15	20	**111**	**261**
CY	Cyprus	3	*	8	5	1	1	**12**	**6**
CZ	Czech Republic	14	17	21	15	15	23	**50**	**55**
DE	Germany	167	242	174	171	40	42	**381**	**455**
DK	Denmark	6	30	28	31	8	8	**42**	**69**
EE	Estonia	5	*	4	3	1	1	**10**	**4**
ES	Spain	63	80	222	141	35	65	**320**	**286**
FI	Finland	13	16	21	20	3	6	**37**	**42**
FR	France	137	195	175	196	50	57	**362**	**448**
GR	Greece	41	44	55	70	25	31	**121**	**145**
HU	Hungary	22	11	28	14	13	11	**63**	**36**
IE	Ireland	21	18	31	34	8	19	**60**	**71**
IS	Iceland	2	2	2	10	6	7	**10**	**19**
IT	Italy	190	92	147	87	36	42	**373**	**221**
LI	Liechtenstein	*	*	1	*	1	*	**2**	**
LT	Lithuania	6	3	*	1	1	*	**7**	**4**
LU	Luxembourg	*	1	1	*	*	*	**1**	**1**
LV	Latvia	1	1	1	1	1	1	**3**	**3**
MT	Malta	2	*	1	*	*	*	**3**	**
NL	Netherlands	38	129	75	104	16	19	**129**	**252**
NO	Norway	7	13	6	15	7	4	**20**	**32**
PL	Poland	70	20	42	21	16	9	**128**	**50**
PT	Portugal	24	19	31	28	22	27	**77**	**74**
RO	Romania	22	9	1	4	6	3	**29**	**16**
SE	Sweden	31	52	48	55	12	15	**91**	**122**
SI	Slovenia	1	6	12	7	2	1	**15**	**14**
SK	Slovakia	8	6	9	6	5	2	**22**	**14**
TR	Turkey	35	11	47	39	12	11	**94**	**61**
UK	United Kingdom	89	311	234	523	61	97	**384**	**931**
Europe 32 subtotal		**1 114**	**1 551**	**1 576**	**1 821**	**439**	**551**	**3 129**	**3 923**
Other countries and regions subtotal		**488**	**50**	**432**	**187**	**169**	**57**	**1 089**	**295**
TOTAL		**1 602**	**1 601**	**2 008**	**2 008**	**608**	**608**	**4 218**	**4 218**

*ESR – early-stage researcher (0-4 years of experience; ER – experienced researcher (4-10 years of experience); MER – more experienced researcher (more than 10 years of experience)

Source: European Commission

The host country with the largest number of Marie Curie Fellows was the UK (931), with a considerable advance on the next most frequent host countries, followed by Germany (455) and France (448). At the sending end, the UK also led (384), followed by Germany and Italy. Some smaller countries, such as Switzerland (261) and the Netherlands (252), received larger numbers, too, and clearly larger proportions of Marie Curie Fellows amongst the doctoral candidates in their respective countries.

On average, incoming and outgoing movements are relatively balanced across the Europe 32 region. Overall, incoming movement exceeded outgoing flow by about one quarter (in: 3 932; out: 3 129). Amongst the "net importers" with larger numbers, the UK and Switzerland stand out, with more than two incoming fellows for one outgoing. Amongst larger-scale "net importers", Italy has almost two outgoing fellows for one incoming (1.7:1) and Poland even two and a half outgoing fellows.

5.4 Information from individual European countries

The UK: foreign and migrant academic staff

In the UK, the Higher Education Statistics Agency (HESA) annually collects the numbers of "non-UK" academic staff, as well as the numbers of "immigrants" and "emigrants" (since the previous year). Table 8 summarizes the findings of an analysis of the available data undertaken for the period from 1995/96 to 2002/03 (Sastry, 2005).

According to this analysis, the proportion of foreign academic staff has increased within seven years from 17% to 25%. During this period, the annual emigration grew from 2.2% to 2.8%. The immigration ratio is higher, but growth is not continuous: it increased from 3.2% in 1995/96 to 3.9% in 2000/01, but fell thereafter to 3.3% in 2002/03. Less than half of the immigrants came from EU-15 countries, and less than half of the emigrants went to EU-15 countries. During the period analysed, the proportion of citizens of the UK returning to academic work in the UK decreased from annually 1.0% of the total academic staff to 0.7%. In contrast, the proportion of UK academics leaving the UK increased slightly from 0.8% to 0.9%.

Table 8: Foreign and migrant academic staff in the United Kingdom (1995/96 to 2002/03)

	1995/96	2000/01	2002/03
Total staff	98 810	107 847	111 809
Non-UK (absolute figures)	16 760	23 747	27 758
Non-UK (percentage)	17.0%	22.0%	24.8%
Immigrants (absolute figures)			
Total immigrants	3 143	4 209	3 671
Total UK immigrants	954	848	834
UK immigrants from EU-15	295	278	324
Non-UK immigrants from EU-15	973	1 508	1 233
Total immigrants from EU-15*	1 365	1 873	1 623
Immigrants (percentages)			
Total immigrants	3.2%	3.9%	3.3%
Total UK immigrants	1.0%	0.8%	0.7%
UK immigrants from EU-15	0.3%	0.3%	0.3%
Non-UK immigrants from EU-15	1.0%	1.4%	1.1%
Total immigrants from EU-15	1.4%	1.7%	1.5%
Emigrants (absolute figures)			
Total emigrants	2 149	2 811	3 082

	1995/96	2000/01	2002/03
Total UK emigrants	817	985	1 003
UK emigrants to EU-15	237	286	308
Non-UK emigrants to EU-15	521	806	979
Total emigrants to EU-15*	776	1 120	1 422
Emigrants (percentages)			
Total emigrants	2.2%	2.6%	2.8%
Total UK emigrants	0.8%	0.9%	0.9%
UK emigrants to EU-15	0.2%	0.3%	0.3%
Non-UK emigrants to EU-15	0.5%	0.7%	0.9%
Total emigrants to EU-15	0.8%	1.0%	1.3%
*** Including nationality not known**			

Source: Adapted from Sastry, 2005 (based on HESA Staff record)

The German "Wissenschaft weltoffen" study

According to the 2009 edition of the "Wissenschaft weltoffen" study (DAAD and HIS, 2009), there were 24 904 *foreign academic and artistic staff* at German institutions of higher education (foreign academic staff at institutions providing other types of tertiary education – ISCED 5B – are not included). Amongst them, 8.6% are professors, 60.9% full-time academic staff and 30.5% part-time academic staff (the German terms *hauptberuflich* and *nebenberuflich* differ from the terms employed in the English translation provided in the publication).

The most frequent regions of origin of foreign academic staff in Germany are Western Europe (42.4%), Eastern Europe (23.9%) and Asia (20.0%); the remaining staff were citizens of countries in the Americas (10.0%), Africa (3.1%) and Australia/Oceania (0.7%). By single country, 4-6% each were citizens of Austria, the Russian Federation, China, Italy, France, the US, Spain and the UK.

According to the same publication, 25 727 *foreign academic staff were provided a fellowship for a stay in Germany* in 2007. Amongst the awarding 34 agencies, foundations and research organizations, the German Academic Exchange Service (31.1%), the Max Planck Society (20.8%), the Deutsche Forschungsgemeinschaft (20.4%), the Hermann von Helmholtz Community (14.4%) and the Alexander von Humboldt Foundation (7.4%) stood out while the remaining 29 agencies together provided 6.1% of the fellowships. The number of fellowships had increased from 18 947 in 2001 (21 agencies), i.e. by more than one-third. The fellowships in 2007 were awarded to

- 12 007 (46.7%) doctoral candidates,
- 3 511 (13.6%) persons at the post-doctoral stage, and
- 5 643 (21.9%) researchers/professors.

No information was available on the status of the remaining fellowship holders (18.8%). The largest numbers of fellowship holders came from the Russian Federation (10.6%), the US (7.4%), China (6.9%), India (5.1%), Poland (3.3%), France (2.3%), Italy (2.2%), Ukraine (2.1%), Brazil (2.0%) and Japan (1.9%).

German scholars were awarded 5 464 *fellowships for a stay abroad*. Of those, 38.6% were awarded by the German Academic Exchange Service and 34.2% by the *Deutsche Forschungsgemeinschaft*.

- 46.9% of the recipients were doctoral candidates,

- 11.8% were in the post-doctoral stage, and
- 12.6% were researchers/professors.

Again, information was missing for a substantial number of fellowships (28.7%). The most frequent destinations were the US (26.4%), the UK (10.4%), France (6.2%), Italy (5.1%), the Russian Federation (4.4%), Switzerland (4.2%), Japan (3.6%), Canada (2.6%), Australia (2.4%) and China (2.1%).

Other examples

The widespread habit to interpret high numbers of incoming mobile persons as an indication of the attractiveness of the respective national higher education system is questionable in two respects. First, absolute numbers can obviously be misleading. One may well ask if academic work in Germany is more attractive than in Switzerland, if there is a higher absolute number of foreign scholars in Germany, but a higher relative figure in Switzerland, i.e. a higher number in relation to the number of academic positions. Second, a destination might not have been the favourite destination. For example, according to a survey of internationally mobile doctoral candidates from Italy, almost twice as many named the US as the preferred destination than actually went to the US. Also, more doctoral candidates would have preferred to go to Spain and France than actually went to these countries. There was hardly any difference between the frequency of preferences and the frequency of actual mobility in the cases of Germany, the Netherlands and the UK. In contrast, the actual mobility was clearly above initial intentions in the case of Switzerland, Canada, Belgium and Japan (Avveduto, 2001, p. 235).

6 Conclusions for the future statistical analysis

The analysis of the international mobility of academic staff is more complicated and has to be undertaken in a more complex manner than the analysis of student mobility. The following complicating features require careful consideration.

- The *definition of the "population*" – "academic staff" – is more complicated than the definition of students: Who is an academic, a scholar, a researcher? Should persons be included who are active in academia on the margin of regular employment (e.g. persons doing academic work only for a few hours a week, teaching a single course on the basis of a fee, etc.)? Should those be included who are professionally active in another country without being employed in that country? Should doctoral candidates be included?
- The *sub-division of scholars into different categories*: Beyond categories of disciplines, occupational fields and institutional or economic sectors, one could consider stages of training and productive work, career stages and professional functions (teaching, research and service as well as core academic work versus supportive and associate professional work).
- The *variety of functions* of mobility has to be taken into consideration (e.g. "short-term" visits, exchanges and sabbaticals; long periods of enhancing competences; mid-term professional mobility; migration, etc.).
- Mobility in terms of moving from one country to another can be defined for academic staff and researchers by means of a larger number of *reference points of prior location* than for students. While for students, current citizenship as well as education or residence prior to study in higher education can be viewed as the two most salient reference points, academic staff mobility might be established in referring to current citizenship and

permanent residence, to citizenship and residence at various prior stages (at birth, prior to study at higher education, at the beginning of the academic career, etc.), to locations of study and to locations at various stages of the academic career.

- Finally, the analysis of an *event history of mobility* is more complex in the case of academic staff and researchers than in the case of students. Certainly, however, such an analysis of movements over the life-course, the course of education and the course of an academic career is highly relevant for understanding the international experience of academic staff and researchers.

Obviously, the actually available data base on international mobility of scholars is weaker than the one on international student mobility. Essential information is lacking in various respects. Moreover, the various strands of information are not compatible as far as the definition of the target group, its classification into sub-groups and other features are concerned. This state of affairs might be viewed as calling for modesty regarding possible and likely steps towards the improvement of data. One could argue, in reverse, that far-reaching measures are needed in order to overcome a deplorable state of knowledge and to reach an acceptable minimum level of information on international mobility of scholars.

On the basis of the discourses of concepts – the policy debates at the European and national level, the analysis of methodological issues, the current availability of data and the analyses of findings with the help of available data – we come to the conclusion that

- four different themes of academic mobility ought to be addressed, and
- different approaches of data gathering have to be chosen and different data sets have to be established in order to analyse the four themes of academic mobility.

We suggest to establish appropriate means of data collection and to build up data sets on the following *four themes*:

- *Current mobility of academic staff and researchers* – this is currently already the most strongly emphasized and most frequently analysed theme. Certainly, it should continue to be a key area of information in the future as well; however, as will be pointed out below, major improvements are also essential in this thematic area.
- *Mobility of doctoral candidates and with respect to doctoral awards* should be the second major thematic area of data collection on the mobility of scholars. This early stage of the "formative years of scholars" is viewed in educational statistics as the highest level of study, and, in research statistics, as the first step in the academic career. We support the latter approach and suggest considering mobility in the course of the preparation of a dissertation as an integral part of statistics of mobility of academic staff and researchers. This is appropriate since the core activity of doctoral candidates is a genuine mix of academic learning and productive academic work, and doctoral candidates in many countries are not viewed as students, and because – as a consequence of the previous arguments – statistics of doctoral students include, varying by country, altogether only a proportion of the overall number of doctoral candidates. Statistics of doctoral awards are the single most reliable and valid data source in the domain of statistics on academic mobility at this stage of academic learning and work. Although the actual figures about foreign doctorate holders and foreign mobile doctorate do not differ substantially, it would be preferable to establish ways of measuring genuine mobility instead of the frequently employed statistics on the citizenship of persons awarded a doctoral degree.
- *Visits, exchanges, and sabbaticals* (or any other kind of short stays abroad) are the third thematic area of international mobility, for which regular data collection is commendable. Such stays abroad – mostly taking the form of an interruption of the academic work at the

home institutions for a limited period – are generally viewed as very important features of academic work in order to broaden comparative perspectives, to contribute to teaching abroad, to trace innovative academic approaches, to establish research cooperation, to collaborate within research projects and to disseminate academic knowledge across borders. Therefore, it is important to overcome the current state of highly sketchy and selective information on this thematic area.

- Finally, *academic career mobility* is the fourth thematic area to be taken into account. Improving the data collection in this domain is the most challenging task. This requires an account of the various prior stages of international mobility over the life-course, the course of study and the course of academic work of scholars. Moreover, one has to take into account that the international competences of scholars and the potential of scholars to act successfully across borders cannot be indicated sufficiently by current mobility or recent visits abroad. Rather, the accumulation of experiences – over various stages in life, study and professional work – is the most strategic piece of information.

We cannot expect that single data sets can cover even the minimum information of these four different areas. Therefore, we suggest *establishing four separate data systems* according to these four thematic areas.

- First, there is a need to establish a *comprehensive statistical data collection system on academic staff and researchers* that can comprise information on mobility. *This would require major improvements*: a harmonization of definitions of scholars across sectors, the establishment of similar standards and modes of data collections in the various sectors (higher education, public research institutes, research and similar academic activities in the public sector, research and similar academic activities in the private production and in service sectors). In this framework, it is necessary to *widen the list of items for measuring international mobility* beyond that of current foreign citizenship. Of course, if agreement could be reached that all European countries establish a register of scholars, and if the same format of register would be implemented in all European countries, one could collect more comparable "factual" data than in the usual statistics, e.g. more than a single reference point for identifying mobility. However, the measurement of international mobility of scholars can also be substantially improved in the framework of statistical data collections and of representative surveys.
- Second, the current *data system of measuring mobility at the first academic career level, i.e. the doctoral level*, should, in principle, be kept in place and be improved. The number of (recent) *doctoral awards* (not the number of doctoral candidates and doctoral students) should be viewed as the key information to identify mobility instead of mere foreign citizenship.
- Third, a *completely new system of collecting data on visits, exchanges and sabbaticals* has to be established. We suggest calling upon institutions of higher education, research institutes, and similar entities to collect such data, both regarding their outgoing academic staff and their incoming guests. Any data collection solely relying on data from funding agencies and programmes (e.g. ERASMUS teaching staff mobility) is bound to be incomplete. Also, the analysis of CVs could be a useful instrument, but only if CVs were similarly standardised as the "Diploma Supplement" standardises reports on curricula and students' study activities and achievements. No matter how the data are collected, a need arises to create common guidelines for the types of short-term mobility to be included, the minimum length and similar issues.
- Fourth, *international mobility in the course of the career*, i.e. all events of scholars' mobility up to the point of the data collection, might be measured best through the establishment of a European-wide survey system. This could be a survey system, for example, of university

graduates many years after graduation, of doctoral awardees some years later, or of the academic professors, the researchers at different stages of their career or different age groups. In those cases, retrospective questions could be formulated suitable to elicit information on all of the respondents' previous international moves linked to their academic activities. Moreover, such a survey can also comprise so-called "subjective" information, e.g. that a currently mobile scholar intends to eventually return to the home country or to the previous country, or if the respondent intends to remain in the country where she or he is currently located. Information could be collected, as well, on the motives for mobility, the length of the sojourn, the career stage of the mobile person and the impact of the experience abroad on the individual person.

Finally, we note that the collection of data on the international mobility of scholars (academic staff, researchers, etc.) is still in its infancy. Major steps towards improved data collection are strongly recommended. In the years to come, which will be marked by an intensification of the drive towards the knowledge society, the availability of good data on the mobility of scholars will be essential.

Literature

Adelman, C. (2009). The Spaces Between Numbers: Getting International Data on Higher Education Straight. Washington, D.C.: Institute for Higher Education Policy.

Auriol, L. (2007). Labour Market Characteristics and International Mobility of Doctorate Holders: Results for Seven Countries. Paris: OECD (Science, Technology and Industry Working Papers, No. 2007/2).Retrieved at:

http://www.oecd.org/dataoecd/17/57/38055153.pdf.

Avveduto, S. (2001). "International Mobility of PhDs". In OECD (ed.). Innovative People: Mobility of Skilled Personnel in National Innovation Systems. Paris: OECD Publishing, pp. 243-260.

Commission of the European Communities (2008). Progress towards the Lisbon Objectives in Education and Training: Indicators and Benchmarks 2008. Brussels: Commission of the European Communities.

Cradden, C. (2007). Constructing Paths to Staff Mobility in the European Higher Education Area: from Individual to Institutional Responsibility. Brussels: Education International. Retrieved at: http://download.ei-ie.org/docs/IRISDocuments/Information/Speeches/2007-00024-01-E.pdf.

Danaher, P., Danaher, M. and Danaher, G (2008). „Mobile Academics Down Under: The Ecologies of Practice, Fraternal Itineraries and Professional Identities of three Australian University Lecturers, In: Byram, M. and Dervin, F. (eds.). Students, Staff and Academic Mobility in Higher Education. Newcastle: Cambridge Scholars Publishing, pp. 262-276.

Dervin, F. and Dirba, M. (2008). "Figures of Strangeness: Blending Perspectives from Mobile Academics". In Byram, M. and Dervin, F. (eds.). Students, Staff and Academic Mobility in Higher Education. Cambridge: Cambridge Scholars Publishing, pp. 237-259.

Deutscher Akademischer Austauschdienst and Hochschul Informations System GmbH (2009). Wissenschaft weltoffen 2009: Daten und Fakten zur Internationalität von Studium und Forschung. Bielefeld: W. Bertelsmann Verlag.

Enders, J. (ed.) (2001). Academic Staff in Europe: Changing Contexts and Conditions. Westport, CT: Greenwood Press.

Enders, J. and Musselin, C. (2008). "Back to the Future? The Academic Professions in the 21st Century". In OECD, CERI (ed.). Higher Education to 2030, Volume 1: Demography. Paris: OECD Publishing, pp. 125-150.

Enders, J. and Teichler U. (2005). "Academics' View of Teaching Staff Mobility: The ERASMUS Experience Revisited", in Welch, A. (ed.) (2005). The Professoriate: Profile of a Profession. Dordrecht: Springer. pp. 97-112.

ERAWATCH Network ASBL (2006). Feasibility of Indicators of Researchers' Geographical Mobility and Career Paths. Brussels: ERAWATCH.

EUROSTAT and Hochschul Informations System GmbH (2009). The Bologna Process in Higher Education in Europe: Key Indicators on the Social Dimension and Mobility. Hannover: Hochschul Informations System GmbH.

European Commission (2007a). Key Data on Higher Education in Europe. Luxembourg: Office for Official Publications of the European Communities.

European Commission (2007b). Study: Indicators on Researchers' Stock, Career and Mobility. Brussels. Retrieved at:

http://ec.europa.eu/euraxess/pdf/indicators_on_researchers_en.pdf.

European Commission (2008). A More Research-intensive and Integrated European Research Area: Science, Technology and Competitiveness Key Figures Report 2008/2009. Brussels. Retrieved at:

http://ec.europa.eu/research/era/pdf/key-figures-report2008-2009_en.pdf.

European Commission (2009). ERA Indicators and Monitoring: Expert Group Report. Brussels. Retrieved at:

ftp://ftp.cordis.europa.eu/pub/era/docs/era_indicators&monitoring.pdf.

EURYDICE (2009). Hochschulbildung in Europa 2009: Entwicklungen im Rahmen des Bologna-Prozesses. Brussels: EACEA.

Guellec, D. and Cervantes, M. (2002). "International Mobility of Highly Skilled Workers: From Statistical Evidence to Policy Formation". In OECD (ed.). International Mobility of the Highly Skilled. Paris: OECD Publishing, pp. 71-98.

Gurney, K. and Adams, J. (2005). Tracking UK and International Researchers by an Analysis of Publication Data. Leeds: Evidence Ltd.

Hoffman, D.M. (2008). "Assumptions of Academic Mobility, Educational Quality and 'Our' Finnish Higher Education System". In Byram, M. and Dervin, F. (eds.) (2008). Students, Staff and Academic Mobility in Higher Education. Cambridge: Cambridge Scholars Publishing, pp. 277-291.

Hoffman, D. M. (2009). "Changing Academic Mobility Patterns and International Migration. What Will Academic Mobility Mean in the 21st Century?" Journal of Studies in International Education, Vol. 13, pp. 347 - 364.

IDEA Consult (2008). Evidence on the Main Factors Inhibiting Mobility and Career Development of Researchers. Brussels: European Commission. Retrieved at:

http://ec.europa.eu/euraxess/pdf/rindicate_final_report_2008_11_june_08_v4.pdf.

Kehm, B.M. and Stensaker, B. (eds.). (2009). University Rankings, Diversity and the Landscape of Higher Education. Rotterdam and Taipei: Sense Publishers.

Kelo, M., Teichler, U. and Wächter, B. (eds.) (2006). EURODATA. Student Mobility in European Higher Education. Bonn: Lemmens.

Le Mouillour, I, Lenecke, K. and Schomburg. H. (2005). Human Resources in Research & Development: Monitoring System on Career Paths and Mobility Flows. Kassel: Centre for Research on Higher Education and Work, University of Kassel.

Liberali, R. (2006). "A European Employment Market for Researchers: Challenges and Achievements". In Teichler, U. (ed.). The Formative Years of Scholars. London: Portland Press, pp. 31-40.

Marginson. S. and van der Wende, M. (2007). "Globalisation and Higher Education". In OECD (ed.). Education Working Paper No. 8. Paris: OECD. pp. 62-68. Retrieved at:

http://www.oecd.org/dataoecd/33/12/38918635.pdf.

Marginson. S. and van der Wende, M. (2010). "Europeanisation, International Mobility and Faculty Mobility: Three Cases in Higher Education Globalisation." In OECD, CERI (ed.). Higher Education to 2030. Volume 2: Globalisation. Paris: OECD, pp. 109-144.

McBurnie, G. and Ziguras, C. (2010). "Trends and Future Scenarios in Programme and Institution Mobility Across Borders". In OECD, CERI (ed.). Higher Education to 2030. Volume 2: Globalisation. Paris: OECD, pp. 89-108.

Meek, L.V., Goedegebuure, L., Santiago, R. and Carvalho, T. (eds.). The Changing Dynamics of Higher Education Middle Management. Dordrecht: Springer.

Moguérou, P and di Pietrogiacomo, M. (2007), Project Report: 6th Framework Programme, Priority: Structuring the European Research Area, Specific Support Action: Integrated Information

System on European Researchers II, Deliverables 1, 2 & 3 (final): Indicators on Researchers' Stock, Career and mobility, JRC/European Commission.

Musselin, C. (2004). "Towards a European Academic Labor Market? Some Lessons Drawn from Empirical Studies on Academic Mobility". Higher Education, Vol. 48, No. 1, pp. 55-78.

Musselin, C. (2005). "European Academic Labor Markets in Transition". Higher Education, Vol. 49, No. 2, pp. 135-154.

OECD (2009). Education at a Glance: OECD Indicators. Paris: OECD.

OECD, CERI (2010) (ed.). Higher Education to 2030. Volume 2: Globalisation. Paris: OECD.

Research Institute for Higher Education, Hiroshima University (ed.) (2008). The Changing Academic Profession in International Comparative and Quantitative Perspectives. Higashi-Hiroshima: RIHE (RIHE International Seminar Reports, no. 12).

Research Institute for Higher Education, Hiroshima University (ed.) (2009). The Changing Academic Profession Over 1992-2007: International, Comparative and Quantitative Perspectives. Higashi-Hiroshima: RIHE (RIHE International Seminar Reports, no. 12).

Santiago, P., Tremblay, K., Basri, E. and Arnal, E. (2008). Tertiary Education in the Knowledge Society. Vol. 2: Special Features: Equity, Innovation, Labour Market, Internationalisation. Paris: OECD.

Sastry, T. (2005). Migration of Academic Staff to and from the UK – an Analysis of the HESA Data. Oxford: Higher Education Policy Institute. Retrieved at:

http://www.hepi.ac.uk/files/19BrainDrain.pdf, http://www.hepi.ac.uk/files/19AcademicMobility_HESAdata.pdf.

Shin, J. C., Toutkoushian, R. K., and Teichler, U. (eds.) (2011). University Rankings: Theoretical Basis, Methodology, and Impacts on Global Higher Education. Dordrecht: Springer (in press).

Solesbury, W. & Associates (2005). The Impact of International Mobility on UK Academic Research. S. l. Retrieved at:

http://www.hepi.ac.uk/files/19AcademicMobility_WSAReport.pdf.

Teichler, U. and Maiworm, F. (1997). The ERASMUS Experience. Major Findings of the ERASMUS Evaluation Research Project. Luxembourg: Office for Official Publications of the European Communities.

Teichler U. (ed.) (2002). ERASMUS in the SOCRATES Programme: Findings of an Evaluation Study. Bonn: Lemmens.

Teichler, U. (2007). The Formative Years of Scholars. London: Portland Press.

Teichler, U. (2009). "Student Mobility and Staff Mobility in the European Higher Education Area Beyond 2010". In Kehm, B.M., Huisman, J. and Stensaker, B. (eds.). The European Higher Education Area: Perspectives on a Moving Target. Rotterdam and Taipei: Sense Publishers, pp. 183-201.

Teichler, U., Becker, P., Maiworm, F. and Holtkamp, R. (1990). Experiences and Careers of Science and Engineering Fellows Supported by the European Community. Luxembourg: Office for Official Publications of the European Communities (Research Evaluation, No. EUR 12932 EN).

Vincent-Lancrin, S. (2010a). "Cross-border Higher Education: Trends and Perspectives". In OECD, CERI (ed.). Higher Education to 2030. Volume 2: Globalisation. Paris: OECD, pp. 63-88.

Vincent-Lancrin, S. (2010b). "What is Changing in Academic Research? Trends and Prospects". In OECD, CERI (ed.). Higher Education to 2030. Volume 2: Globalisation. Paris: OECD, pp. 145-172.

Wächter, B. (2006). "Brain Drain: What We Know and What we Do Not Know". In Teichler, U. (ed.). The Formative Years of Scholars. London: Portland Press, pp. 51-66.

Wächter, B. (2008). "Mobility and Cooperation in the European Higher Education Area". In Kelo, M. (ed.). Beyond 2010: Priorities and Challenges for Higher Education in the New Decade. Bonn: Lemmens, pp. 13-42.

Welch, A. (2008). "Myths and Modes of Mobility: The Changing Face of Academic Mobility in the Global Era". In Byram, M. and Dervin, F. (eds.). Students, Staff and Academic Mobility in Higher Education. Cambridge: Cambridge Scholars Publishing, pp. 292-311.

UNESCO (2005). UNESCO Science Report 2005. Paris: UNESCO.

UNESCO (2010). UNESCO Science Report 2010. Paris: UNESCO.

UNESCO Institute for Statistics (2006). International Standard Classification of Education: ISCED 1997. Montreal: UIS.

UNESCO Institute for Statistics (2009). Global Education Digest 2009: Comparing Education Statistics Across the World. Montreal: UIS.

Chapter IV: Student mobility data - Recent achievements, current issues and future prospects

Ulrich Teichler and Irina Ferencz

1 Introduction

The aim of this study, as pointed out in the introductory chapter of this publication, is twofold. On the one hand, the study aims to present and interpret the best available statistical data on mobility, into and out of the 32 European target countries. It does so by undertaking a *secondary statistical analysis*, i.e. by reproducing, sorting and analysing available statistics. On the other hand, the study aims to provide information on the current state of the international data collection on student mobility and its quality. By undertaking such a statistical *meta*-study, we aim to identify the strengths and weaknesses of current methodologies and to propose possible steps towards the improvement of data collection on international student mobility. The first aim – to present data and analyse student mobility trends – has been extensively addressed in Chapters I and II of this volume, as well as in Volume II. The present chapter addresses the second aim and, particularly, a number of relevant methodological issues. It gives an account of the evolution of international data collections on student mobility, pointing to their strengths and weaknesses. It also makes a number of proposals for future data improvement.

It should be stated from the start that student mobility in the framework of this study means *international* student mobility or *border-crossing* mobility (occasionally the terms *transnational mobility* and the *study destination country* are also used*)*. This sort of movement has to be set apart from other types of mobility which are not or not necessarily border-crossing, e.g. inter-institutional mobility, inter-regional mobility and social mobility.

This study relies to a great extent on work carried out in the framework of the 2006 publication *EURODATA: Student Mobility in European Higher Education* (Kelo, Teichler and Wächter, 2006). This previous study, undertaken by the Academic Cooperation Association (ACA) with support of the European Commission, has analysed the data available at the international level on student mobility and their methodological implications, in the academic year 2002/03. In this publication, the chapter addressing methodological aspects of student mobility statistics (Richters and Teichler 2006) already raised a number of issues which also play a role in this chapter. Of them, four items have an immediate relevance for our discussion and are further explored in the present chapter:

- *"From nationality to mobility".* While the public debate focused on student *mobility*, most of the relevant data available at the beginning of the 21st century provided information on the nationality of students, i.e. on *foreign students* and *study abroad students*, and not necessarily on their *mobile* or immobile status. Nevertheless, the previous study did not only give an account of the traditional practice of referring to *nationality* and *citizenship* as proxies for student mobility, but put a prime emphasis on existing activities (at the time of the study) to measure and to provide information on *genuine mobility*, i.e. on border-crossing of students for the purpose or in the context of higher education study. In this context, a proposal was made in this publication, based on the practice of a number of European countries, to collect mobility data on two other proxies, i.e. on either the country of *prior education* or *prior/permanent domicile*, which were regarded, at that time, as better suited to measure genuine mobility.
- *"Diploma mobility" and "credit mobility".* A clear distinction is made in the public debate between mobility for the purpose of studying a whole programme in another country on the

one hand (*degree/diploma mobility*), and mobility for a part or a shorter period of/within a study programme (referred to as *credit mobility* in this study, or often as *temporary mobility*) on the other hand. The latter had gained enormous popularity in Europe, particularly after the inauguration of the ERASMUS student mobility scheme of the European Union in 1987 which had inspired the Bologna Declaration of 1999. However, the available database at the international level on student mobility – the UOE statistics jointly collected and provided by UNESCO, OECD and EUROSTAT – just presented the number of students enrolled in another country in a given year, remaining vague about the extent to which *credit mobility* actually was included in the available statistics (as a rule, only partly or perhaps altogether excluded).

- *Coverage, consistency and quality of data.* The previous study identified different practices in various European countries with regard to the definition of students that were included in statistics on nationality/citizenship and mobility. For example, the following types of students were excluded in some countries: part-time students, distance education students, students in short programmes, students in some sectors of higher education (e.g. tertiary education not viewed as higher education and private higher education), doctoral candidates not registered as doctoral students, students doing internships, etc. National data collections also varied, amongst others, according to the time of data collection, the responsible data providers and the efforts made to gather complete information.
- *Major sub-groupings/characteristics of students*. The statistics, collected internationally and nationally, provide, as a rule, information about gender, field of study, the levels of programmes according to international standards of data collection (ISCED 5B, 5A and 6 in UNESCO terms), as well as on the countries of origin and host countries of *foreign* or *mobile students*. Following the structural changes which started with the Bologna Declaration of 1999, there is a felt need within Europe to sub-divide mobile students (as well) according to the two-cycle structure, i.e. between bachelor and master levels. In the current UOE data collection, the bachelor and master programmes are lumped together in the ISCED 5A level without the possibility to separate between the two. But this is expected to change in the near future.

The previous study had also pointed to another element in passing, which had only scarcely been covered by the national statistics and not at all by the international data collections, but which was increasingly present in the recent public and policy discourse on student mobility: the *occurrence (event) of student mobility in the course of studies.* While the UOE data collection and, correspondingly, the national data collections recorded the cohorts of students that have been mobile every academic year, the relatively new concept referred to the occurrences/episodes of mobility throughout a period of study.

Such an approach had nevertheless already been pursued two decades earlier, in the framework of the ERASMUS Programme. When ERASMUS was launched in 1987, it came with an ambitious aim, i.e. that approximately 10% of European students should eventually be mobile in the course of study. This target would have been reached if about 2.5% of all European students had studied abroad in a given year (based on the assumption that the length of study is four years). In the meantime, the ERASMUS 10% target was replaced with the target to have 3 million ERASMUS students by 2013.

The approach to measure mobility episodes during studies was recently taken up again. In 2009, the education ministers of the European countries cooperating in the Bologna Process called for a target for the year 2020, when 20% of their graduates should have had a study abroad experience in the course of study. This chapter will also discuss the opportunities and problems of gathering information on the occurrence(s) (events) of mobility in the course of study. The relevance of such

data, as well as possible definitions and modes of data collection, will be an additional major theme of this meta-statistical discussion.

Last but not least, this chapter takes into account a significant improvement of UOE data in another area: the *mobility of higher education graduates*. This data provides important information beyond that given by the retrospective survey data.

Regarding the data sources taken as a basis in this meta-statistical analysis, the present study covers three main *sources* of data on student mobility:

- The *international data collection on students.* Since the 1990s, students statistics comparing various countries around the globe, and, therefore also the European countries, have been available in the framework of the so-called UOE data collection of education indicators, which is produced jointly by the *UNESCO Institute for Statistics (UIS), OECD* and *EUROSTAT*. We thus refer primarily to this data collection and to the presentations of data provided by these three supra-national agencies.
- The *official national-level statistical collections produced in all European* countries included in this study. This data might be collected by the ministries in charge (generally the ministry of education), by official statistical offices or by other organisations entrusted by government to collect statistical data on students in general or on foreign and/or mobile students in particular. These are, amongst others, also the entities that deliver the country data to UOE, based on a common set of definitions recommended by the latter.
- *Other relevant data collections* from statistics produced by other resources and/or agencies, e.g. those in charge of student aid or support for student mobility, representative surveys of students (e.g. EUROSTUDENT) and graduates undertaken by various institutions and individuals and research projects of scholars.

The overarching aims of this chapter are to offer an in-depth analysis of the *international data on student mobility – the UOE dataset*, to show the variety of options for data collection, as well as the degree of deviation from internationally agreed definitions and parameters of the national-level datasets. Other relevant data collections will only be presented and discussed selectively, to the extent that they can be seen as models for the improvement of international data collection in the near future.

2 Foreign students and study abroad students: the traditional descriptors

For several decades now, data on foreign students and on study abroad students have been collected internationally, and have been used as proxies for measuring international student mobility. Until 2004, nationality was as a matter of fact the only descriptor used for student mobility in the UOE data collection. On the specific category of foreign students, the *UOE Data Collection Manual*[24] – the guidelines sent to national statistical data collectors and used to 'translate' the national data in order to fit the international dataset – of 2004 provides the following definition: "Students are non-national students (or foreign students) if they do not have the citizenship of the country for which the data are collected. Normally citizenship corresponds to the nationality of the passport which the student holds or would hold." (UOE 2004 Manual, p. 23).

This quote shows that, while nationality was a popular measure for international student mobility, there was, in 2004, no clear consensus on the most appropriate terminology. Rather, a sequence

[24] http://circa.europa.eu/Public/irc/dsis/edtcs/library?l=/public/unesco_collection

of terms is provided: non-national, foreign/abroad, nationality, citizenship and nationality of passport. To help clarify this terminological ambiguity, the EURODATA study of 2006, made some specifications with regard to the concepts of *nationality, foreign students and study abroad students*: "The term 'nationals' is preferred because 'citizenship' has recently been often applied for rights of residence, work, social benefits or voting, even if the 'nationality' is different (for example 'European citizens')." (Richters and Teichler, 2006, p. 84).

The 2006 study further illustrated, through several examples, why *foreign student* is not a perfectly clear concept, neither in terms of definitions, nor as far as the country of registration was concerned:

- *Double nationality:* Students with double nationality could be counted as foreign and/or national students. The UOE manual recommends counting them as nationals, i.e. not as foreigners. However, it was, and still is, not certain whether this guideline is consistently followed across all countries and by all persons and institutions delivering data.
- *Regarding distance learning students*, the UOE suggested defining foreign students with respect to the country where the institution which provides the distance education programme was registered. A student staying in the country of his or her nationality most of the study period, but registered in a distance programme that is provided from another country, is expected to be counted as foreign student in the country where the programme is registered. Again, we do not know whether this was/is handled correspondingly in all countries.
- *In cases of transnational education* – notably, if higher education institutions have a branch campus in another country – the students at the branch campus should be defined, according to UOE recommendations, as home students or foreign students with respect to the location of the branch campus.
- Finally, in the case of c*hange of citizenship over time*, it is not clear whether the nationality for defining *foreign students* is always measured as 'current nationality', or whether it is measured as 'nationality at birth', 'nationality at the beginning of study' or similarly.

The supra-national agencies have published, up to the academic year 2002/03, only data on foreign students and study abroad (except for a few countries that, lacking a nationality-based data collection at home, delivered only data on genuinely mobile students). Despite this consistency in the use of the nationality-based data collection up to the year 2002/03, the exact terminology employed for this dataset has not always been consistent in this period. While in general, the more appropriate terms of foreign students and study abroad students were employed, on several occasions, the more ambiguous term "international students" was preferred.

Although *nationality* remains the traditional proxy to assess international student mobility, a number of ambiguities in the definition of foreign students persist. Furthermore, there were and still are *national cases* which are clearly not in tune with the dominant thrust of the UOE data collection on foreign students. Two clear types of deviations have been identified so far:

- Three countries did *not* traditionally collect data on foreign nationality students. One of these three countries is the UK. According to the UK country report (of this study as well as of the predecessor publication), the UK has always delivered to UOE data on genuinely mobile students (i.e. not on foreign students), on the criterion country of *prior domicile*, i.e. the country of residence from which the mobile student came to enter the UK higher education institution (see e.g. Sibson, 2006, p. 97). UK data on *incoming students* was thus mislabelled in the UOE data collection as *foreign nationality data*. The nationality of students, though, was only an *optional* field in the UK national data collection, and was not made public (because of its incomplete coverage), neither in the UK nor in the UOE statistics. Recently, this situation changed, as explained in the UK country analysis, in

Volume II of this publication. The two remaining countries, Ireland and Latvia, continue to collect and deliver data *only* on *incoming students*.

- At least one country has a different definition than UOE of the *foreign student* concept. According to the Swedish country report in Volume II of this study, *foreign students* in Sweden are not defined in the official statistics according to their *nationality*, but rather according to a concept of *immigration*. Foreign students in Sweden are those students "with a foreign background", i.e. students who were born outside Sweden from non-Swedish parents or students that were born in Sweden from non Sweden-born parents. In the UOE publications, however, these data were handled in the same way as foreign students defined by nationality.

While data on *foreign students* have been traditionally collected directly in the individual countries and have been transmitted to the international agencies for inclusion into the international statistics, the data of *students studying abroad* could and can, as a rule, only be calculated with the help of international statistics on foreign students. For example, the number of Austrian students studying abroad is derived from summing up all the students registered in all other countries of the world as foreign students with an Austrian nationality.

There is one exception, though, of a country that gathers data on its own *nationals* enrolled abroad without the help of UOE statistics. According to the German country report in this study (Volume II), the German statistical agency in charge of compiling student data asks similar agencies in more than 100 countries to provide data on foreign students with German nationalities and thus calculates, with additional estimates, the number of German nationals studying abroad.

3 Incoming and outgoing (i.e. mobile) students: the newly-emerging descriptors

Background

The higher the frequency of international mobility and migration in modern societies, the less data on nationality (i.e. on foreign students and study abroad in general) can be viewed as a good *proxy* for border-crossing student mobility. As already pointed out in predecessor publications of this study, two different aspects are crucial for the proper assessment of international student mobility. First, as often discussed, foreign students might have lived and studied already for a long time in the country of enrolment. Thus, they might not be 'foreign' in terms of socialisation, cultural learning, language proficiency and entry qualification. As a consequence, *only foreign students who studied and lived abroad prior to current study* can be viewed as *mobile* students. In the context of this study we named this group *incoming foreign students.* Second, students who are nationals of the country where they study might have lived and learned abroad and returned to the country of their nationality for study purposes. Students in this category are often referred to in national or international statistics as *returners* or *homecoming students*. Within the scope of our study we have defined this type of mobile students as *incoming students with home nationality.*

The increased interest in the collection of data on *genuine mobility* data, rather than on foreign students and on study abroad students, can be explained both educationally and administratively. From an *educational point of view*, it can be argued that the typical challenge of coping with an educational environment strongly contrasting with prior educational and cultural experiences do not apply at all or not to the same extent to *foreign students* who have lived and learned, for a while or even their whole life, in the country of study, as they do in the case of truly *incoming foreign students*. Even some *incoming students with home nationality* might face more challenges in

orientation than *foreign students* who have lived for a long time in the country of current study. From an *administrative point of view*, we note that often rules of admission, eligibility for scholarships, visa issues, etc. are completely different for foreigners who lived and learned abroad prior to study on the one hand and for foreigners who lived and learned in the country where they eventually study on the other hand (generally labelled 'students with migrant background').

The EURODATA study argued in 2006, in line with the increasing level of attention paid in the public debate to student mobility, that the national and international data collections had to be aligned to gather data on *genuine mobility* in addition to *nationality*, supporting the efforts of EUROSTAT in this respect. To bring palpable proof of the extent to which genuine *mobility data* was already gathered at the national level, the 2006 study conducted an exploratory survey of all national agencies in charge of the collection of student data. The latter were asked to provide available information and statistics on *student mobility* for the academic year 2002/03 – the reference year of the study. The results showed that data on *mobile students were available in the academic year 2002/03 in only 9* of the 32 European countries addressed. More specifically, mobility data was available in the two countries with the biggest inflow of students within Europe (the Germany and the UK), in another relatively large country (Spain), as well as in six smaller European countries (Austria, the Flemish Community of Belgium, Cyprus, Ireland, Latvia and Switzerland). Altogether, these 9 countries hosted 57% of all foreign students in the 32 countries covered by the 2006 study.

The actual modes of defining and collecting data on *genuine student mobility,* identified in the survey, have been classified into two major approaches (a classification first presented in Lanzendorf and Teichler, 2003, and further developed in the EURODATA publication):

- "*The prior or permanent domicile approach*: students are asked to provide information on their domicile prior to enrolment or about their permanent domicile, for example understood as family residence, as valid at the time the information is gathered. For example, the British student statistics record the country of domicile of students prior to entry to study at UK institutions of tertiary education. Mobile students, thus, are students whose domicile prior to study in the country in question was different from the country of current study – independent of nationality."
- "*The prior education approach*: students are asked to provide information about the country where they successfully completed the kind of secondary education required for entry to tertiary education. Students having obtained their entry qualification in a country other than that of study can be viewed as internationally mobile students – independently of their nationality. Or one can combine information on nationality and mobility thus measured. For example, German statistics make a distinction between *Bildungsausländer*, i.e. students with foreign nationality having obtained the entry qualification in other countries, and *Bildungsinländer*, i.e. students of foreign nationality who have obtained their entry qualification in Germany. Since not only foreign students, but also the Germans enrolled at German higher education institutions are asked about the country where they obtained the entry qualification, it is also possible to determine the number of incoming German students, i.e. those moving from another country to Germany for the purpose of study (see above)." (Richters and Teichler, 2006, p. 87).

In 2002/03, of the 9 countries that collected genuine mobility data, the majority had opted for the residence approach. The prior education measure prevailed in Austria, Germany and Switzerland. In 7 of these countries, a distinction could be made between *foreign incoming students* and *incoming students with home nationality*, while in the remaining 2 countries – Cyprus and Latvia – data was available on *foreign incoming students* only. As already specified above, no data on foreign students was collected in three of these countries, notably in the UK, Ireland and Latvia, though in the UK the data could be imputed (see Lanzendorf, 2006, p. 54).

The analysis of student mobility data available for the academic year 2002/03 (see Lanzendorf, 2006, pp. 56-57) underscored the importance of no longer relying on *foreign students* as a proxy for genuine mobility, given the distorting effect of this measure for real mobility flows:

- The number of *mobile students* was, on average, more than 20% lower than the number of *foreign students* in 2002/03.
- Additionally, on average, almost 10% of all *incoming students* in the analysed countries turned out to be *incoming students with home nationality*.

In the following section, matching data will be provided for the academic year 2006/07. While important, it should be highlighted that these differences were not so substantial to make the foreign student and study abroad student data a completely misleading proxy for student mobility. The gaps were, however, sufficiently large to emphasise the need for genuine mobility data.

In fact, although it was concluded that *nationality* data was no longer an appropriate measure for international student mobility, it was very clear that this descriptor had other explanatory values, and was, as a result, worthwhile to maintain. First, there was and still is a *pragmatic argument* for keeping data on the *nationality* of students. As long as data on genuine mobility are not collected in the majority of countries worldwide, data on foreign students have the advantage of a wide coverage and of offering a calculation base for study abroad, as well as the possibility to analyse developments over time. Under these circumstances, data on foreign nationality could still be viewed as a "proxy" for mobility. Second, there is a *principle argument*. Data on foreign students and on study abroad do not become obsolete if data on mobility are available. Rights to be admitted, to stay in a country for a long period, to not have to pay fees or to be eligible to pay smaller fees, to be eligible for certain scholarships, to get visa after graduation, etc., might continue to depend on nationality. And third, by keeping the nationality data collection and contrasting the two data sets, observers can get useful information on two sub-groups of students: *incoming students with home nationality* (returners) and *foreign non-mobile students* (i.e. resident foreigners, or students with a migrant background).

In fact, the three international data collectors started to recommend to reporting countries – from 2005 onwards (UOE 2005 Manual) – to provide data on both *foreign students* and *mobile students*. The three organisations also provided the corresponding terminology and definitions. To quote the most recent manual: *"Foreign and mobile students are identified on the basis of the following criteria […]: Foreign students by their country of citizenship and […] Mobile students by their country of origin conceptualised by their country of permanent or usual residence, or their country of prior education […] Countries are required to provide all detailed data on foreign students, in order to maintain time series on foreign students. Countries are required to provide data on mobile students since this is the data requesters' preferred concept to measure student mobility"* (2010 UOE Manual, p. 10).

Current state of the art

In the meantime, the *data collection on mobile students has evolved remarkably* in the 32 European countries covered in the present study. More specifically:

- the *number of countries collecting information on incoming students* grew from 9 in the academic year 2002/03 to *24 for the academic year 2006/07*. Only France, Greece, Italy, Luxembourg, Malta, Poland, Portugal and Turkey had not yet introduced any general system of statistical data collection on *mobility* up to this academic year. Nevertheless, according to information collected by OECD (2008, p. 8), additional countries have built a data collection system on mobile students *since then*, or intend to do so in the near future.

- In line with the earlier trend, a larger number of countries had opted for *the domicile/prior residence* approach than for the *prior education* approach. Among the 24 countries collecting data on genuine student mobility, 13 had collected data exclusively or primarily based on the *prior or permanent domicile* approach, 7 on the prior education approach, and 4 on both approaches (where, as a rule, the data on one of these approaches was qualitatively superior to that on the other).

The degree of differentiation by characteristics varies greatly from one country to another. Table 1 gives a overview, in this respect, of some of the remaining limitations, caused by incomplete coverage or differentiation.

Table 1: Shortcomings of official data on incoming students

Countries	ISCED level missing/ not identifiable	No classification by country of origin	No classification by study subjects	No classification by gender	Over 10 % unclassi-fied mobile students	Differing treatment of certain student subgroups	No mobile graduat e data
1. AT Austria p.r.		X					
AT Austria p.e.	X	X	X				
2. BE Belgium p.r.			X		X	X	X
BE Belgium p.e.		X				X	X
3. BG Bulgaria			X				X
4. CH Switzerland	X						(X)*
5. CY Cyprus							
6. CZ Czech Republic		X	X				(X)*
7. DE Germany	X						(X)*
8. DK Denmark							
9. EE Estonia							
10. ES Spain					X		X
11. FI Finland		X					
12. HU Hungary		X					X
13. IE Ireland	X		X		X		X
14. IS Iceland							X
15. LI Liechtenstein						X	
16. LT Lithuania p.r.							
LT Lithuania p.e.							
17. LV Latvia	X			X			X
18. NL The Netherlands	X				X	X	X
19. NO Norway			X				
20. RO Romania							
21. SE Sweden					X		
22. SI Slovenia p.r.							
SI Slovenia p.e.							
23. SK Slovakia			X				X
24. UK United Kingdom						X	

p.r.: prior residence p.e.: prior education

* information missing for particular ISCED levels

Source: 2010 survey of national agencies in charge of educational statistics undertaken in the framework of this study.

In the present study, the comparison between the data sets on *incoming foreign students* and on *foreign students* in the academic year 2006/07 confirms for a large number of European countries

that the genuine mobility totals are substantially lower than the figures for foreign students, as highlighted in Chapter I of this volume. On average, and for the 24 countries that had genuine mobility data in 2006/07, the foreign student total was an overestimate of close to 25% of real mobility numbers.

The genuine mobility descriptors have thus a superior explanatory value for assessing international mobility levels. Nevertheless, while better suited, the two descriptors used for genuine mobility flows are by no means perfect. This has been already discussed in the 2006 mobility study of ACA. For example, the *prior domicile* might have been an official place of registration, but not the place where the respective person actually has lived. *Prior education* might have been measured by the place where the entry qualification to higher education was given, but this is not always identical with the place of secondary education. Moreover, persons might have been mobile between the moment when prior domicile and completion of secondary education were recorded, and the moment which is 'current' (for example, a student might have completed secondary education in country x, then worked in country y and only afterwards began to study in country z).

Research undertaken in the framework of the present study identifies a number of additional limitations. These limitations are mostly caused by divergent operationalisation of the two descriptors in the national data collections, as follows:

- The *country of prior education*[25] is interpreted and identified differently in many of the reporting countries. The authors of the 2006 study advised for the country of *prior* education to be interpreted as education *immediately prior to the current level of study*. This would be the country where the upper-secondary school leaving certificate was granted for mobile students currently enrolled in bachelor level studies; the country where the bachelor degree was awarded for students enrolled in master level study programmes; and the country where the master degree was obtained for students pursuing doctoral education. However, in the majority of reporting countries, including the UOE data collection, prior education is interpreted as the education that grants access to higher education, i.e. the country where the upper-secondary school leaving certificate was obtained. This means that students entering higher education in a foreign country and pursuing different levels of tertiary education within the respective country are considered mobile throughout their full higher education studies, and not only during the first level attended there. For example, a French student who enters the Finnish higher education system at the bachelor level and continues the studies in Finland up to the PhD level, will be considered mobile throughout the three levels of study and not for the bachelor level only.
- This limitation in the operationalisation of the *country of prior education*, while significant, does not pose tremendous problems at the moment, as it is still impossible to differentiate in the ISCED 5A level of study between students in bachelor and master-level programmes. Nevertheless, if unchanged, it will become a serious setback once the ISCED classification is revised to allow for differentiation between the two levels. In order to make it possible to record in the national and UOE statistics the inter-cycle mobility, i.e. mobility between the bachelor and the master levels, as well as mobility between the master and doctoral level, the mainstream operationalisation of the country of prior education descriptor will have to be adapted as well.
- The *country of prior residence* criterion poses a number of problems as well, in countries where the residence of incoming students might or can change in the course of higher education study, i.e. where the residence status of students changes during studies. Nordic

[25] The application of this principle also poses some problems in countries were preparatory programmes for mobile students are required in order to be enable them to fully enroll in higher education. However, until now, this has not become a widespread phenomenon.

countries, for example, have special regional arrangements to grant a resident status, immediately upon arrival, to incoming students from the Nordic region. Furthermore, there are countries where incoming students, irrespective of origin, are required to register as residing in the country of study, within a certain period upon arrival. Thus, incoming students change their residence status during the course of study. By way of example, Chapter I of this volume portrays a big difference, particularly in countries like Denmark and Norway, between the number of incoming students (measured on the country of prior/permanent residence criterion) and the number of foreign students within the country. This would, at a first glance, seem to indicate that there is a large community of foreign non-mobile students (resident foreigners) in the two countries. However, this seems not to be the case, at least in Norway. Incoming students in Norway go through a residence status change, as they are required, no later than six months after enrolment in higher education in Norway to declare their current residence in the country. This requirement impacts on the way these students are recorded in the statistics of the next year and, very likely, accounts for the big gap between the incoming and the foreign student numbers observed in this country. This allows us to conclude that the real number of incoming students to Norway is higher than the number provided in the UOE statistics.

In fact, the authors of the previous mobility study concluded that measuring student mobility in terms of *prior education* would be *preferable* to measuring it in terms of *prior residence*, given the right to free movement of people in the European Union context. Having in mind, however, the international diversity of national-level practices and their underlying concepts, they have allowed for some flexibility and recommended the introduction of the genuine measures of student mobility in all European countries and possibly world-wide, whereby mobility could be either measured in terms of prior/permanent residence or in terms of prior education.

Shifting now focus from inflows to *outflows*, and given that the transition to the genuine mobility data collection is not complete, for the time being the number of outgoing students from individual Europe 32 countries cannot be computed from incoming student totals. The only type of outflows data that can be generated from the UOE statistics and which comes closer to the genuine outgoing student numbers is the mixed dataset, where nationality data are taken into account (as a substitute) in those reporting countries where no genuine mobility data are available. These data were presented in Chapter I, and show that, based on this mixed measure, the study abroad data are an overcount of outflows of at least 16%.

Some individual countries manage, however, to collate statistics on outgoing student numbers through other sources than the UOE data collection. Two examples, in detail analysed in Volume II, are depicted below:

- According to the Swedish country report in this study, more or less all Swedish students studying abroad are awarded/or at least entitled to a study grant. These grants are normally available for students studying in Sweden, but are also portable for study abroad, under certain conditions. At the national level, the Swedish data collectors regard the total number of students receiving this type of aid and going abroad as being equal to the total number of outgoing Swedish students. How many Swedish students go abroad without this grant is difficult to say, but according to national sources, the share of the latter is estimated to be fairly small. Students receiving this type of aid can go abroad either for a short-stay (credit mobility) of for a full degree programme (degree mobility). The situation seems to be alike in other Nordic countries.
- In a similar fashion, the Cypriot report reveals statistics on outgoing students with a national fellowship, without any further information about the proportion of outgoing students funded in this way, however. As in the case of Sweden, Cypriot students could go abroad (with a fellowship) for either credit or degree mobility. Nevertheless, the system is

now fading away in the country, as the grants scheme will in the future be means-tested, and, as a result, less representative of total outflows.

4 Incoming (mobile) students with foreign vs. home nationality ('returners')

As already pointed out above, one of the main advantages of collecting in parallel data on nationality and mobility is that the two datasets can be contrasted and provide information on two important sub-groups of students, i.e. on *incoming foreign students* on the one hand and *incoming students with home nationality* (the so-called *returners* or *homecoming students*) on the other hand. The latter group, in particular, has been acutely disregarded in the public discourse on student mobility in the past, as various countries collected data on *mobile students* with foreign nationality only. Nevertheless, the 2003 study for the European Parliament (Lanzendorf and Teichler, 2003) and the EURODATA study of 2006 both gave evidence that mobile students with home nationality are by no means such a marginal group that they should be completely disregarded in mobility statistics.

Subsequently, the UOE recommended, as of 2005, to collect data on *incoming students irrespective of their nationality/citizenship* (be it foreign or national) on a try out basis. This specification was made in the pilot project on student mobility data collection that started in the same year. In 2009, with the completion of the pilot project, UOE revised this recommendation. The three organisations asked (starting with the 2009 data collection) to abandon the data reporting on *homecoming students* and to focus on *foreign incoming students* only. The manual specifies that, *"Homecoming national students (students who are citizens of the reporting country but have their usual residence abroad or who received their prior qualifying education abroad) should* ***not*** *be classified as mobile students. Such students, as citizens of the reporting country, will be entitled to permanent residence of that country."* (2009 UOE Manual, p. 40).

While this change in the UOE methodology does not affect the data we present in this volume, it will impact on the data collections from the academic year 2007/08 onwards. We find the last sentence, providing an explanation for this recommendation, by no means convincing. The entitlement or non-entitlement to residence in a host country is *not* the only possible administrative rationale for collecting data on incoming foreign students and incoming students with home nationality. Moreover, there are many cases where *incoming foreign students*, and *not only returners*, are entitled to permanent residence in the country of study, e.g. students from any EU country studying in any other member state of the European Union, as highlighted above.

The above notwithstanding, the majority of countries that have moved towards genuine mobility collections do *not* identify the number of *incoming home nationality students*. Amongst the 24 countries collecting mobility data, only *15 countries collect and present data in such a way that the number of incoming students with home nationality* can be identified. In reality, *the share of returners of all mobile students* varied substantially in 2006/07, as shown in Chapter I:

- about half *of all incoming students* in Denmark and about one-third in Finland;
- 10% or more in Iceland, Switzerland and Norway;
- between 5-10% in three other Europe 32 countries; and
- less than 5% in 7 countries.

The shares are also different when expressed as a proportion of the total student population, as illustrated in a number of selected countries in Table 2.

Table 2: Proportions of foreign, incoming (mobile) students with home and foreign nationality and non-mobile foreign students of all students, in 2006/07 (percentages)

	AT	CH	UK	ES	DK
a. Foreign mobile students (i.e. incoming students with foreign nationality)	11.9%	12.2%	13.6%	1.7%	2.7%
b. Incoming students with home nationality (i.e. returners)	0.6%	1.7%	1.3%	0.1%	2.7%
All incoming (mobile) students (a, b)	**12.4%**	**14.0%**	**14.9%**	**1.8%**	**5.5%**
c. Foreign non-mobile students	4.8%	4.3%	5.9%	1.6%	6.3%
All foreign students (a, c)	**16.7%**	**19.3%**	**19.5%**	**3.4%**	**9.0%**

AT=Austria, CH=Switzerland, UK=United Kingdom, ES=Spain and DK=Denmark

Source: UOE data collection

The data in the table also reveal that the UOE collection up the year 2006/07 *was not* consistently confined (in practice) to *incoming foreign students*, as now intended by the three collectors. In some cases, even, data on mobility was collected at the national level without any differentiation according to nationality, the data being delivered in this manner to UOE.

5 Credit mobility and diploma mobility

As already pointed out, the mobility study of 2006 recommended to collect data both on mobile students aiming to spend a whole study programme in another country and on those aiming to spend only part of a study programme abroad. The former type of mobility was defined as *diploma or degree mobility*. "Diploma", similar to the way the term "diploma supplement " is employed, was viewed to include not only programmes usually understood as "degree" programmes, but also shorter or lower-level programmes as long as they are "complete programmes" and lead to a qualification. The latter type of mobility was named *credit or temporary mobility*, departing from the assumption that achievements within short periods of study abroad would count towards the degree at the home institution upon return.

It should be additionally specified that the definition of *credit/temporary mobility* in the present study includes:

- periods of study abroad that can be either *self-organised* and self-financed or undertaken through *organised* (and funded) mobility programmes, student exchanges, bilateral agreements etc.; and
- two main types of activities abroad, namely *study* as well as practically-oriented stays such as *traineeships/placements*, which (at least in principle) should be counted towards the degree at the home institution.

Available information so far suggests that the majority of internationally-mobile students in the world moved to another country for the purpose of studying a complete study programme. This is most frequently the case if students move from low- and middle-income countries to economically advanced states. In other words, degree mobility still has a vertical character.

Between economically advanced countries, credit mobility seems comparatively more common. In general, this mode of mobility is viewed as being a more recent phenomenon. A first wave of short-term mobility emerged after the end of World War II, and the inauguration of the ERASMUS often is viewed as a second wave of this kind.

Nowadays short-term mobility is so central to the European higher education agenda that this phenomenon can no longer be ignored. Efforts to improve the information base on credit mobile students seem vital. Clearly, a distinction between *student mobility for a short period and mobility for the whole programme* within student statistics is advisable and necessary, because either option has enormous implications for the students, the institutions of higher education, national and European-level higher education policies altogether.

Already in 2006, the EURODATA study touched on a number of aspects of major importance for the credit mobility information base:

- First, hardly any distinctions were explicitly made in national data collections between diploma mobility and credit mobility.
- Second, while all countries seemed to normally include those students who were enrolled in degree programmes in their statistics of foreign or mobile students, the treatment of students who were viewed as temporary (present for a short period of time within the country) differed. In some countries, temporary/credit mobile students were and are registered and counted in statistics in the same way as students enrolled in degree programmes, whereas in other countries they are registered separately. In a number of countries these students are not at all registered in statistics in the host country, while in others the temporarily mobile students are even counted as home institution students (like national non-mobile students).
- Third, it was pointed out that UOE have changed, over time, their specifications on the inclusion or exclusion of short-term foreign students: in some periods, short-term mobile students should have been excluded if they had been enrolled for *less than one year* in the host country, while in other periods, if they spent *up to one year* in the host country.
- Fourth, it became clear that the distinction between *credit mobility* and *diploma mobility* cannot be made consistently in all cases, because this is a distinction of intention, i.e. not necessarily a distinction of formal status, and statistical enquiries as a rule do not inquire on motives. Moreover, students might change their intention in the course of study, i.e. stay for longer or shorter than initially envisaged.

Many of these inconsistent practices still persist in the current data collection systems. And though the 2006 mobility study recommended establishing a distinction between credit mobility and diploma mobility within the official student statistics, this did not happen until now at the UOE level.

In fact, in an effort to clean the UOE dataset on student mobility, the three data collectors suggested as of 2005 to *exclude all mobile students from the statistics of foreign or mobile students who study in another country for up to one year*: This decision can be illustrated by

- the UOE 2005 Manual: “Exchange programmes: all students in exchange programmes, on short-term postings (a school-year or less than a full school year) to institutions in other countries should be excluded in the enrolment statistics of the host country but be reported only in the home country, the country of original enrolment. It is recognized that this will result in an undercount of student mobility, but as data on participants in exchange programmes are available from other sources, it can be overcome“ (UOE 2005 Manual, p. 10);
- as well as the respective section of the UOE 2009 Manual: “All students in exchange programmes, on short-term postings (a semester, less than a full school-year or up to a school year) to institutions in other countries, fulfilling part of the educational programme with the institution where they originally enrolled, should be **excluded** [emphasis in original] from the enrolment statistics of the host country and be reported only in the country of original enrolment. The defining characteristic of such students are that they are given for

their stay abroad at their home institution where they originally enrolled (they are therefore also called credit students/credit point students). It is recognised that this will result in under-reporting of student mobility as these students are currently outside the scope of the data collection." (UOE 2009 Manual, p. 10).

Furthermore, the preparatory group of an *OECD Working Party on Indicators of Educational Systems*, which also comprised representatives of UNESCO and EUROSTAT, concluded in 2008 (based on a survey of participating countries) that: *"Also credit/exchange mobility is rated of high interest (type of mobility). However to include this category of mobility into the data collection would imply an expansion, which the sub-group for the time being would not recommend."* (OECD 2008, p. 4).

Surprisingly, the specifications in the UOE manuals seem to show that the three collectors *underestimate the large number of credit mobile students who are not exchange students*. Also, it is not entirely correct that temporarily mobile students remain registered at their institution of origin – many of the credit mobile students might remain to graduate in other countries than their country of origin. Finally, the authors of the manuals underestimate the multitude of sponsors and data collectors on student exchanges and thus the significantly larger effort needed for collecting data on temporary mobility outside of general student statistics.

Currently, the UOE statistics are both an undercount and an overcount of student mobility. As a rule, countries should report to UOE only degree mobility (i.e. foreign and incoming students that have studied in the respective country for more than one academic year). Nevertheless, the OECD survey quoted above shows that about half of the European countries included short-term mobile students into their data delivery to UOE. As a result, the UOE data collection is an overcount of degree mobility - as some countries break the rule of not including credit mobility - and an undercount of credit mobility – as only some, and not all countries, report mobility of this type.

While the current UOE dataset strives to capture degree mobility only, the authors of this study strongly believe that the establishment of an international data collection on credit mobility is also necessary, particularly to measure progress towards the achievement of recently set targets at the European level – 20% by 2020 – in which, according to current discussion, credit mobility seems to be a very important type. Such a collection should be established by introducing an additional category in the regular student statistics. Any collection via organisers or sponsors of exchange programmes would increase the burden of data collection, and would remain incomplete amidst the multitude of small sponsors and organisers, also because many short-term mobile students are not exchange students and therefore are not counted by such entities.

Moreover, one cannot expect that the UOE data collection would ever become a clear data set of *diploma mobility*, unless a clear distinction is introduced in the database between *diploma mobility* and *short-term/credit mobility*. Therefore, the authors of this study suggest revising the UOE Manual in the future and suggesting to national data providers to include all student mobility and to distinguish between *diploma mobility* and *credit mobility* (or any equivalent term they might prefer).

Additionally, as will be pointed out below, information on the *occurrence of student mobility during the course of study* can be collected through retrospective surveys of students close to graduation or through graduate surveys. If the UOE statistics will not move towards an improvement in the direction discussed, the *establishment of regular large-scale student or graduate surveys would be the most convincing alternative*.

6 Levels and types of study programmes

The more higher education has expanded, the more diverse the overall student population has become. Many reports on students in the 1950s and to an extent in the 1960s focused on *university education*. This meant, in the European context, students at institutions more or less equally involved in research and teaching. During the 1960s and 1970s, the term *higher education* spread, while many institutions, primarily in charge of teaching were established or upgraded to a second type of higher education institution. Subsequently, views diverged in the European countries whether students should be classified in international overviews primarily according to types of higher education institutions (e.g. students at universities vs. students at *Fachhochschulen* or similar practically-oriented institutions) or according to stages of study programmes and degrees (e.g. *bachelor* vs. *master* or *licence* vs. *maitrise*). Since the 1980s, the supra-national organisations use the term *tertiary education* as an umbrella concept, including institutions and programmes within university education and other types of higher education as well as students who, as a rule, have completed upper secondary education but enrolled at shorter and less academically demanding programmes than the usual degree programmes at higher education institutions.

For the international collection of student data, UNESCO, OECD and EUROSTAT agreed, first, *not to compile data according to types of institutions* (e.g. students at universities vs. students at polytechnics, university colleges, *Fachhochschulen* or similar-type institutions). Second, they created their own scheme of levels of study programmes, which they considered most appropriate for international comparison and most feasible for international data gathering. In the so-called *ISCD97 classification* of UNESCO (see UNESCO Institute for Statistics, 2006), we note a division between the following levels:

- ISCED 5 – "first stage of tertiary education not leading directly to an advanced research qualification", with a further differentiation between:
    - ISCED 5B – "programmes which are practical/technical/occupationally specific" and "are typically shorter than those in 5A", i.e. more than two years but less than three years. In this publication we've referred to this type of programmes as 'short-cycle' or 'sub-bachelor' programmes, and
    - ISCED 5A – "programmes which are theoretically based/research preparatory (history, philosophy, mathematics, etc.) or giving access to professions with high skills requirements (e.g. medicine, dentistry, architecture, etc.)" and have a "minimum cumulative theoretical duration of three years' full-time equivalent".
- ISCED 6 – "second stage of higher education leading to an advanced research qualification". Programmes at this level are often called "advanced programmes", and they coincide in most cases with doctoral programmes.

As a consequence, the UOE provides information on foreign and mobile students enrolled at the three levels ISCED 5B, ISCED 5A and ISCED 6. Unfortunately, this classification poses a number of problems of *data coverage*. In some countries, data on ISCED 5B, often collected separately from data on *higher education* (ISCED 5a and ISCED 6), do not comprise information on foreign and mobile students. Moreover, statistics on ISCED 6 are incomplete in many countries, a point also highlighted by the comparison of statistics on ISCED 6 students and doctoral awards. This is in some countries primarily due to the fact that many doctoral candidates are not enrolled as *doctoral students*, but are recorded rather as employees of the higher education institutions. Additionally, in some countries universities do not expect, i.e. universities do not require, for doctoral candidates to necessarily enrol as doctoral students. Because of these different national practices, data on nationality and citizenship of persons newly *awarded* a doctoral degree can be viewed as more valid information than data on nationality and citizenship of *ISCED 6 students*.

From 1999 onwards, when the ministers in charge of higher education of the majority of European countries signed the Bologna Declaration, we note a rapid chain reaction in the establishment of initially a *two-cycle (bachelor/master),* and now a *three-cycle (bachelor/master/PhD) system of study programmes and degrees*. While the ISCED 6 level corresponds by and large to the PhD level education, the ISCED 5A level does not provide yet a proper differentiation between bachelor and master level programmes, but only a nationally-established delineation between first, second and further degrees, all within the ISCED 5A level. Nevertheless, a sub-division of ISCED 5A according to bachelor programmes and master programmes is generally viewed as desirable. Available national statistics show that the patterns of foreign and mobile students, as a rule, vary substantially at the bachelor and the master level. In the context of the current revision of the ISCED97 classification, we expect that this further differentiation of the ISCED 5A level will be one of the main and long-awaited changes.

For the moment, we have to bear in mind that not all first study programmes in higher education in Europe can be categorised as bachelor programmes and all second programmes as master programmes. In various European countries the introduction of a bachelor-master system has been a protracted process. Some long single-cycle programmes have persisted as a consequence of slow implementation. In some countries, in some individual study programmes or at some individual institutions, the decision was made to keep long single-cycle programmes. Finally, in some of the so-called “regulated professions”, notably in the medical field, agreement was reached on European or even world-wide level to keep the initial, long programmes in place. Therefore, *three types of study programmes of the ISCED 5A domain will have to be disentangled in the future*: bachelor-level programmes, master-level programme and initial (long) single-cycle programmes.

This all notwithstanding, the more the interest has grown in student mobility at various levels of study programmes, the more it became clear that the definition and measurement of student mobility across levels is extraordinarily complicated and cannot be agreed upon easily. In the 2006 EURODATA study, suggestions were made only for the definition and measurement of a single level of study programmes, e.g. first degree programmes. It that case, the reference point of mobility was education or residence prior to that study programme. In *addressing more than a single level of study programmes*, as we have partly underlined above, *various options for defining mobility* can be considered:

- First, one could define a master student as mobile according to *most recent mobility*: If the student has lived and studied in another country immediately prior to master study.
- Second, one could define a master student as mobile according to the moment *prior to initial study,* i.e. prior to bachelor study: if the student has lived and studied in another country immediately prior to embarking on (initial) study.
- Third, one could define a master student as mobile *cumulatively*: if the student has been defined as a mobile student at any point of measurement since initial study.

To illustrate these distinctions we give the following example. If a Portuguese student, who has lived and studied up to the completion of secondary education in Portugal, has undertaken his bachelor studies in Italy and embarks in master study in Portugal, this student would be viewed as

- an incoming student with home nationality according to the first approach;
- as a national non-mobile student according to the second approach;
- or as a mobile foreign student according to the third approach.

The OECD report referred to above clearly prefers a cumulative approach at least for the case in which the student continues to study in the same country for more than a single programme level (OECD 2008, p. 17): *“A mobile student entering an ISCED 5A programme at the tertiary levels*

stays a mobile student if upon graduation the student continues in an ISCED 6 programme in the same destination country". But, it does not become clear how multiple 'mobilities' should be viewed or counted. Moreover, we have to bear in mind that the currently available statistics do not provide any information at all about mobility or non-mobility in the (overall) course of study. While this sort of approach does not impose any limitations for international mobility between the bachelor and the master levels, as the current ISCED 5A level does not allow for a differentiation between the two types of programmes, it does pose problems for mobility between the ISCED 5A and ISCED 6 levels. The situation will become more problematic as soon as the ISCED classification will present separately programmes at the bachelor and master levels.

We draw the conclusion that *the first approach,* as we have argued above, is the most convincing one in the framework of statistics on identifying student mobility at a certain point in time. As a consequence, master students should be considered mobile if they studied or lived in another country immediately prior to master study. *Cumulative mobility*, in contrast, should be measured, as will be explained below, with the help of surveys of students close to graduation or graduate surveys.

7 Other relevant quality and coverage elements of mobility data collections

As outlined in the sections above, the statistical data on student mobility are not as accurate as they tend to be perceived in the public discourse. Official statistical data (in general and not necessarily on student mobility) are often quoted and interpreted in way a which suggests that the information provided is completely accurate. In reality, though, we have to bear in mind that, e.g. *the data presented on student mobility might be even up to one quarter higher (or more) or one-forth lower (or more) than the real mobility flows*. As already pointed out, data on student mobility differ strikingly according to major definitions and modes of data collection: whether nationality is taken as a proxy or whether border-crossing for the purpose of study is taken as the measure; whether only mobile foreign students are included or also mobile students with home country nationality; whether only diploma mobility is included or also credit mobility; whether at least a semester abroad is counted or even shorter encounters, such as language courses and summer schools.

In addition, we note further variations of definitions of *students* and specifically of *mobile students*, we observe *different definitions of modes of data collection amongst the various countries*, and different qualities and degrees of completeness of data collection of those delivering the data to the national statistical agencies, i.e. of the individual higher education institutions. There are also differences as far as the extent to which information is collected according to sub-groups, e.g. countries of origin of mobile students or fields of study (see Table 1 above). Some of the problems of data on mobility might be specific to mobility issues (e.g. country of origin), while others might be caused by general weaknesses of the students statistics (e.g. incomplete data).

While in other sections of this chapter some improvements are suggested, improvements that are viewed as crucial by the authors of this study, this section simply wants to make the readers *aware of further imperfections of the mobility data*. The aim of this presentation is not to offer information as complete as possible, but to enumerate the most salient issues regarding the quality of data on student mobility. Obviously, it is a continuous task of those in charge of international data compilation to improve the international standardisation of data collection and of those in charge of national data compilation to improve the quality and coverage of national data. While acknowledging that further steps need to be taken, we duly welcome the efforts and progress made by UOE in recent years, is establishing a better data collection on student mobility.

We have to take into consideration that there are some sub-groups of students whose classification as *mobile* or *non-mobile* is not obvious from the outset, namely of *students undertaking distance education*, *students at branch campuses of foreign universities* and *commuting students*. The UOE consistently recommended over the years to handle them as follows (cf. the formulation in the UOE Manual 2009, p. 40):

- Students undertaking distance study: "Students involved in distance learning/e-learning across borders should … be classified as mobile students …".
- Students at branch campuses: "Students at campuses of foreign-owned institutions in a reporting country should be classified as mobile students according to the same criteria as students enrolled at its domestic educational institutions".
- Commuting students: "Commuting students crossing a border on a daily basis should be classified as mobile students according to the same criteria …".

The national data delivered for inclusion into the international data do not consistently comply with these principles. Amongst 17 European countries for which information is available for 2007, 11 include commuting students into foreign and mobile students, but only 7 countries treat students undertaking distance studies and even only two countries classify students at branch campuses in the way recommended in the UOE manuals (OECD 2008). Moreover, even if efforts are made to collect data according to these criteria, one cannot expect perfect data delivery; in the area of so-called *transnational higher education*, we note some variations of the legal and de facto relationships between universities in different countries, so that it is difficult to establish whether this relationship is appropriately termed *branch campus*.

In addition, students with a double nationality are most likely classified differently in different Europe 32 countries. It can be taken for granted, though, that students, as a rule, are not viewed as *mobile foreign students* or as *foreign students*, if one of their nationalities is that of the respective country of study.

In the framework of this study, the national agencies in charge of the collection of higher education statistics were asked to provide information on the identification of different sub-groups of mobile students. The 28 countries actually providing information named the following imperfections of information (see Table 1 above):

- Six countries do not provide distinct information on foreign/mobile students according to all the three levels of study (ISCED 5B, 5A and 6) – either information on some levels is missing, or the levels cannot be disentangled.
- Six countries do not inform about the individual countries of origin of the mobile students or the countries of nationality of foreign students.
- Seven countries do not differentiate foreign/mobile students according to field of study.
- One country does not sub-divide these data according to gender.
- Moreover, we note that five countries name more than 10% of mobile students without any further sub-classifications at all. We might add, in this context, that a few countries name a substantial residual number of students where no information is provided at all on nationality and on mobility or non-mobility.

In the context of the EURODATA study of 2006, further categories were identified according to which foreign/mobile students were included in the data collection of some countries and excluded in other countries: part-time students, students participating only in language courses, participants in preparatory courses, students participating in summer schools, students mobile only for an internship in another country and students with an official guest status. This information, gathered through a survey of national statistical offices and ministries in charge of mobility data collection at

that time, confirmed that the practice of inclusion or exclusion of such data persists, with a wide variation by countries. We have reasons to believe the situation has not changed dramatically in the four years that followed.

8 Occurrence, frequency and modes of mobility

The official statistics on *genuine mobility* and on *foreign students* report how many students study in another country at a certain moment in time. This is certainly interesting information if we consider specific measures of support appropriate for mobile and foreign students, e.g. scholarships, accommodation, administrative support, language training or counselling. However, this dataset cannot answer all the politically salient questions.

In Europe, the principle that an increasing proportion of students should experience study in another country at least for a limited period has spread over the years. For example, the aim advocated at the inauguration of the ERASMUS programme in 1987 was that eventually 10% of the students in Europe should spend a period of study in another European country via this programme. As mentioned above, to realise this aim, under the assumption that students study four years on average, it was considered necessary that 2.5% of students participate annually in short-term study in another European country.

And while the ERASMUS mobility target has in the meantime changed (3 million students by 2013), this approach spread even further and the *occurrence of short-term study abroad* gained momentum. Consequently, the ministers in charge of the Bologna Process agreed in 2009 in their ministerial conference in Leuven/Louvain-la-Neuve to set a 20% mobility target for the year 2020: by this year, 20% of European graduates should have had the experience of studying or participating in an internship in another – *as a rule, European,* – country.

Various countries have set national targets for student mobility, some of them in response to the Bologna Process benchmark, while others well before that (see EURYDICE, 2010, pp. 42-43, cf. also Chapter V of this study). As a rule though, Europe 32 countries remained very unspecific about the type of mobility that should be measured to judge achievement of these objectives, but there are indications, given the very ambitious level of percentages in some countries (e.g. as high as 50% in Germany and Austria) that they did not primarily refer to mobility at a certain point of time, but rather to the *occurrence of mobility in the course of study* – irrespective whether mobility is for a short period or for the whole study programme.

Obviously, the *occurrence (event) of study abroad* can be measured only when the study period is completed. In other words, a retrospective information gathering is needed – unless there was a register identifying all the steps of study for all students all over the world.

It is worthwhile in this context to mention that the supra-national agencies cooperating in the UOE data collection have recently set up a system for providing information on, *graduates* whose nationality differs from that of the country of graduation (*foreign graduates*) or whose prior residence and/or prior education was different from the country of graduation (*mobile graduates*). These data are presented in Chapter I. While this is a positive development of the data collection process, such *statistical data* on *foreign graduates* and *foreign mobile graduates* only include a subset of students. They refer to students who were either *diploma mobile students* or to those students that arrived as incoming credit mobile students but *eventually graduated in the country of destination*. The foreign and mobile graduates data set does not include students who have been abroad in the course of study, but returned to the country of prior study for graduation.

Up to now, information on the *occurrence of study abroad* has been collected in the framework of a few representative surveys, in *three different manners:*

- surveys of students, conducted close to graduation;

- surveys of students across different levels and at different points of study; and
- surveys of graduates conducted at various points in time after graduation.

Retrospective data collection of short-term student mobility, with the help of student surveys, has been already undertaken for some years in Germany by the *HIS-Institute for Research on Higher Education GmbH*. HIS conducts regularly, i.e. every third year, a representative survey of students at German higher education institutions. It asks German students, amongst others, to provide information on whether they have been in another country for study, internships and other study-related activities (summer schools, language courses, etc.). In looking at the *responses of students in advanced semesters*[26], i.e. those close to graduation (who are assumed to have had more mobility opportunities than students in earlier years of study) HIS established a rate of the occurrence(s) of mobility during the course of study. For example, the survey undertaken in 1997 had shown that 27% *of students in advanced semesters* at German institutions of higher education had spent a study period in another country (or in other countries) and/or had undertaken other study-related activities. Amongst them, 12% of all students had *studied* in another country (or in other countries). Consecutive surveys undertaken in 2000, 2003 and 2006 showed a slightly increased and then stagnating percentage (29% in 2000, 30% in 2003 and 29% in 2006) of students in *advanced semesters* with a study-related activity abroad. Amongst them, 15-16% actually *studied* abroad.

The Italian *Alma Laurea*[27] system of information on universities has an even more elaborate approach in retrospectively collecting data on short-term mobility. First, students in their final years are surveyed, similarly to students in the HIS surveys. After the graduation date, the universities inform the Alma Laurea team which of the students they previously surveyed actually graduated as planned and which students have not yet graduated. As a result, the Alma Laurea team can exclude the students who have not graduated from the dataset, and, thus, can provide more valid data on the actual numbers of students who had been short-term mobile during their course of study.

Prior short-term mobility of all current students is measured in the EUROSTUDENT project – a collection of national student surveys employing a partly-identical questionnaire (Orr, 2008). In contrast to the aforementioned HIS and Alma Laurea surveys, the data presented in the EUROSTUDENT study comprises a cross-section of the student population, i.e. also students still at earlier stages of study who might not yet have studied in another country (or in other countries), but might do so at a later stage of their study. As a consequence, the ratio of those students having *studied* or having undertaken *other study-related activities* in another country (or in other countries) is bound to be lower than in surveys measuring prior mobility close to the end or after the end of the study period.

The occurrence of short-term study abroad can also be measured with the help of *graduate surveys*. For example, the *International Centre for Higher Education Research of the University of Kassel (INCHER-Kassel)* has undertaken surveys in 2009 and 2010 of graduates from higher education institutions having graduated in Germany in the years 2007 and 2008. The results show that 31% of graduates have studied abroad and/or have had other study-related experiences during their course of study. Amongst these graduates, 15% *studied* abroad and 13% attended a *practical training period* (Schomburg and Teichler, 2010, p. 210). As many of the respondents were bachelor graduates who continue to study in master programmes, the actual rate of graduates from German higher education institutions having spent a *study-period* abroad up to the degree from which they transfer to the employment system is likely to have already reached the 20% target set for 2020 by the ministers of Bologna Process countries.

[26] Depending on the type of higher education institution, advanced semesters can mean semesters 10-14 at universities and semesters 6-10 at universities of applied sciences (Fachhochschulen).

[27] http://www.almalaurea.it/

Similar graduate surveys exist in other European countries. Table 3 provides information on the occurrence of mobility during the course of study reported in several national graduate surveys.

Table 3: Graduates that spent study-related periods abroad in the course of study, in selected Europe 32 countries (percentages)

	Bachelor graduates			Master graduates			Single-cycle/traditional degrees		
Country	Univ.	Other HEIs	All	Univ.	Other HEIs	All	Univ.	Other HEIs	All
AT Austria									
Study	16%	22%	**18%**	•	•	•	22%	23%	**22%**
Various activities	24%	33%	**27%**	•	•	•	37%	40%	**37%**
CZ Czech Republic									
Study	•	•	**6%**	•	•	**18%**	•	•	•
Work	•	•	**6%**	•	•	**15%**	•	•	•
DE Germany									
Study	16%	14%	•	17%	9%	•	19%	9%	•
Various activities	28%	27%	•	35%	22%	•	37%	20%	•
FR France									
Study	6%	2%	•	12%	22%	•	11%	•	•
Various activities	20%	22%	•	29%	54%	•	32%	•	•
IT Italy									
Study	5%	•	**5%**	15%	•	**15%**	10%	•	**10%**
NL The Netherlands									
Study	28%	21%	•	28%	•	**28%**	35%	16%	•
NO Norway									
Study	20%	•	•	25%	•	•	•	•	•
PL Poland									
Study	•	•	**2%**	•	•	**3%**	•	•	**3%**
UK United Kingdom									
Study	4%	•	•	•	•	•	•	•	•

Univ. = University

Other HEIs = Other Higher Education Institutions (e.g. Fachhochschulen, Grandes Écoles etc.)

Source: EMBAC study (Schomburg and Teichler, 2011)

One has to read Table 3 with caution, though, for a number of reasons:

- the years of graduation vary;
- some countries do not cover graduates from all disciplines and study programmes;
- in some cases, graduates are not included who have not been professionally active at the time the survey was conducted.
- the definition of study and other related activities is not consistent across countries, nor is the minimum duration of such stays. As a rule, the lower the threshold and the more inclusive the definition of study-related activities, the higher the shares of graduates with mobility experiences abroad.
- Yet, Table 3 demonstrates the potential explanatory value of graduate surveys – as either comparative studies across countries or national studies, if these formulate similar questions.

It should be added that graduate surveys might comprise *further data on nationality and mobility.* One example is the REFLEX study which has surveyed graduates of the year 2000 five later in

more than a dozen European countries. This study showed that altogether 50% of the graduates from French, 46% of the graduates from British and 40% of the graduates from German institutions of higher education had *major international experience in their life-course up to five years after graduation*. This survey enquired on mobility after graduation as well. In Germany: 8% of respondents had a *migration background;* amongst them, 6% had been born abroad. 16% were internationally mobile during the first five years after graduation; amongst them 3% were employed abroad five years after graduation.

It should be noted that the figures presented above refer only to students and *graduates having spent a period of study in another country* (or in other countries). In order to have complete figures on student mobility, one needs to complete the picture with data on *degree mobility*. The available data presented above suggest that the occurrence of *short-term mobility* is at least as, if not much more frequent among Europe 32 students than degree mobility in another country of this region. To take the German case: we can estimate that more than 20% of students study for a period abroad, while only about 3% of German students study in another country for a full degree.

As a methodological consequence, we note that the *occurrence of student mobility during the course of study* can be measured most easily through a combination of two approaches: graduate surveys which can provide information on *credit mobile students* (short-term mobility), and official higher education statistics, which can provide information on mobile students in the process of undertaking or actually having completed *a degree abroad*. In both cases, the available data might be sub-optimal and require estimates. For example, participation in student and graduate surveys is voluntary, and response rates of even methodologically-sound surveys often are in the range between 30% and 50% and, as a rule, information is lacking on whether non-respondents differ systematically from respondents. However, the available information seems to be sufficiently good to assume that the estimates are relatively close to reality.

9 Headline findings and future prospects

The analysis of methods for international and national data collection on student mobility has led to some very interesting findings.

Primarily, we note a *fast transition to the genuine mobility data collection system in most Europe 32 countries*. While the genuine mobility data set was available only for a minority of countries in 2002/03, mobility data was collected by as many as 24 of the 32 European countries addressed in this study, in 2006/07. The favourite genuine mobility criterion is the country of (prior) residence, which is adopted in 17 out of 24 countries.

Second, in line with recommendations formulated in previous studies, we note the continuation of the nationality-based data collection of UOE, in addition to the fairly-recent genuine mobility data set. The former is, in fact, still the only student mobility data set available in eight of the Europe 32 countries. The two collections, despite their limitations, have the great advantage that, when used together, provide important information on three sub-groups of students: incoming students with foreign nationality, incoming students with home nationality and non-mobile (resident) foreign students.

Third, the body of knowledge on international student mobility has been further enhanced, through the availability, within the UOE, of data on foreign and mobile graduates, which give further information on the success rates of foreign and mobile students compared to domestic students.

Last but not least, the growth in the number of national-level student and graduate surveys expanded our level of knowledge of this phenomenon by covering additional mobility aspects, which are, by definition, impossible to tackle at the highly-aggregate level of international UOE

statistics. Furthermore, survey data from different Europe 32 countries seem to show that, based on national definitions, many countries are close to or have even reached the Leuven 20% mobility target.

Against the generally positive data collection trend and the diversification of methods, a number of important limitations remain and will need to be addressed in the short and medium term:

- The UOE data collection still lumps together students in bachelor and master-level programmes in the ISCED category 5A. There are signs though that this limitation will be corrected in the current revision of the ISCED 97 classification.
- While the UOE data set was designed to cover degree mobility only, it still includes a mix of diploma and credit mobile students for a number of reporting countries. It is, in this respect, an undercount of credit mobility, and for the countries in question, an overcount of degree mobility. We see this limitation as one that needs to be urgently addressed, given the political importance of credit mobility in the European context and the necessity to assess progress against the recently-set Leuven mobility target, i.e. 20% of graduates with a mobility experience by 2020.
- This could be achieved by establishing an additional annual data collection on credit mobility, i.e. by adding the respective category to the regular data collection on students, rather than through a separate scheme of collecting data on credit mobility, and/or by instituting a Europe 32-wide graduate or student survey to regularly gather information on the event (occurrence) of mobility during studies.
- We further suggest that such a graduate survey should include a certain range of measures on nationality at different stages of life, on different phases and purposes of mobility as well as on other measures of cultural diversity. Furthermore, it should set clear guidelines on the minimum duration of recorded mobility and on the types of activities abroad that qualify to be measured. As a rule, the lower the threshold and the more inclusive the definition of types of activities, the higher the shares of students with a study abroad experience. This may, in fact, account for some of the impressive shares of mobile students currently reported by graduate surveys in individual Europe 32 countries.
- Given that it is crucial at the political level to achieve the already set mobility targets, we note a tendency to lower the threshold to a minimum (e.g. to 1 ECTS in the current Bologna Process discussions) to guarantee this. We would like to warn against the possible negative effects of such actions, on the discussion about the impact and relevance of study abroad for the employability of graduates in particular, which would become almost superfluous under such conditions.
- In the genuine mobility data collection, despite the impressive progress registered in a short period of time, we see a stringent need for further streamlining. More precisely, it is essential to arrive at a uniform interpretation of the two mobility descriptors, i.e. country of prior education and country of prior/permanent residence, across the reporting countries. More precisely, we recommend interpreting the criterion country of prior education as that of *immediately prior education* to the current level of study. Additionally, for the country of (prior) residence criterion, we encourage the development of a strategy to cope with status changes in the course of study, which artificially distort incoming student numbers.
- In addition, we see as a limitation the decision of UOE to stop the reporting of incoming students with home nationality to their joint data collection, given that, as we have seen, these students are a sizeable group in several Europe 32 countries and their exclusion will, again, result in an undercount of real mobility levels. We therefore suggest reversing this decision.

- Last but not least, some important limitations remain in computing genuine outflows. Despite the fast progress, the genuine mobility data collection has not advanced to the extent that outgoing mobility can be automatically calculated in a similar manner to the way the study abroad data is calculated, i.e. by adding all foreign students of a certain nationality that study in all countries of the world. Nevertheless, as more countries will start to collect data on genuine mobility, we will get closer to having an accurate data set on outgoing students. We see no immediate solutions for this problem.

Overall, we note that the mobility data collections at the national and international level, despite significant progress, have not managed to keep up with the mobility discourse. This is by all means a natural development, not a criticism of the current situation – statistical data collection cannot follow all political fashions, changes require significant investment and resources, and they take several years to be implemented. As it was to be expected, we note that further efforts and adaptations are needed.

Literature

Center for Higher Education Policy Studies, International Centre for Higher Education Research Kassel and ECOTEC (2010). The First Decade of Working on the European Higher Education Area: The Bologna Process Independent Assessment. Volume 1. Enschede: Twente University, CHEPS (unpublished).

Eurostat and Eurostudent (2009). The Bologna Process in Higher Education in Europe: Key Indicators on the Social Dimension and Mobility. Luxembourg: Sogeti.

Eurydice (ed.) (2010). Focus on Higher Education in Europe 2010 – The Impact of the Bologna Process. Brussels: Eurydice.

Janson, K., Schomburg, H. and Teichler, U. (2009). The Professional Value of ERASMUS Mobility. Bonn: Lemmens.

Kelo, M., Teichler, U. und Wächter, B. (eds.) (2006). EURODATA. Student Mobility in European Higher Education. Bonn: Lemmens.

Lanzendorf, U. (2006). „Inwards and Outgoing Students". In Kelo, M., Teichler, U. und Wächter, B. (eds.). (2006). EURODATA. Student Mobility in European Higher Education. Bonn: Lemmens, pp. 54-77.

Lanzendorf, U. and Teichler, U. (2003) Statistics on Student Mobility within the European Union. Luxembourg: European Parliament.

OECD (2008) Working Party on Indicators of Educational Systems – Developing indicators of student mobility. Paris (unpublished).

OECD (2009). Education at a Glance: OECD Education Indicators 2009. Paris: OECD.

Orr, D. (ed.) (2008). Social and Economic Conditions of Student Life in Europe. Bielefeld: W. Bertelsmann Verlag.

Richters, E. and Teichler, U. (2006). „Student Mobility Data: Current Methodological Issues and Future Prospects". In Kelo, M., Teichler, U. und Wächter, B. (eds.). EURODATA. Student Mobility in European Higher Education. Bonn: Lemmens, pp. 78-95.

Schomburg, H., (Ed.) (2010) Employability and Mobility of Bachelor Graduates in Europe. Kassel: International Centre for Higher Education Research (INCHER-Kassel), Universitiy of Kassel.

Schomburg, H. and Teichler, U. (2008). „Mobilité international des étudiants et débuts de vie active", Formation emploi, No. 103, 41-55.

Schomburg, H. and Teichler, U. (eds.) (2011). Exployability and Mobility of Bachelor Graduates in Europe Key Results of the Bologna Process. Rotterdam/Taipei: Sense Publishers.

Sibson, R. (2006). „The United Kingdom". In Kelo, M., Teichler, U. und Wächter, B. (eds.). EURODATA. Student Mobility in European Higher Education. Bonn: Lemmens, pp. 95-113.

Sursock, A. and Smidt, H. (2010). Trends 2010: A Decade of Change in European Higher Education. Brussels: European University Association.

Teichler, U. (2003). "Mutual Recognition and Credit Transfer in Europe: Experiences and Problems," Journal of Studies in International Education, Vol. 7, No. 4, 312-341.

Teichler, U. (ed.) (2007). Careers of University Graduates. Views and Experiences in Comparative Perspective. Dordrecht: Springer.

Teichler, U. (2009). „Student Mobility and Staff Mobility in the European Higher Education Area Beyond 2010". In Kehm, B.M., Huisman, J. and Stensaker, B. (eds.) The European Higher Education Area: Perspectives on a Moving Target. Rotterdam and Taipei: Sense, pp. 183-201.

UNESCO Institute for Statistics (2006). International Standard Classification of Education: ISCED 1997. Montreal: UIS.

UNESCO Institute for Statistics (2009). Global Education Digest 2009. Montreal: UIS.

Wächter, B. (2008). "Mobility and Internationalisation in the European Higher Education Area". In Kelo, M. (ed.). Beyond 2010: Priorities and Challenges for Higher Education in the Next Decade. Bonn: Lemmens, pp. 13-42.

Chapter V: National policies on mobility in higher education

Bernd Wächter

1 Introduction

This chapter explores the governmental strategies and policies which the 32 countries covered by this study pursue in the area of student and staff mobility. Like the following chapter, on mobility obstacles, it is meant to contextualise the data and findings contained in the earlier parts of this study. Due to the limits of the exercise (see below), it constitutes a *prolegomena* to a more in-depth exploration of national policies, rather than a study in its own right.

The overview presented here is based on the analysis of existing documents and literature, which was conducted between October 2009 and June 2010. Key amongst them were

An email survey of the members of the Bologna Follow-up Group of the 32 countries covered, which asked for the provision of the "three most important policy documents" of governmental origin relating to the respective country's internationalisation strategy in general, and to the international mobility of students and staff in particular. In case of documents in rarely spoken languages, addressees were asked to additionally provide a version in English or in another often spoken language. Addressees were also encouraged to provide the contact information of other source persons in case they felt they were not knowledgeable enough about the issue. Non-responding addressees were reminded twice.

An analysis of the responses to the survey of national governments in the context of the EURYDICE survey on the impact of the Bologna Process[28], as well as an assessment of the mobility-relevant sections of the national reports produced as part of the Bologna Process Stocktaking exercise[29] provided by the Bologna Process signatory governments.

The information made available from the three sources was very uneven amongst countries. For every country, information from the EURYDICE survey and a "national Bologna report" is available, even though the completeness and the quality of information received differs greatly. While some countries provided in-depth and informed answers to most or all the questions asked and areas covered in the EURYDICE survey and in the "national Bologna reports", others returned almost blank questionnaires or gave short-hand information in an often cryptic form, leaving much room for interpretation.

The survey to identify the three most recent policy documents with a bearing on international mobility strategies resulted in a very mixed response. About one quarter of the countries remained unresponsive even after two reminders. Another quarter provided five or more documents, while the bulk of countries delivered two or three.

The types of documents made available to us differ in many respects.

[28] EURYDICE, *Focus on higher education 2010: The impact of the Bologna Process*, Brussels 2010, pp. 38-42 (section student mobility).

[29] National reports for the 2009 Bologna Stocktaking exercise, http://www.ond.vlaanderen.be/hogeronderwijs/bologna/actionlines/stocktaking.htm

Authorship

Countries had been asked to provide 'official' documents only, i.e. such which represented the intentions and views of sovereign actors, such as ministries and parliaments. Most of the documents received indeed had such 'authors'. But we were also provided with documents from quasi-governmental actors, such as internationalisation agencies acting on behalf of government, or, in the field of research, research councils. In some cases, we also received reports on the state of the art and recommendations of independent experts (researchers), which governments might or might not act on. One country sent us the mission statement of its largest university, thereby indicating that it probably had no mobility strategy.

Formal status

In line with authorship, documents differed with regard to their exact status. Amongst others, we received law texts (amending higher education legislation), governmental strategies (usually medium-term, up to five years), action plans, governmental responses to parliamentary enquiries, governmental declarations, progress reports (assessing past performance rather than stating future-related aims), by governmental or external authors, or simply documents describing the country's higher education system.

Coverage

The coverage of themes and issues of the documents provided differs vastly. A small number of documents are fully-fledged country strategies in which higher education is only one area amongst many treated. Other documents represent development plans for the higher education and science system as a whole. The most common type of document is an internationalization strategy, in which international mobility figures amongst other measures (though often prominently). At the other end of the spectrum are documents which focus on one or a few particular mobility-related aspects, for example in the area of mobility support (scholarship programmes, mobility-conducive curricula) or mobility obstacles.

Higher education or research focus

The majority of documents made available refer to mobility in the context of teaching and learning, i.e. to the mobility of students at bachelor and master (and occasionally PhD) level, as well as to staff mobility mainly for teaching purposes. A smaller number of documents addresses the research and innovation function of higher education, and looks at the mobility of researchers, especially early-stage ones (PhD students, postdoctoral fellows). Although there is some overlap between these documents, particularly for the target group of PhD students (who constitute a 'hybrid' group, in that they are learners and knowledge producers at the same time, see Chapter III), the dominant concerns of the research-related policy documents are very different from those concentrating on teaching and learning.

Stage of development of national strategies

Before analysing the material available to us in detail, we would like to make an overall assessment of the stage of development of national mobility policies across the 32 countries covered in this study. By and large, we come to conclusions very similar to those reached in the earlier-mentioned EURIDYCE publication. Its authors found that "it is surprisingly rare for a country to express clear objectives related to student mobility, and it is more common to find general expressions of desires

for more mobility – whether incoming or outgoing".[30] Indeed, most national strategies emerging from the documents made available to us vaguely endorse mobility as a desirable phenomenon, and are often characterized by a "the more the better" approach. We would hesitate to honour this very widespread approach with the terms "policy" or "strategy". The relative lack of a systematic approach to international mobility in most European countries comes as a surprise, given the throughout high importance attached to mobility by almost every government. It might be understandable in some small countries, such as Luxembourg or Liechtenstein, from where comments were received indicating that their very high mobility levels made the development of detailed strategies superfluous. But, in the case of most countries, it is rather inexplicable.

An explicit policy or strategy on mobility would need to differentiate between different *modes of mobility*. In the case of student mobility, such differentiations would minimally include incoming and outgoing mobility, as well as diploma and credit mobility. Ideally, it should also distinguish between mobility inside of funding programmes and outside of them; and mobility for study and mobility for other purposes. An explicit strategy would also differentiate by *level of study* (student target groups) as well as by *regional orientation*.

Furthermore, it would set *quantitative targets* for the mobility modes prioritised, and it would name *rationales*, i.e. the aims and objectives to be pursued by the mobility. It would also put the mobility policy in the context of a wider *internationalisation and higher education policy*. In very highly developed strategies, a link would be made to overall national development targets, in policy areas beyond education.

Importantly, an explicit policy would also name the *instruments and means* to be employed to reach the set targets (scholarship programmes, curricular strategies, etc), and address the issue of *mobility obstacles* and how to overcome them.

By the standards of the above – admittedly demanding – concept, very few countries covered by this study would qualify as having a fully developed mobility policy or strategy. Amongst them would be Estonia, Finland, Germany, the Netherlands, England and Wales. The large majority of countries covered fall into a middle category, with some of the elements mentioned above. A sizeable minority of countries have what we would call an elementary policy, which in many cases does not go beyond the endorsement of mobility as a good thing and worthy of support.

2 Student mobility

2.1 Mobility modes and directions

The most often stated national priorities in student mobility are outgoing credit mobility and incoming degree mobility. Of 25 countries which mentioned (explicitly or implicitly) student mobility priorities, 19 named outgoing temporary (credit) mobility and 18 incoming degree mobility. 13 out of 25 countries combine these priorities, i.e. they pursue the double strategy of seeking to support both outgoing credit and incoming degree mobility.

It is noteworthy that outgoing degree mobility and incoming credit mobility are hardly ever mentioned as priority modes. Incoming mobility in general is sometimes viewed as desirable for its indirect effects, such as creating the conditions for "internationalisation at home", i.e. for creating an international environment for non-mobile students. It is conceivable that the lack of specific mention of incoming credit mobility is due to the fact that it is a quasi-automatic result of outgoing credit mobility, at least in exchange-type arrangements and reciprocal scholarship programmes, such as

[30] EURIDYCE, Focus on higher education, p.40.

ERASMUS. In these cases, it could be argued that efforts to promote outgoing credit mobility in one country automatically lead to incoming mobility in another. Outgoing degree mobility, by contrast, is clearly no country's priority. Three documents, from Denmark, Romania[31] and the Netherlands, even contain discreet warnings against high outflows of degree mobile students, especially when coupled with lower inflows, and evoke fears of "brain drain". Another country, Norway, which has traditionally had a high outflow of degree mobility, is now considering "steering" this flow by means of a differentiated support policy. The country's generous state loan and grant system, which is available to almost 100% of students, has so far financed study abroad world-wide. The country does not appear to want to revert on this policy altogether, but it intends to provide better funding for study abroad at "high-quality" institutions, which it still needs to identify. It is interesting that the cautious attitude to outgoing degree mobility of the three countries mentioned originates from very different mobility realities. Whereas about twice as many students from Romania study abroad than foreign students study in Romania, and one can therefore easily understand brain-drain worries, the picture is very different in the two other countries. Denmark has a foreign enrolment about three times as high as its degree mobility outflow, and inflows and outflows in Norway are roughly in balance.

Not being aware that a similar examination of national mobility policies has ever been carried out before, we have no historical comparison for our findings. But we are strongly convinced that, had we conducted the same exercise ten years ago, a far smaller group of countries would have stated an explicit emphasis on incoming degree mobility. Amongst the 18 out of 25 countries which explicitly named incoming degree mobility as a policy aim, four are particularly interesting in that they do not simultaneously also name outgoing credit mobility as a priority. These are Cyprus, Greece, Ireland, England and Wales. In the case of England and Wales, this comes as no surprise. These governments of these countries have consistently pursued a determined policy aimed at foreign (fee-paying students) students on the one hand, and have become almost proverbial for the low importance they attach to outgoing credit mobility, on the other. In England and Wales, the mobility reality is also in line with their governmental policy aims: for every 100 incoming foreign students, five students with home nationality are enrolled abroad. The picture is markedly different for the three other countries. Cyprus is the country with the highest percentage outflow of own nationals: for 100 Cypriots studying at home, 139 are enrolled abroad. There are also about three times as many Cypriots studying abroad as foreign students enrolled in Cyprus. In the case of Ireland and Greece, the relationship is about 2:1. Ireland, Cyprus and Greece thus appear to want to counteract the effects of high outflows by trying to increase inflows.

Parallel to the above-described increased emphasis on incoming degree mobility, however, a few countries with already high inflows of foreign diploma-seeking students seem to be starting to nuance their attitudes to incoming mobility. BE-FR documents indicate that the French-speaking Community of Belgium has enough foreign students, which is understandable against the background of a large influx of students from northern France into the community's small higher education sector (especially in the para-medical area). It is interesting to note that a country like Austria, which is confronted with a similar "mass movement" especially from Germany, does not (yet) officially show signs of such caution vis-à-vis incoming degree mobility (although one hears about worries through more informal channels). Swedish documents indicate the need for a shift from quantity to quality, after the marked increase in the number of foreign students over the last decade or so. Indirectly, German documents also display caution as to further incoming degree mobility increases: its 10% target on *Bildungsausländer* students (incoming foreign students) has almost been reached.

[31] Romania promotes degree study abroad by means of "anti-brain-drain scholarships". But these must be paid back by scholarship holders if they do not return to Romania after graduation, to work for a number of years in the country's public sector.

2.2 Mobility targets

The Council decision which set up the ERASMUS Programme in 1986 already contained a quantitative mobility target. It stated that 10% of higher education students in Europe should temporarily study outside of their country of origin (at the same time leaving it open if this rate should be achieved by ERASMUS mobility alone). Later decisions to continue the programme no longer mention the target, probably due to doubts if it was at all reachable. As part of a more empirical culture in the past ten years, and specifically in relation to the Bologna Process, target-setting has re-appeared. Despite this, however, our findings display that there is still considerable uncertainty as to what exactly a "target" or "benchmark" is. Generally, governments struggle with the "new" concept. For example,

- in the course of the aforementioned EURYDICE survey, a number of countries reported the existence of mobility targets, but failed to state numerical values;
- some countries classify the desire to generally increase mobility volumes as a "target"; and
- other countries indicate that they regard their "targets" as not too realistic (one country, for example, states that it will try to reach it "as much as possible").

Next to these problems with the quantitative nature of targets, there are issues relating to the exact definition of a target. Definitions are fluid in a number of respects. Thus, it is not always clear

- if the set targets refer to temporary or to diploma mobility, or to both;
- if the targets refer to academic study only, or if they include the wider concept of "study-related activities"; and
- how long a mobility phase must minimally last to qualify for inclusion in the "target".

Mostly, the targets stated are expressed in terms of percentages. In some cases, absolutes are quoted. In the most common case of a target expressed in percentage terms, some values refer to a particular point in time (academic year) when the count is made (current stocks), whereas others refer to mobility in the course of studies. Therefore, two countries which state one and the same numerical target (say 10%) for outgoing mobility could mean two very different things: either, that a number of students equivalent to 10% of total enrolment study abroad in a given year, or that 10% of all graduates of the country have studied abroad in the course of their study programme(s). Further, in both cases it is not necessarily clear if the percentage refers only to temporary study abroad or if it also includes diploma study.

By and large, the use of "targets" and "benchmarks" in the proper sense of the word is still relatively rare, as Table 1 displays.

Table 1: National mobility targets and benchmarks

Country	Outgoing target	Incoming target	Comment
AUSTRIA	50% of graduates to have had a study- or research-related stay abroad by 2020	None	
BELGIUM - NL	20% in 2020 (10% in 2010, 15% in 2015)	None	Outgoing target explicitly linked to Leuven Bologna target
BELGIUM - FR	None	None	
BULGARIA	None	None	
CYPRUS	No information	None	
CZECH REPUBLIC	50% with at least one semester at a foreign HEI	10% of the student population by 2010	Outgoing target is an "expectation" only

Country	Outgoing target	Incoming target	Comment
			Incoming target includes *credit mobility*
DENMARK	No targets, but HEIs "have the responsibility to set their own benchmarks" (Regeringen 2006)	None	Leuven Bologna target is mentioned, without being clearly endorsed
ESTONIA	4-5% by 2015 (about 2,000) in exchange programmes or short mobility schemes. All PhD students at least one semester abroad.	Double the number of foreign students by 2015; 10% foreign PhD students and postdocs;	Outgoing student target relates only to *study* in another country
FINLAND	6% and 8% outgoing exchanges for universities and "polytechnics" by 2015 respectively	7% foreign degree students by 2015; 20% foreign PhD students by 2015; 6% and 8% of foreign exchange students at universities and polytechnics respectively	
FRANCE	Reference to Leuven Bologna target of 20%	By 2012, 17% foreign students at master level and 33% at PhD level.	Vast majority of incoming master and PhD students to come from non-OECD countries.
GERMANY	50% of graduates had "study-related stay abroad" in the course of studies; 20% (of above?) one-semester study abroad;	10% foreign students	Incoming target relates to *Bildungsausländer* only
GREECE	None	None	
HUNGARY	None	None	None
ICELAND	No information	No information	
IRELAND	None	12-15 % foreign students	
ITALY	Vague reference to the Leuven Bologna target of 20%	Targets for master and PhD students (unspecified)	None
LATVIA	None	None	No EURYDICE questionnaire
LIECHTENSTEIN	None	None	Liechtenstein points out that it has very high mobility rates and does not need a benchmark
LITHUANIA	None	None	
LUXEMBOURG	No information	None	No targets, since "mobility is at satisfactory levels"
MALTA	Reference to 20% Leuven Bologna target, which "Malta will strive to achieve as much as possible"	5,000 non-EEA foreign fee-paying students between 2009 and 2020	Unclear if incoming rate is annual enrolment or added up
NETHERLANDS	25% of student population by 2013; Explicit refusal of government to set target for outgoing degree mobility	Individual HEIs are to set their own targets;	Outgoing target refers to a given year (not graduation).
NORWAY	No information	No information	
POLAND	No information	None	None
PORTUGAL	Double number of ERASMUS stays	None	None
ROMANIA	Yes, but unspecified (EURYDICE)	Yes, but unspecified.	One Romanian

Country	Outgoing target	Incoming target	Comment
			document mentions that 1 in 5 graduates should have an international experience (by 2012)
SLOVAKIA	No information	No information	
SLOVENIA	None	None	
SPAIN	Increase ERASMUS mobility "as much as possible"	None	
SWEDEN	None	None	
SWITZERLAND	Reference to Leuven Bologna target of 20%	None	
TURKEY	None	None	None
UNITED KINGDOM	None (but aim to increase in Scotland)	100 000 additional foreign students by 2011 compared to 2006 (70 000 in higher and 30 000 in further education)	Additional incoming target: doubling the number of countries sending over 10 000 per year to the UK

HEI = higher education institution

Outgoing mobility

Only for eight countries of those covered in this study could we identify relatively clearly defined mobility targets. These are Austria, the Flemish Community of Belgium, the Czech Republic, Estonia, Finland, Germany, the Netherlands and Portugal (the latter with regard to ERASMUS mobility only). A further four countries make reference to the Leuven Bologna target, though mostly in soft formulations leaving some doubt if this has been adopted as a national target.

The eight countries mentioned display a high degree of ambition, even though the targets set are not always comparable. Both Austria and Germany pursue the aim that 50% of their graduates will have passed a study- or research-related stay abroad. Germany specifies that a sub-group of 20% should have been abroad for academic study of at least one semester's duration. It remains ultimately unclear if the percentages refer only to temporary study (as is likely), or also to degree study. The Czech Republic is similarly ambitious. Although it stresses that it has left the setting of targets to the individual higher education institutions, it "expects" that the average rate of study abroad across the country will be 50%. In the Czech case, it is clear that only study of at least one semester is included, as in the lower of the two German targets (20%). In the Austrian case, a wider definition of study-related activities seems to be the measure (including also internships, language courses and generally stays of a shorter duration).

The Dutch target of 25% of outgoing mobility looks less ambitious at a first glance, but all indications are that it refers to a single year (current stock) and, apparently, to temporary mobility only. If this is so, and if one assumes that an average student spends at least three years in higher education, this would translate into an outgoing mobility rate at graduation of 75%, i.e. of the vast majority of students.

Finland's target mobility rate (by 2015) of 6% for universities and 8% for "polytechnics" clearly relates to credit mobility ("exchanges") only, and is on an annual basis. Translated into the graduation rate logic, this would result in a rate of between 25 and 30%. Estonia also expresses its target in the annual logic. It is not clear if the target value of 4-5% includes degree students. Like Finland, Estonia has a differentiated set of individual targets (if one includes incoming mobility). It

has also set itself the aim that every PhD student graduating from a university in the country has spent at least one semester abroad.

The Dutch-speaking Community of Belgium has set a mobility target of 15% by 2015 and 20% by 2020. It is unclear if this refers to a single year, or to the course of study.

As we stated before, the relative rarity of quantitative targets raises some doubts about the credibility of outgoing mobility policies. The absence of a target does, however, not in each and every case mean that the country is not serious about promoting outgoing mobility. Both Luxembourg and Liechtenstein, for example, explain that the very high levels of mobility in their countries make the setting of targets pointless. The Netherlands underlines that it has consciously abstained from setting an outgoing target in the area of diploma mobility (it has one for credit mobility).

Incoming mobility

As in the case of outgoing mobility, only a minority of nine countries state clear numerically expressed targets for incoming mobility. Again, most of these countries do not make it clear if their targets only refer to degree-seeking students, or also credit-mobile ones. Likewise, in the majority of cases, no differentiation is made between different levels of study. An example of the contrary, i.e. of a differentiated set of targets, is provided by Finland. This country aims at a rate of foreign degree students of 7% by 2015, and of 20% in the sub-set of PhD students. As a "mirror" of its outgoing target of 7% of credit mobile students from universities and six from "polytechnics", it aims at the same percentage values in incoming credit mobility. France has set separate targets for the master and PhD segments by 2012 (17% of master and 33% of PhD students), but none for undergraduates. Malta has set a target exclusively for the group of non-EEA foreigners (fee-paying), and, in contrast to the other countries, in the form of an absolute number (5 000 in the period until 2020). Estonia intends to double its number of foreign students in general and to reach a share of 10% in the segment of PhD students (and postdoctoral fellows). The UK also states its target in the form of an absolute number, which refers to the increase on present levels, however.

There is no clear relationship between the fact that a country does set a target for incoming mobility and the numbers of foreign students in this country. Amongst target-setting countries are such with a relatively low share of foreign students, such as Estonia and Finland (3.2 and 3.3% respectively), but also such with medium-high shares, like France and Germany (each 11.3%), and very high shares, such as the UK (19.5%). Amongst those not setting targets are countries like Luxembourg or Liechtenstein, where the majority of enrolment is foreign, are Cyprus, Austria and Switzerland, where it is high (26.9%, 16.7% and 19.3% respectively), but also such with very few foreign students, such as Poland (0.6%), Turkey (0.8%), Slovakia (0.9%) and Slovenia (1.3%).

2.3 Geographical focus

Are there any focus countries and regions of the world emerging from the policy documents of the 32 countries covered by this study? The documents are rarely very explicit or very comprehensive on this issue, so that the overview below needs to be regarded as preliminary, like much else in this chapter.

A number of countries state no regional priorities at all. Whereas in some cases this is probably simply due to an omission, in others it signifies that the regional priority is global, i.e. that the countries try to attract students from around the globe. Global ambitions do not exclude (temporary or permanent) priority regions, though (as the case of the UK underlines). With very few exceptions, countries with a global priority do still attract foreign students more from some world regions than others.

Almost every country names the European Union (or the European Economic Area – EEA – and the European Higher Education Area – EHEA) as a priority region for mobility. This is not surprising, given the considerable involvement of the European Union through mobility-enhancing instruments like ERASMUS and the high importance which the Bologna Process attaches to mobility matters. Even though not explicitly mentioned in the documents, the European focus is almost certainly strongest in the case of temporary and programme mobility. Interestingly, the country with the strongest EU focus (though not an exclusive one) is Switzerland, and thus not an EU member. The Swiss emphasis on the EU is explained by the long period of "exclusion" of the country from EU higher education cooperation programmes, which is now coming to an end.

Next to the EU-EEA-EHEA, a fair number of countries pursue a near-neighbour priority policy, amongst others. A typical example are the Nordic countries, which do not only have traditional ties of a cultural and (most of them) linguistic sort, but who have joint institutions like the Nordic Council and the Nordic Council of Ministers, which run mobility programmes of their own (such as NORDPLUS). The joint Nordic mobility approach also encompasses the Baltic and the Barents Sea region (North-West Russia). Austria has a similar focus on adjacent countries, in Central and in Southeast Europe, i.e. in a catchment area similar in borders to that of its former empire. The countries in this region also cooperate via multi-lateral mobility schemes (CEEPUS) or bi-lateral ones (Austria's "Aktion" programmes). There are similar regional foci around the Mediterranean Sea and reaching into the Middle East (Greece, Cyprus and Malta).

Old political ties – mostly from a colonial context and often coupled with linguistic links – still play a role in the definition of geographical priorities. The two countries on the Iberian Peninsula provide examples of this. Portuguese policy documents mention the lusophone (i.e. Portuguese-speaking) countries in Africa and Brazil as focal areas and Spanish sources make frequent reference to Latin America. French documents refer to Africa as a priority region. An unexpected, but, on historical grounds, quite understandable regional orientation was found in the case of Lithuania, where, next to neighbouring countries (Ukraine, Russia and Belarus), other countries further afield forming part of the former Soviet Union, such as Moldova, Georgia and Armenia, are mentioned as a priority.

Developing countries, or, more generally, "the South", are still often mentioned as priority regions, though probably much less than they would have been ten years ago. References were most frequent in Nordic documents (the Nordic countries still have, by and large, the biggest per-capita budgets for development cooperation) and in the French-speaking Community of Belgium, amongst others.

A very strong – and certainly recent – trend is for a geographical focus on emerging economy countries, such as the "BRIC" countries, but also the Gulf states and the Middle East and on Asia as the new growth region generally. A wide range of countries make explicit reference to these "non-traditional" target countries, amongst them Austria, Cyprus, Denmark, Finland, France, Hungary, Ireland, Lithuania, Malta, Norway, Romania, Spain, Switzerland, England and Wales. In the case of other countries, which make no mention in the policy documentation, one can infer a similar orientation from the target regions of new mobility programmes and other recent mobility-enhancing measures.

2.4 Levels of study

Given their mostly general nature, it is unsurprising that not many policy documents make explicit reference to the different levels of study. The vast majority of documents simply talks of "students". This applies in particular to (outgoing) credit mobility, where practically no differentiations are being made. As an exception of this rule, a Norwegian document makes reference to measures to encourage outgoing mobility in the sub-bachelor (short-cycle) segment. Another exception is Estonia, where every PhD graduate will have studied abroad for at least one semester. In Denmark, a document mentions a special scholarship programme for students from "colleges" (as

distinct from universities). This differentiation is by institutional type, but it is likely to concern mainly bachelor (or sub-bachelor) students.

The picture is slightly different with regard to incoming degree mobility. The majority of documents for this mobility mode are also unspecific, but some mention a level focus. Where this is the case, the emphasis is almost always on the postgraduate segment, i.e. on master and PhD students. In the context of quantitative targets, we have already referred to France and Estonia earlier in this chapter. The countries have both set targets for foreign PhD students (10% in Estonia, 33% in France), and France has also set a target for foreign master students (17%). Finland intends to reach a 20% share of foreign PhD students. An Italian document claims that the country has targets for foreign master and PhD students, but it does not quantify them.

Other research we are involved in also suggests that the *de facto* emphasis of many European countries for incoming mobility lies in the postgraduate sector. Most national marketing campaigns and branding efforts (see below), which are usually government-funded, primarily address postgraduate students, and many new scholarship programmes do so, too (often in combination with a focus on non-European students).

2.5 Measures

The documents made available to us mention a very wide range of measures aimed at implementing the mobility "strategies" and policies. As is the case generally, the width and depth of information provided concerning measures intended to enhance mobility differs considerably amongst countries. This makes direct comparisons of countries impossible in this section, as in this chapter throughout.

Scholarships and other forms of financial support

Almost all countries covered by this study mention the European Union support programmes, such as ERASMUS and ERASMUS MUNDUS, as mobility support measures of prime importance. In some countries, this is also the (almost) only item on the list of scholarships, together possibly with a small number of grants provided in the framework of bilateral cultural agreements with other countries.

A small number of countries state that they provide or intend to provide in the future complementary funds for EU programmes, in the majority of cases for ERASMUS (both "Belgiums", Lithuania, Portugal, Romania and Spain). Austria mentions a special programme to support higher education institutions in the preparation of an ERASMUS MUNDUS application.

Nationally funded scholarship programmes are frequently mentioned, for both outgoing and incoming students. Since the policy documents understandably do not provide full inventories, it is impossible to quantitatively compare the national commitments. Germany is a country with a very broad scholarship offer for incoming and outgoing students as well as for temporary and degree study. The German Academic Exchange Service (DAAD), the country's largest scholarship provider, offers over 200 schemes, which together have a global coverage. As mentioned already, amongst new programmes highlighted in the policy documents, many are geographically focused on the "BRICs" and like countries. There are also indications that new programmes target primarily highly qualified students and are, thus, designed as "knowledge gain" instruments. Three countries (i.e. Hungary, Italy and Greece) report plans to abolish taxes on scholarships, which apparently so far exist.

State grant and loan systems are another very frequent form of support for study abroad. In the vast majority of countries, they were originally designed for the study of domestic students in their own country, but they have gradually been turned or are now foreseen to be turned "portable".

According to the survey conducted in the framework of the 2009 Bologna Stocktaking exercise, state grants were not portable in only five of the 32 countries covered by this study. No portable loans were available in just seven countries (because there was either no loan system at all, or the system was not portable). It must be stressed, however, that the comments of respondents give rise to the question if answers were provided on a shared concept of state loans and grants.

The portability of grants and loans is, however, subject to a number of restrictions, which differ from country to country and on which no comprehensive overview exists yet. These restrictions relate to

- *Socio-economic status*: in a number of countries, mostly in Europe's Northern countries, almost 100% of students are eligible for state loans and grants. Usually, however, the grants and loans are "means-tested", i.e. only a group of students whose parents are less well off is eligible.
- *Duration and mobility mode*: only a few countries provide information by mobility mode and mobility duration. From these answers it appears that portability is often restricted to credit mobility. An interesting case is Slovenia, which restricts portability to temporary study abroad, but covers full degree study if a course is not available in Slovenia or if the course abroad improves the student's "employability".
- *Geographical reach*: many countries differentiate portability by target country. All countries with portable grants or loans cover study in another EU or EEA country. In some cases, the "reach" of the grants and loans is world-wide. Yet in other countries, the portability covers both temporary and full degree study in the EEA, but only temporary study beyond this area.
- *Levels of study*: in some countries, the portability of grants and loans depends on the level of study. For example, Portuguese grants are apparently portable at the bachelor and master level, but not in the PhD segment. Spanish grants are portable for PhD students, but not for those at bachelor and master level.

A few countries, amongst them the Flemish Community of Belgium, advocate for the creation of a European loan fund to be financed by the European Investment Bank.

Languages

About one-third of the countries covered by this study state in their policy documents an explicit priority for the creation of programmes taught in English. Since many of the countries with a high or very high supply of such teaching offers did not explicitly mention English-taught provision, but nevertheless pursue such polices very vigorously, we estimate that at least two-thirds of all countries covered aim at either creating or increasing this type of offer. Some countries – amongst them Greece and the Flemish Community of Belgium – mention legal obstacles for the provision of English-taught programmes which they intend to address. English-medium provision has no doubt become one of the key measures in most of Europe for the attraction of incoming (degree) mobile students. [32]

It is interesting that a number of countries stress the need for foreign students in English-taught programmes to also learn the domestic language(s) of their host country. Mostly, such needs are seen in the context of the desirability for students to be able to participate in local life beyond the classroom and be properly integrated in the host institution and country. Also stressing the need to learn the national languages, a Finnish document argues that without proficiency in the national languages (i.e. Finnish and Swedish), foreign students would not be able to make themselves

[32] Cf. also Bernd Wächter, Friedhelm Maiworm, *English-taught programmes in European higher education. The picture in 2007*, Bonn: Lemmens 2008.

available in the Finnish labour market after graduation. In this case, foreign students are viewed as skilled migrants (see also below).

Many countries regard the lack of sufficient foreign language competencies amongst their own students as an obstacle to outgoing mobility. They announce efforts, mostly of an unspecified sort, to improve foreign language mastery of students. Countries in whose policy documents we found more explicit references to such efforts were Spain, Portugal, France, the Czech Republic, Malta and the Dutch- and French-speaking Communities of Belgium (the latter has developed a *plan langues*).

Information and encouragement measures

A number of documents stress efforts undertaken to convince their students of the benefits of temporary study abroad. Mostly, the exact measures that are being employed (or in the planning) remain unspecified. Various documents refer to the provision of information about opportunities for outgoing mobility. A document from the Flemish Community of Belgium is more specific, arguing to involve the media in encouraging mobility, as well as academic staff. Sweden provides a yet more palpable example: when participation of Swedish students in ERASMUS started to stagnate, the country staged a comprehensive ERASMUS promotion campaign.

Marketing and promotion

The international promotion and marketing of its higher education institutions and programmes has become a cornerstone of many, if not most countries' concrete efforts to boost incoming mobility (mostly for degree mobility). This is a palpable change from ten or 15 years ago, when marketing was regarded in most countries as a fundamentally "un-academic" activity associated with commercialism. The change applies especially in the case of countries which attach a heightened importance to a substantial inflow of foreign degree students, but it is not limited to them.

About two-thirds of all countries report marketing-related activities of some kind, and from earlier research, we know that still more are active in this field.

A small number of countries, such as the UK, France, Germany, Sweden, the Netherlands and, more recently, Spain are operating comprehensive global marketing campaigns. They have "branded" their country's higher education sector, run websites (portals) as gateways to the country's higher education offer (study-in-…), organised their own education fairs and media campaigns, and some of them operate promotion offices around the globe and conduct (country-based) market research. These countries have either created a separate organisation for their country's global marketing, such as CampusFrance or Universidad.es, or have entrusted an established organisation in the field (e.g. DAAD in Germany, NUFFIC in the Netherlands or the British Council in the UK) with the task of international marketing.

A far larger number of countries are engaged in more limited ways. These countries might not have created a full brand, but they run web portals (study-in-…) of various degrees of sophistication and detail and they participate (or organise their country's higher education institutions' participation) in international marketing fairs staged by third parties. They have also assigned an existing organisation or newly created one with the task of implementing their promotion efforts.

Mobility windows

From the documents provided emerges a wide-spread belief that a promising instrument for the increase of temporary outgoing mobility is the curricular integration of a "study-abroad" phase. Structured mobility of this sort is believed to lower mobility obstacles. The relative popularity of this

approach is possibly due to the fears related to the expected negative impacts of shorter programme durations and fuller workloads under the new Bologna degree architecture.

Documents from about half of the countries covered by this study mention a priority for the creation of "mobility windows", be they simple integrated study abroad phases, or, more often, double or joint degrees. Once again, we assume that some countries which pursue such priorities did not mention "mobility windows" because they thought they were obvious. A number of countries where joint degrees are – or were at the time of writing of the respective documents – not yet legally possible do report the intention to change their laws.

Recognition

The policy documents perused stress the importance that governments attach to the recognition of qualifications, credits and prior learning acquired outside of the country, as a means to enhance incoming and outgoing mobility. This reveals a strong consensus that non-recognition is one of the major mobility deterrents. Most countries stress recognition issues in one form or another. Most often mentioned is the implementation of ECTS and the Diploma Supplement. Despite the upbeat nature of statements, there are frequent references to necessary improvements.

The importance attached to recognition issues is also reflected in the outcome of the 2009 Bologna Stocktaking exercise. Based on information collected by means of a questionnaire, the implementation stage and quality of the Diploma Supplement, ECTS, the Lisbon Recognition Convention and the recognition of prior learning were assessed. There were five evaluation categories, ranging from practically impeccable implementation at the one end, to very flawed implementation on the other end. With exceptions, the results were very good[33]:

- *Stage of implementation of the Diploma Supplement*: 21 countries received the top mark, six the second best, and seven the middle one;
- *Implementation of the principles of the Lisbon Recognition Convention*: 27 countries were awarded the top rating, two the second-best, and five the lowest;
- *Stage of ECTS implementation*: 16 countries were in the top category, nine in the second-best, five in the middle category, and one in the second-lowest; and
- *Recognition of prior learning*: 17 countries received the top grade, four the second-best, six the middle one, four the second-lowest, and three the lowest.

Understandably, most comments refer to recognition at the "receiving end". One country, Malta, stresses the need for a better recognition of its own institutions' qualifications in other countries, and especially in Asia, Africa and the Middle East. This is apparently linked to worries that students from these regions will not choose Malta as a study destination if they cannot be sure to have the qualifications gained there recognized 'at home'.

Student services and removal of obstacles

An appropriate level of services for foreign students is part of the stated mobility policy of many countries. The services in question cover a wide range of issues, ranging from practical issues and social aspects to help in the academic sphere. The degree of detail devoted to student services varies tremendously amongst countries and individual policy documents, and so appear to do the measures put in place. Many countries stress particular individual aspects. Turkey highlights efforts to provide better-quality accommodation, and Malta stresses a range of "facilities". Other countries put the emphasis on academic mentoring in order to ensure that students graduate successfully.

[33] It must be pointed out, though, that most experts regard the Stocktaking exercise as a good-willed and slightly lenient evaluation.

Support for the proper integration of foreign students into the student body and the wider social environment are stressed in further documents. Some countries have drawn up behavioural codes for their higher education institutions, which are to ensure the "ethical" treatment of students and a (high) minimum level of service provision. A particular concern in many countries is the facilitation and speeding up of the student admissions process.

One of the most comprehensive sets of service and support measures was put in place by Germany. This country launched in the past years two major programmes, PROFIS[34] and STIBET[35], which provided higher education institutions with funds to improve their services for foreign students in wide range of fields.

Next to student services, the documents reviewed highlight the determination of and the need for the improvement and facilitation of visa and residence regulations, which are regarded in most countries as an obstacle to incoming mobility. A typical example is Portugal, which plans to put in place a "fast track" visa procedure for non-EU students. As in the Portuguese case, references of this sort are almost exclusively to students from non-EEA countries, although one of the countries covered here, Turkey, also identifies visa regulations as an obstacle to incoming and outgoing mobility in the framework of the ERASMUS Programme.

A smaller number of countries also stress efforts made in order to enable foreign students to work during studies (on a limited basis) or after graduation (for a limited period of time). Especially measures opening up the host country's labour market to students after graduation indicate the possible emergence of a trend to use incoming degree mobility as an instrument to facilitate skilled migration.

2.6 Rationales

Which objectives do national governments try to achieve with international mobility? What are the potential outcomes attributed to mobility by national governments?

First, and in line with the overwhelming belief that mobility is a desirable phenomenon, mobility is practically never associated with negative effects. The exceptions are the few cases mentioned earlier, where very high outflows of degree mobile students lead to fears of "brain drain", and where very high inflows create capacity problems in some subject areas.

Second, and related to the above, mobility is seen by most countries as so desirable that many do not see the necessity to specify in detail the exact effects expected of it. It appears that for many, if not most governments, international mobility is a "good in itself", the benefits of which are evident and in no need of elaboration.

Third, and to the extent specific rationales are stated, very few countries pursue only one single rationale. Typically, a range of desired outcomes is mentioned, and sometimes even contradictory ones.

Outgoing mobility

The list of the number of reasons given for outgoing (credit) mobility is shorter than that for incoming degree mobility. Though not always being explicitly stated, it becomes clear that most governments regard mobility, in one way or another, as part of a "quality education". The same expectation is also often expressed as an increased "attractiveness" of higher education institutions and whole national systems. More concretely, mobility is often seen as increasing graduates'

[34] http://www.daad.de/hochschulen/betreuung/profis/05094.de.html

[35] http://www.daad.de/hochschulen/betreuung/stibet/05096.de.html

"employability". Also, the expectation that outgoing mobile students act as "ambassadors" of their respective countries is sometimes voiced, though voiced less often. Interestingly, this hope is also harboured by host countries (in the case of incoming mobility), so that the role expected of one and the same student can sometimes be that of a "double agent".

Incoming mobility

The list of possible benefits of incoming mobility is somewhat longer, and most rationales are predominantly on the "egoistical" side. One exception, of an "altruistic" motive, is that of "academic aid" in the context of development cooperation. Even though we found that the policy documents we studied rarely expressly quote this motivation, it is common, as becomes apparent through the funding instruments (above all, scholarship programmes) mentioned. Another motive, though perhaps not altogether altruistic, if not outright egoistical, is the use of mobility as an instrument of foreign policy, be it towards near neighbours or far-away countries. This rationale is quite overtly stated in German documents, but it is implicit in a number of other cases, too, where, for example, bilateral (cultural) agreements are frequently mentioned.

However, the much more frequently mentioned rationales are such which aim at gains for the host country and/or its higher education institutions. One of these "egoistical" reasons for attracting foreign students is to make "knowledge gains", by attracting high-quality students from abroad. This argument is strongest in documents concentrating on research and innovation rather than higher education policies (teaching and learning), though it is by no means weak in the latter. The focus is on students in the postgraduate segment, PhD students above all, but also master-level students (as well as on post-doctoral fellows).

The objective to make "knowledge gains" is primarily academically oriented and based on the idea that knowledge gains strengthen an institution in the national and international competition in higher education. However, it has an economic undercurrent, too, in that knowledge-driven societies and economies are also economic winners. A second set of rationales, around the concept of the "export of education", is much more overtly economically orientated. The intention to "export higher education" is often somewhat euphemistically described as "increasing attractiveness" or "competitiveness". Only a few countries bluntly state that their intention is to improve the institutional funding base by creating revenue from tuition fees (usually from non-EEA students), such as the UK, the Netherlands, as well as Malta and the Czech Republic (in the latter two cases, as future intentions rather than present reality). In other cases, more indirect formulations of the "attractiveness" or "competitiveness" sort are used (Finland, Denmark, France and Lithuania). A variant of this is Cyprus, which states its intention to become a regional education centre. It is interesting to note that not all countries arguing this way (yet) charge tuition fees, and cannot therefore make direct economic gains from incoming degree students. Hopes that the study of foreign nationals will improve opportunities of future trade are also sometimes voiced. However, the economic benefit is in those cases not expected from the "selling" of education, but from future orders of goods and services of the returned foreign student, and from joint economic activity more widely.

Another set of rationales, linked to the above, is related to the idea of skilled migration. Foreign degree students are, in those instances, viewed as a potential reinforcement of the national work force and those who would fill skills shortages. Only a few countries mention this motive explicitly, amongst them Denmark, Finland and the Netherlands, but far more discreetly indicate such motives, by stressing new legislation allowing students to stay on and work after graduation for a limited period.

A last rationale we found, though much less frequently mentioned, relates to the concept of "internationalisation at home". The argument is that the presence of a sizeable number of foreign

students in the classroom creates internationalisation opportunities for non-mobile domestic students, thus providing an alternative to outgoing credit mobility.

3 Staff mobility

As mentioned already in Chapter III of this volume, the term “staff mobility” is ambiguous. This also applies to the documents studied. “Staff” covers a wide range of persons, amongs them persons who are mainly or only teaching (and not involved in research in any substantial way), persons who are mainly researching, as well as doctoral candidates, who, depending on view, are either learners (students) at an advanced stage, or knowledge producers, i.e. researchers. “Mobility” can refer to both temporary stays abroad and to “permanent” migration to another country, and to stays for the purposes of teaching and research. In other words, more so than in the case of student mobility, the documents studied cover a wide range of mobility modes, between which they rarely differentiate explicitly.

We found two main types of documents whose focus is markedly different. The one type deals with temporary mobility and puts the emphasis on mostly outgoing teaching stays. The other type deals foremost with incoming mobility, and focuses on persons who it is hoped will stay in the host country permanently or for a substantial period of time. The first type of document is mostly found in documents relating to the teaching and learning function of higher education (education policy). The second type of document originates from science, research and innovation policies.

By and large, and remarkably parallel to student mobility, the emphasis of the documents studied is on two types of mobility: outgoing temporary mobility, mainly for teaching purposes, and incoming migration of researchers.

Overall, and rather unsurprisingly, staff mobility is treated in the documents studied as highly desirable and in need of increase. This applies to both outgoing temporary and incoming temporary and permanent mobility. Understandably, outgoing migration is exempt from this: if mentioned at all, it is viewed as a danger.

The degree of elaboration of the documents studied differs considerably. Documents relating to incoming mobility tend to be much more systematic and detailed than such on outgoing temporary mobility. While the latter very rarely deserve the attribute “strategy”, the former often do. Temporary outgoing mobility for teaching purposes is usually dealt with together with student mobility. Slightly overstating the case, one could say that sections on staff mobility in these documents are often a “footnote” to the main theme – student mobility – indirectly indicating a lesser importance on staff mobility.

3.1 Outgoing mobility

As already stated, the outgoing mobility of staff for teaching is named by almost every country as an important policy aim. At the same time, such statements are usually made “collectively” for staff and students, and, as a rule, space specifically dedicated to outgoing staff mobility is only a fraction of that devoted to student mobility. The same goes for detail (e.g. on measures put in place to increase the volumes of outgoing teaching staff mobility). Therefore, statements on outgoing staff mobility are rather vague, which undermines their credibility.

Against the background of the above, it is no surprise that we have not found any quantitative targets set for outgoing staff mobility, except for the sub-group of PhD candidates in Estonia. Estonia aims for 100% of PhDs with a period of at least one semester abroad, in order to achieve, which the country intends to integrate, “mobility windows” into all PhD programmes.

A key measure mentioned to increase outgoing staff mobility is the provision of scholarships in the framework of funding programmes. Most often mentioned are European programmes and projects in general and the ERASMUS Programme in particular.[36] Norway mentions a national scheme topping up Marie Curie grants (i.e. salaries). Germany emphasises its nationally-financed programmes, mostly run by DAAD, which it says annually fund between 5 000 and 6 000 German "scientists" abroad. The Netherlands announced, in 2008, the imminent creation of a new programme for temporary outgoing mobility worth nearly EUR 9 million.

A few countries report that teaching periods abroad are counted towards the standard teaching load at home, among them Germany and Norway. Sweden reports of funds to cover the replacement costs of staff teaching abroad, though it is not clear if this is restricted to some institutions or if it applies nation-wide.

Countries mention a range of motives to support teaching staff mobility. Widespread is the notion that a teaching experience abroad enhances staff members' international competencies and generally "internationalises" them, and thus the institution of origin. Similarly, some countries, amongst them Denmark, the Dutch-speaking Community of Belgium, Liechtenstein, Malta and Scotland regard staff mobility as a "catalyst" for the mobility of students, and therefore view it as important. This assessment is probably also shared by a number of countries which do not specifically mention it. The problem with this approach is that staff mobility appears to be even more difficult to put in place than the mobility of students.

3.2 Incoming mobility

In comparison to documents on outgoing mobility, policy statements on incoming staff mobility are much more forceful, comprehensive and detailed and, overall, credible. Judging from the documents available to us, we observe a strong trend to encourage the incoming mobility of staff for one main reason: to strengthen the international competitiveness of countries' higher education, science and innovation systems, and thereby, to create the foundation for strong knowledge-driven economies able to face ever stronger competition from old and especially new (BRIC and Asian) economies in the future. The focus of these documents is rather on immigration than on short-term stays; it is on researchers rather than teaching staff; and it is on top-achievers rather than "run-of-the-mill" academics and researchers. However, short term stays are often viewed as an "entry point" into longer stays, and postgraduate students play a key role in these strategies, too, since they might be persuaded to stay in the country after graduation, and be available to higher education and research or to the economy more generally.

The strategies pursued are often implemented in the form of national research "excellence initiatives" (to use the name of the German programme of this sort as a generic one). Their main thrust is on systemic improvements in the form of more research funding, better infrastructures and equipment, better research career paths and novel approaches in the education of young researchers, e.g. the introduction of American-style graduate or PhD schools (in English, in Estonia). On top of this, the initiatives also often provide funding for foreign researchers' salaries.

It is interesting to note that the concept of internationalisation behind these policies and strategies is largely instrumental. The idea behind them is not as such to attract foreign students, but to attract the best a country can get. Only because "the best" are thought to be equally distributed around the globe do foreign students become a major target. Tellingly, many of the policy documents made available to us also try to re-attract own-nationality researchers from abroad, be they PhD graduates, postdoctoral fellows or senior researchers.

[36] Spain, in particular, underlines its success in increasing ERASMUS teaching staff mobility. It is not clear from the documents if Spain is co-funding outgoing teaching staff mobility – but it appears quite likely from the figures.

Compared to outgoing mobility of teaching staff, more countries have set quantitative targets for incoming staff and researcher mobility, though targets are still much rarer than in student mobility, and not usually very precise. Ambitions are different, due to different shares of foreigners to date. Estonia, a target-rich country, aims at a 3% share of permanent foreign staff and a 10% share of foreign PhD graduates. Slovenia is striving to attain a foreign researcher rate of 5%. Germany wants to improve to a rate of 8% amongst all foreign staff and 15% amongst foreign researchers. Germany also stresses that it needs to considerably increase its share of foreign PhD students, remarking that it ranks only 15th amongst OECD countries as a destination of foreign PhDs. PhD students and graduates, as potential future researchers, are also a key concern of Iceland, where the country's main university has set itself the target of increasing the share of foreign nationals fivefold, and in France, whose international marketing and promotion campaign places a particular emphasis on this group. Other countries, such as Switzerland, have very high shares of foreign staff already (nearly 50% in the university and 20% in the *Fachhochschulen* sector*)*, which it intends to consolidate.

Next to obvious obstacles like a relative lack of attractiveness of a country's higher education, research and innovation system, issues related to immigration (e.g. visas) and labour market access (e.g. work permits) are viewed, by most countries, as major impediments for the influx of foreign staff and researchers. Almost every country reports of recently implemented or scheduled improvements in the respective laws and regulations. Many countries make reference to the "translation" into national law of the Council Directive 2005/71/E (and, less often, 2004/114/EC), on easing the entry of third-country nationals for research purposes. Some countries make specific mention of the fact that researchers' spouses now have unrestricted access to the labour market. Likewise, many countries stress the efforts of their national mobility centres, in the context of Researchers in Motion (EURAXESS), to provide information and advice to foreign researchers aimed at overcoming mobility obstacles. More widely, countries have become conscious of the need to provide foreign researchers with services when in the country; in parallel to "student services", "researcher services" appear to become a feature of higher education and research institutions.

Chapter VI: Review of the existing literature on mobility obstacles and incentives

Laura Rumbley

1 Introduction

A considerable amount of literature has been produced – particularly over the last two decades – that has attempted to provide insight into the nature and characteristics of mobility in European higher education, including achievements and shortcomings of mobility efforts at all levels. A central theme in much of this analysis has been the question of incentives and obstacles. The factors that encourage individuals – particularly students but also professors, researchers and even administrative staff – to work and study internationally, and the impediments that keep them home, have been (and remain) issues of concern to students, academics, policymakers, university leadership and other key stakeholders. A review of the existing literature in this area provides an important foundation for this study, in terms of highlighting the common understanding of what exactly facilitates and what inhibits the mobility process.

The body of material drawn upon for this chapter includes a wide range of documents, publications and reports from institutional, governmental, non-governmental and academic sources. It is interesting to note from the outset that, overall, there is considerably more literature available relating to the phenomenon of credit mobility rather than diploma mobility. Of course, as will be explored in the sections that follow below, the amount of attention placed on credit versus diploma mobility also depends on the specific obstacles and incentives under discussion, as some of these apply either exclusively or mostly to one mobility mode or the other.

2 Contextual considerations

One of the most important aspects of the analysis of obstacles and incentives to mobility concerns the broader context in which these issues are situated. It is important to acknowledge from the outset that students and higher education institutions in Europe operate in an atmosphere where mobility is generally regarded as a positive and desirable development. The phenomenon has been an increasingly visible agenda item in Europe over the last two decades, at all levels, and currently mobility is referenced broadly and frequently in European public discourse as a fundamentally 'good thing' that should be universally accessible and widely encouraged. This is certainly true at the European level, as evidenced by an enormous body of material emanating from European Union on the subject, the stated Bologna Process aims and the literature that has analysed these two supra-national areas of activity in the last decade. Chapter VI of this study (in section 6.2.6 Rationales) also touches on the predisposition at the national level to view mobility in a highly favourable light. Contextual considerations about mobility are also meaningful to explore at the institutional and individual levels, where much of the direct experience with mobility activities takes place.

2.1 At the institutional level

The enormous number and wide variety of postsecondary institutions in Europe make it difficult to generalise about convergence around any one issue at the institutional level. However, support for mobility – at least in terms of publicly articulated positions – has been unquestionably vigorous and sustained by European higher education institutions in recent years. From Belgium to Bulgaria,

Finland to France, internationalisation is very often presented – particularly by universities – as a fundamental aspect of the institutional profile, with international mobility (particularly amongst students and academic staff) singled out as a clear, tangible and desirable example of how this commitment to internationalisation is 'lived' by the institution.

Institutions express a variety of rationales for encouraging and enabling mobility. Typical amongst these are the contributions they can make via mobility support to the production of more skilled and adaptable graduates, which in turn exerts (they assert) a positive net effect on the development of innovative and productive economies and societies.

Also relevant to this discussion is the way in which individual institutions operate in concert with others through international associations of various types. Network of Universities from the capitals of Europe (UNICA), the Coimbra, Compostela and Santander Groups are well-known examples in European university circles. These networks typically include on their agendas a focus on one or more types of 'mobilities'. For example, the Compostela Group coordinates the STELLA Staff Mobility Programme, "to provide opportunities for administrative staff mobility, to enhance cross cultural experience and work placement experience by means of two weeks work exchanges amongst University members within the Compostela Group" (n.d., n.p.). It is also notable that the networks have joined forces at times to articulate a common set of values and orientations with regard to a variety of European higher education issues. In June 2003, for example, UNICA and the Coimbra, Compostela and Santander Groups issued a joint declaration aimed at the Bologna ministers meeting in Berlin. In this joint statement, these networks called for recognition of the potentially positive role to be played by networks in the process of embedding Bologna reforms at the institutional level, particularly in terms of the ability to "promote and develop all forms of mobility under the new Bologna realities" (n.p.).

2.2 At the individual level

Given that international mobility is, at its essence, about the movement of individuals, it is highly relevant to at least endeavour to make sense of perspectives at this level, in conjunction with the contextual considerations at the European, national and institutional levels. And there appears to be a fairly solid level of interest in international mobility for at least part of one's studies amongst European higher education students. An April 2009 Eurobarometer poll of 15 000 students in 31 different countries across Europe found that a total of 53% had already studied abroad, intended to do so, or had at one time intended to study internationally but had either given up on the idea or had failed to be selected to do so. The overall results also indicated fairly robust support amongst the student respondents for the "inclusion of a short study period in another country as an integrated part of the studies"—64% "strongly agreed" or "rather agreed" with this statement (p. 37). It is extremely important to note, however, that the survey found that different populations of students, particularly in terms of nationality and socioeconomic background, register different levels of interest in mobility.

Meanwhile, student organisations such as the European Students' Union (ESU, 2008) openly acknowledge that "Mobility is in the strong interest of students". Moreover, "Because of the clear added value of higher education, ESU believes that mobility is a right for all students. ESU opposes policies that restrict mobility to a small group of students" (n.p.). As the largest group of direct beneficiaries of international mobility policies at the European, national and institutional levels, students (particularly working collectively within such organisations as ESU) play an important 'watchdog role' in the policy discussions about mobility. In this capacity, they appear to be amongst the sharpest critics in Europe when it comes to the mobility agenda. ESU has long worked to point out the discrepancies between rhetoric and reality with regard to mobility. Most recently, it has weighed in unequivocally on the European Commission's new Youth on the Move initiative, lauding many of its objectives but also clearly denouncing what it perceives to be the 'imbalanced' prioritising of economic and competition-based rationales for mobility over and above such benefits

as “fostering intercultural dialogue and understanding” (ESU, 2010c, p. 7). ESU also decries what it sees as insufficient funding despite ambitious EU objectives for increasing mobility numbers.

In sum, a broad and diverse range of documentary evidence supports the assertion that there is an overwhelmingly positive public presentation of international mobility within the context of higher education in Europe. This can be seen at the most local level in terms of the potential benefits for specific stakeholders, up to the broadest consideration of efforts to strengthen social, economic and political projects across the continent. At the same time, there is ongoing conversation across the board about the need to effectively identify and remove obstacles to mobility participation, as well as strengthen and expand the menu of incentives that can serve to actively encourage and facilitate mobility in European higher education for a substantially greater numbers of individuals.

3 Obstacles to mobility

A substantial amount of literature has focused on the question of what prevents potentially mobile individuals from engaging in this activity. Most of this discussion has centred on eight fundamental challenges, including:

- a lack of information about mobility opportunities;
- low motivation levels or little to no personal interest in being mobile;
- inadequate financial support;
- foreign language skills deficiencies;
- a sense of insufficient time or space for an international experience within the framework of an established curriculum or programme of study (for those considering temporary mobility within a degree programme);
- concerns about the quality of mobility experiences;
- legal barriers, particularly relating to visa and immigration issues; and
- problems gaining recognition for academic work completed abroad.

Individually and collectively, this list of obstacles appears repeatedly and in a variety of configurations throughout much of the writing about international mobility in recent years. Nevertheless, it has to be emphasised that the ‘hierarchy’ of obstacles is very different from one country to another, as well as across the different types of mobility. Obstacles can be quite different for diploma and credit mobility, for example. And within the scope of credit mobility alone, there may also be distinct challenges depending on the specific type of mobility undertaken (for example, mobility for studies versus mobility for placements).

3.1 Information

Despite what many perceive to be a pervasive amount of widely accessible information about mobility opportunities, the literature points to ongoing challenges in this area. This is an issue at a variety of levels. On the one hand, there are indications that European-level sources of information – such as web portals for information on EU programme and funding opportunities – are not sufficiently well-known by large proportions of key target audiences (Wuttig & Rohde, 2010). And even amongst those who are familiar with these resources there is criticism, including the lack of user-friendliness of these tools as well as an effect of “disorientation and confusion” in the face of “far too many websites” rather than a smaller number of definitive information sources at the European level (Wuttig & Rohde, 2010, p. 17).

Even 'flagship' programmes seem to suffer from information gaps. Indeed, a study conducted in 2010 for the European Parliament (Vossensteyn, et al) generated responses to a questionnaire from 21 145 students in seven countries that participate in the ERASMUS Programme. Of the total number of student respondents, 8 697 had not participated in ERASMUS. Of course, as with many analyses of mobility trends and issues, the variation in responses by country was significant and should not be discounted. However, for the purposes of this more general overview here, it is interesting to note several findings. For example, amongst the nearly 8 700 non-participants, 18% of respondents indicated never having heard of the ERASMUS Programme as an "important" or "very important" factor in not having considered taking part in it, while 27% of this group said they "could not find enough information about the ERASMUS Programme and how it works". Furthermore, 34% of those who had not considered ERASMUS expressed "Uncertainty about the benefits of the ERASMUS period abroad" (Vossensteyn et al, 2010, p. 89).

Amongst those respondents who may have considered taking part in ERASMUS but did not ultimately do so, 26% cited "Lack of information about the ERASMUS programme and how it works" as an "important" or "very important" factor related to not having taken part in ERASMUS (Vossensteyn et al, 2010, p. 87). Meanwhile, the question of obstacles extends beyond both the specifics of ERASMUS and the direct transmission of information to potentially mobile students. For example, the 2008 *Report of the High Level Expert Forum on Mobility* concluded that potential "promoters of mobility" (p. 14) also lack information (as well as personal experience with mobility themselves). This is understood to hamper effective transmission to potential participants, even when "individual counselling" has been characterised in some quarters as being "crucial" in the preparation for mobility periods (Wutting & Rohde, 2010, p. 17).

Finally, limited or one-sided information may also play a role in holding back potentially mobile students. The report *Social and Economic Conditions of Student Life in Europe* (Orr, 2008), an output of a joint international project coordinated by the Higher Education Information System (HIS) which incorporates data from the EUROSTUDENT III survey, noted that "decisions for or against mobility are mainly made from the perspective of the situation in the home country" (p. 153). Negative (or even ambivalent) messages about mobility prospects on the home front, or insufficient information about the host country or institution may effectively serve to dampen student interest.

3.2 Motivation

The issue of personal motivation (or lack thereof) is also present in the literature on obstacles to mobility, despite the high visibility and positive connotations associated with the phenomenon in Europe. In point of fact, personal disinclinations to pursue international academic experiences may be one of the "strongest deterrents" for engagement in this activity, given the strong tendency for individuals around the world to "stay where they are… as long as conditions are not too hostile" (Wächter, 2010, p. 3). Evidence to support this notion can be seen in the previously mentioned 2010 European Parliament study that focused on ERASMUS participation, in which 24% of students who did not consider joining ERASMUS cited simply not being "interested in a study abroad programme" as an "important" or "very important" factor for not having considered taking part in ERASMUS. Just over one-fifth (21%) of these students also stated that "study abroad is not important for my future career" (Vossensteyn, 2010, p. 89). The tendency towards non-mobility amongst Europeans of all ages is also recognised by the Report of the High Level Expert Forum on Mobility (2008). This document notes that although the propensity in Europe is to view mobility favourably, Europeans tend not to move in large numbers outside of the region or country of their birth.

The question of 'social selectivity' is an interesting one to raise in this discussion. Drawing on findings from EUROSTUDENT III, the HIS study notes that "students from low-educated families tend to have lower than average rates of foreign enrolment and much lower rates than students from relatively high-educated families" (Orr, 2008, p. 139). There are, of course, a variety of

subtleties and exceptions to this general finding, and these are extremely important to take into account in any serious analysis. Furthermore, some argue that participation in the ERASMUS Programme is actually no more socially selective than access to higher education more broadly speaking. However, in terms of getting a handle on the landscape of potential obstacles to student mobility, the EUROSTUDENT finding may point to a situation in which students coming from family backgrounds with lower levels of education attainment may simply not 'identify' easily or naturally with international mobility experiences. Making sense of the level of interest of this underrepresented group and others is an area for some attention moving forward.

3.3 Funding

Financial barriers are perhaps the most commonly cited set of obstacles in the literature on international mobility trends and challenges in Europe. For example, the 2009 Eurobarometer poll mentioned previously found that "lack of funds" was the most frequently mentioned obstacle (at 61%) amongst those students who had either abandoned study abroad plans or never planned to study internationally. Both the direct costs (e.g. travel expenses and the sometimes higher costs of living abroad), as well as the potential losses as a result of overseas experience (including social benefits, domestic subsidies, student finances, along with salary differentials and pension plan complexities for academics working abroad), factor heavily into this discussion.

Documentation touching on the financial challenges inherent in student mobility in Europe abounds, and student advocacy groups have been particularly vocal on this issue. One of the main themes in the literature relevant to this topic is the perceived disconnect between, on the one hand, the desire at the policy level to enhance internationalisation of European higher education through expanded participation in mobility while, on the other hand, insufficient increases of financial resources to match the rhetorical support for mobility. For example, the Bologna Coordination Group on Mobility produced a report in 2009 that endeavoured to synthesise perspectives on mobility issues over the course of four Bologna Seminars in 2008[37]. "Financing mobility" stood out as a major concern in the context of these various gatherings, which collectively echoed the refrain that "lack of funding still constitutes a major obstacle to mobility, especially to the mobility of students" (p. 4). The report touched on some examples of the range of sub-issues related to the overarching topic of concern, including questions about the portability of funding instruments, the relative merits of different types of funding instruments (grants versus loans) and the challenges presented by variable costs of living across the different countries of Europe. *Bologna with Student Eyes 2009* (2010b) and *Bologna at the Finish Line* (2010a), two reports produced by the European Students' Union (ESU), reiterated many of the same concerns voiced elsewhere about funding obstacles for mobility in Europe, at least in the context of the Bologna Process. In both cases, ESU noted that funding instruments heavily affect mobility flows, "that the portability of grants and loans is the only concrete ministerial commitment in the field of financing mobility" (ESU, 2010a, p. 16), and that "the reluctance for real portability for national grants and loans persists" in a significant number of countries (ESU, 2010a, p. 17),.

Meanwhile, Orr (2008) brings an interesting regional perspective to this discussion, with the finding that "income disparities in the European Higher Education Area cause a great strain on mobility" (p. 146). The report noted an "enormous downward slope of 'income-power' running from West to East and North to South" (p. 148). Students in the less privileged parts of Europe "face the extra disadvantage that their normal income, which may be relatively favourable in their home country, is worth much less in most of the potential host countries". This troublesome dynamic is identified by

[37] The four seminars were: (1) "Fostering student mobility: Next steps? Involving the stakeholders for an improved mobility inside the EHEA", Brussels, 29-30 May 2008. (2) "Penalized for being mobile? National pension schemes as an obstacle to mobility for researchers in the European Higher Education Area", Berlin, 12-13 June 2008. (3) "Let's go! – Where to now?", Lille, 6-7 October 2008. (4) "The Europe of higher education: Strengthening pan-European mobility", Nancy, 4-5 November 2008.

Orr (2008) as “one of the biggest obstacles to mobility in the European Higher Education Area” (p. 148-149).

Financial barriers also vex EU programmes specifically designed to foster mobility through scholarship support, as is the case with ERASMUS. The previously cited study on ERASMUS participation issues (Vossensteyn et al, 2010) indicated that 57% of students who did not consider participating had the sense that “Study abroad is too costly” (p. 89). Meanwhile, 29% of those who had considered participating in ERASMUS (but ultimately chose not to) cited “ERASMUS grant was insufficient to cover additional costs of period abroad” as an “important” or “very important” factor in this decision. One in five students who chose not to participate in ERASMUS indicated that “I would lose part of my income in home country (due to job, lack of flexibility of student financing system in my country of study, etc.)” (Vossensteyn et al, 2010, p. 87).

Funding as an obstacle to student mobility is a concept not typically challenged in the relevant literature. However, the Background Paper produced for the October 2010 Belgian EU Presidency conference “Youth on the Move – Achieving mobility for all!” (Wächter, 2010) does suggest some more nuanced ways of thinking about the issue. For one thing, mobility in pursuit of full degrees presents a very different funding picture than that of temporary or credit mobility, with a large percentage of this kind of mobile student likely financing their studies themselves. Meanwhile, the perceived shortcomings in the portability of state loans and grants “appears to have markedly improved in recent years” (Wächter, 2010, p. 7), as evidenced by the fact that, in the latest round of Bologna Stocktaking Reports, 24 of 30 countries indicate that their state loans are now portable. Finally, although the common perception is that European students are fairly well-endowed with funding instruments such as state loans and grants and the “shining example of the ERASMUS Programme grant”, Wächter (2010) asserts a “best guess” that “at least 70% of all mobile students in Europe are self-financed” (p. 7), supporting themselves through work or relying on family assistance. While scholarships may indeed serve to augment the number of students taking advantage of an international mobility experience, it may well be that the lack of such financial support is not as critically detrimental an obstacle as many believe. Indeed, Chapter III of this study also provides insight into other sources of funding, particularly beyond that offered by the well-known instrument of ERASMUS.

3.4 Language

A lack of foreign language skills is an obstacle of some importance to student mobility in Europe, and is mentioned with some frequency in the literature. Concerns in policy circles about the ways in which limited foreign language proficiency and cultural knowledge function as ‘disincentives’ to mobility for some are bolstered by a number of recent quantitative exercises aimed at identifying mobility obstacles. For example, the 2009 Eurobarometer survey on “Students and Higher Education Reform” found that 38% of students who had not planned to study abroad or had eventually abandoned plans to do so cited “language barriers” as a “very big” or “big obstacle” (p. 28-29). Nearly a quarter (24%) of Vossensteyn et al’s (2010) student respondents who did not take part in ERASMUS (although they had considered doing so) cited “Lack of language skills to follow a course abroad” as an “important” or “very important” factor in this decision (p. 87).

More dramatically, amongst those non-ERASMUS respondents in Vossensteyn et al’s (2010) study who had not even considered participating in ERASMUS, 41% indicated that the lack of language skills was an “important” or “very important” factor. Amongst this group, the language deficiency issue was the third most frequently cited factor inhibiting consideration of participation in ERASMUS, after the perception that the experience would be too costly (57%) and the difficulties presented by “family reasons or personal relationships” (46%) (Vossensteyn et al, 2010, p. 89).

It is interesting to note that amongst the students in Vossensteyn et al’s (2010) study, the “Lack of study programmes in English in hosting institution (abroad)” (p. 87, 88) was also perceived as an

obstacle to some extent. One quarter of students who had considered but ultimately not participated in ERASMUS cited the lack of study programmes in English as an obstacle (slightly more than the 24% who referred to the lack of foreign language skills more generally), while 20% of students who had never considered ERASMUS also found a lack of programmes in English to be problematic.

Language as a barrier to mobility is clearly on the radar of many higher education institutions in Europe. A study published by the Academic Cooperation Association (Wächter and Maiworm, 2008), building on previous work in this area dating from 2002, found that institutions are motivated to offer programmes taught in English for a variety of reasons, key amongst these being the leverage this is perceived to provide in terms of the potential to "attract foreign students" (p. 67-68).

Finally, the EUROSTUDENT III survey (Orr, 2008) found a "clear" relationship between high foreign language competency and "relatively higher mobility rates than those with low foreign language abilities" (p. 146). However, the authors of this study openly admit that their data show no clear line between "causes and effects"; language proficiency might have been a skill acquired abroad, not a skill possessed before studying internationally (Orr, 2008, p. 146), further complicating the question of whether language limitations serve to inhibit international mobility or not.

3.5 Curriculum

One obstacle that is nearly exclusively an issue for those considering temporary mobility has to do with how the international experience fits within the overall curriculum or programme of study. To some extent, this obstacle has become more salient in the literature in recent years, in the context of discussions about the wide range of curricular reforms that have been undertaken in Europe in the last decade, and particularly in light of the shortening of many first-degree programmes in response to the Bologna Process calls for greater degree comparability.

The question of finding the 'time' for mobility, as this is articulated in some of the literature, turns on several considerations. First, the period of time envisaged to complete a bachelor degree today may be as short as three years, whereas a first degree in the pre-Bologna period might have been designed for completion over the course of five years. In other words, according to some arguments, there is simply less time to include a period of international mobility within a three-year versus a five-year period. In addition to the simple question of duration of a programme of study, some newly shortened bachelor degrees have been criticised for being 'overloaded'; that is, effectively expecting the same amount of work as the previously longer first-degree programmes, but now requiring this work to be completed in a shorter period of time. Time for mobility in this context may be further 'squeezed out' by an overall shorter window of opportunity. And even where bachelor programmes have not been overloaded, programmes of study may "reflect insufficient modularisation" or contain a "high number of examinations, which keep students at home" (Sursock & Smidt, 2010, p. 81). Programme inflexibility may be further evidenced where all modules are made compulsory or rules require that thesis work be completed exclusively at the home university (Crosier, Purser & Smidt, 2007). Indeed, according to the European University Association's (EUA) Trends V report, "such measures effectively leave little room for students to consider a semester or year in a partner university abroad" (Crosier, Purser & Smidt, 2007, p. 44). Along these lines, temporary mobility in master degree programmes of just one or two years may be even more difficult to achieve, although an increase in degree mobility at the master level has been an interesting development and may represent a 'silver lining' of sorts to some of the obstacles related to the curriculum noted here.

Despite the prevalence of the 'time crunch' argument in much mobility-related discourse, ostensibly due to shorter bachelor programmes, the EUA's *Trends V* report in 2007 found no clear link between the shortening of degrees and a 'chilling' effect on mobility (Crosier, Purser & Smidt, 2007). Likewise, our findings now in 2010 provide no support for the position that Bologna has

somehow stymied credit mobility at the bachelor degree level. Indeed, our interpretation of the data point unequivocally to an increase in mobility numbers throughout the course of the Bologna Process of the last decade. Furthermore, information from graduate tracer studies reveals impressive rates of graduates that had a mobility experience at some point during their studies (cf. Chapter V).

Beyond the question of time, mobility opportunities for students may be more challenging to incorporate in specific fields of study, where the tightly sequenced progression of the curriculum, for example, makes it difficult to 'step out' for any length of time. This has traditionally been a concern in the more technical fields, such as engineering or the hard sciences. For example, the report previously cited on the *Social and Economic Conditions of Student Life in Europe* (Orr, 2008), found that humanities and arts students averaged higher mobility rates than engineering, manufacturing and construction students in 19 of 21 countries; and, in most cases, these discrepancies were significant. The lack of a curricular 'fit' for some students is also apparent in the specific context of ERASMUS. Again, referring to the Vossensteyn el al (2010) work involving a survey of students who did not consider taking part in the ERASMUS Programme, 31% of these individuals indicated that "Lack of integration between the curriculum abroad and in current country of study" was an "important" or "very important" (p. 89) factor in the decision not to consider taking part in this mobility programme. Amongst those students who had considered but then did not take part in ERASMUS, 32% cited the same obstacle.

3.6 Quality

Quality as an issue of concern in the discussion of obstacles to mobility can be understood from a variety of perspectives; however two seem to stand out most consistently in the literature. The first relates to the academic offer that awaits the potentially mobile student abroad (in the case of students who move internationally for either temporary or full-degree purposes). The second has to do with the framework of support that may (or may not) be in place to ensure a smooth and meaningful mobility experience for the individual involved (Wächter, 2010). This has typically applied mostly to short-term study abroad programming, but is increasingly salient in the realm of full-degree student mobility.

On the academic front, the distinction between mobility types – full-degree/vertical or temporary/horizontal – is especially important. Wächter (2010) has suggested that students seeking full degrees abroad are likely drawn to programmes that represent improvements in quality over what they could ostensibly find in their home country, while students moving horizontally – "at least in reciprocal exchange arrangements" (p. 15) – are more probably stepping into academic environments of a roughly similar level of quality. For students who more readily define quality in international mobility experience as a function of improvements in "internationally related soft skills, like the mastery of foreign languages, the acquisition of intercultural competences, the ability to act in an unknown environment, personal maturity" (Wächter, 2010, p. 15), concerns about the quality of the academic offer, more traditionally defined, may be less of an obstacle. However, Vossensteyn et al's (2010) findings seem to dispute a bit the idea that horizontally-mobile students are unconcerned about the quality of the academic offer abroad. Amongst the student respondents in his study who had considered but not ultimately undertaken an ERASMUS experience, 21% of these said that "Uncertainty about education quality abroad" was an "important" or "very important" (p. 87) reason for not taking part in ERASMUS. Of those who had not considered participating in ERASMUS at all, 32% cited similar thinking. And in answer to the question of what measures would have stimulated these students to participate, 47% indicated that an increase in "the quality of experiences abroad" (p. 91) would have made a difference.

The mobility experience is one that encompasses the "whole student" (Kelo & Rogers, 2010, p. 16), and the quality of student life beyond the classroom is becoming increasingly important in Europe in the conversation about what encourages and inhibits mobility. In a recent survey of 1 278 full-

degree foreign students, many of whom came from outside Europe, Kelo and Rogers (2010) noted that 80% of respondents "indicated that the availability of services at the host institution was either 'very important' or 'partly important' in the final decision" (p. 11) about where to enrol. In the context of the Kelo and Rogers study (2010), information and orientation, integration activities, language support and other practical considerations (e.g. housing, visa and administrative procedures and career and internship guidance) were specifically highlighted as being of some importance to internationally mobile degree-seeking students in Europe. Quality, coherence, consistency and accessibility of information and service provision were also highlighted as key issues for effective management and delivery of overall international student support.

Of real concern at the micro level of the individual student, quality issues are important at a larger macro level, as well. Quantity inevitably exerts pressure on quality, a point highlighted by the Bologna Coordination Group on Mobility (2009) and elsewhere in light of the broad push in Europe to increase mobility participation rates, ensure the involvement of a more diverse population and expand the overall scope of activities in this area (e.g. in terms of professional placements).

3.7 Legal issues

Legal issues for mobile students typically concern visa and residence/immigration requirements, as well as eligibility for and access to work permits in the host country. The relative ease of mobility within Europe for European citizens eliminates visa concerns for many mobile students in this context, at least in terms of gaining entry to a host country and particularly for shorter-term, credit mobility purposes.

However, the situation is obviously more complex for non-European citizens. In 2001, van Aken conducted an analysis of the procedures for obtaining entry and residence permission for Denmark, France, Germany, the Netherlands and the UK for students coming from outside the EU and European Economic Area (EEA). Beyond his key conclusion that the Netherlands presented the greatest number of legal and bureaucratic difficulties for incoming students, van Aken (2001) also determined that in all five of the host countries such incoming mobile students "face many problems when seeking permission to enter… for academic purposes" (p. 307). In general, he found rules and procedures to be "complex", "subject to frequent change" and inconsistent in terms of interpretation and implementation (p. 292). Acquiring a student visa apparently remains an issue of some concern; a decade later, Kelo & Rogers (2010) found that applying for a visa was the second-most important pre-arrival service for the degree-seeking foreign students who responded to their survey (following help to find housing). Some categories of students, such as those at the doctoral level, face unique challenges within different legal frameworks. Often, their status as 'student' or 'researcher' varies from country to country, which, in turn, relates to the portability of social security and pension rights. The European Commission's new 'Innovation Union' initiative openly acknowledges the potential for these kinds of issues to exert a drag on mobility of students at this advanced stage and aims to ease such difficulties by facilitating the development of a "framework for improved mobility" at this level (European Commission, 2010, p. 39).

For students with families, visa and immigration questions can be even more complicated. And even amongst those for whom entry into the host country is not problematic, complying with host country residence rules can be daunting. Understanding the requirements, negotiating the various layers of bureaucracy and managing this in a foreign language can be overwhelming. Student difficulties with such issues can generate a powerful wave of bad publicity for programmes, institutions and even countries, with such images discouraging potential students and frustrating stakeholders on the receiving end.

There does seem to be some progress in this area, however. The ESU's poll of students for the 2009 iteration of *Bologna with Student Eyes* found that over 60% of respondents thought that

"Bureaucratic obstacles to mobility, especially visas and residence permits" were currently either "much better" or "a little better" than in the past (ESU, 2010b, p. 78).

3.8 Recognition

Recognition represents one of the most important aspects of a successful mobility experience for students. For credit-mobility students, the term 'recognition' captures the idea that a student who has completed an international study experience will be able to carry the academic credits (e.g. through the European Credit Transfer System, known as ECTS) back to their home institution. For individuals who have completed a full degree abroad, recognition has more to do with the acceptance of their academic or professional qualifications in their home country or elsewhere for the purposes of pursuing employment or further levels of education. This is a fundamental issue underpinning the mobility movement in Europe, yet Wächter (2010) states clearly that "recognition is still an issue in Europe, despite decades of determined efforts to ensure recognition of credits and degrees earned in another country". He notes further that "it is widely assumed that the fear of non-recognition acts as a mobility deterrent on students and other learners" (p. 5).

The *Bologna Process Stocktaking Report 2009* provides an overview of the state of play with regard to key recognition instruments and issues, and points to ongoing challenges. For example, more than one-third of Bologna countries "still do not issue the DS [Diploma Supplement] automatically" (p. 70). It also found that there are widespread differences in terms of the interpretation, implementation and even terminology relevant to the components of the Lisbon Recognition Convention. Finally, ECTS has not been fully implemented across all of the Bologna countries.

Two other very recent sources offer additionally helpful overviews of the kinds of issues vexing the mobility movement in this area; these are the EUA's *Trends 2010: A Decade of Change in European Higher Educatio*n (2010) and the Erasmus Student Network's (ESN) *PRIME 2009: Problems of Recognition in Making Erasmus.*

In its latest *Trends* report, the EUA notes that 44% of the institutions polled for their report reported that "none of their students had problems" getting credits recognised after short-term mobility (Sursock & Smidt, p. 79). This figure has fluctuated up from 41% and down from 48% in two previous iterations of this study – consistently reflecting a finding that over 50% of credit-mobile students may encounter such problems to one extent or another. Beyond the quantitative data, the EUA uncovered a list of concerns relevant to recognition through the site visits also conducted for this report. The obstacles, all of which can exert a negative effect on mobility engagement, include a lack of understanding or awareness of the Lisbon Recognition Convention by academics; lack of support by academics of a central office to process study abroad periods; a sense amongst both students and academics that learning agreements can be burdensome; and tensions (particularly at the master level) between institutional efforts to try to be "unique or different", which creates "further obstacles to recognition" (Sursock & Smidt, 2010, p. 80).

For its part, the Erasmus Student Network undertook a survey of both former ERASMUS students as well as university staff working in the field of student mobility. The total number of student respondents was 2 367, while staff from 100 different higher education institutions responded to the survey. The goal of this exercise was to gain insight into four main areas: provision of information about ERASMUS exchange programmes; course credit issues; Learning Agreement issues; and course recognition issues. The main finding of this study was that a full one-third of the surveyed students (33.7%) holding a valid Learning Agreement signed before studying abroad indicated that they had failed to receive full credit from their home institutions for the courses taken during the mobility period.

4 Incentives for mobility

Mobility incentives may be understood as measures or mechanisms designed to "make things happen which would not happen by themselves, or anyway not to the same extent or so fast" (Wächter, 2010, p. 3). Although the line between obstacles and incentives may not necessarily be an absolutely direct one (as in a text book 'problem-solution' relationship), it can be helpful to talk in tandem about these two unquestionably interrelated areas. The literature on student mobility clearly recognises that obstacles exert a real 'drag' on realising mobility goals, while incentives can provide needed encouragement (and rewards) that enhance the attractiveness of becoming mobile. Understood in this way, mobility incentives may be seen to fall largely into three main categories:

- Financial incentives
- Curricular incentives
- Personal incentives

Although these incentive categories involve some very different instruments, approaches and objectives, in each case a strong commitment to information provision appears to underpin the thinking about how best to ensure meaningful results. The provision of key resources – in terms of formal initiatives, dedicated personnel, funding and administrative frameworks – is another critical aspect in the discussion of developing and implementing incentives for mobility that really work.

Finally, it is important to note that different stakeholders have different perspectives on the very question of incentivising mobility. For example, few countries and virtually no institutions would want to incentivise outgoing degree mobility. This would not be a logical large-scale policy at the European level, either. However, as seen in Chapter VI of our study, which deals with national policies on mobility, creating incentives for incoming degree mobility is seen as a rational and positive thing for many countries, as is the encouragement of outgoing credit mobility. A great deal of literature on incentives tends to focus on outgoing credit mobility (which also has an impact on incoming credit mobility in the case of reciprocal exchange programmes), but there is increasing attention being paid to the question of how to motivate degree mobility as well, mostly from the perspective of the host countries and host institutions.

4.1 Financial incentives

Additional costs are almost a given for any student participating in study abroad (Wächter, 2010). In light of this fact, there is a need to ensure that students can meet these costs, and that they are not prematurely deterred from considering a mobility experience on the basis of limited or incorrect information about either the costs or the financial mechanisms at their disposal.

The literature abounds with examples of ways in which students might be provided financial incentives to engage in a mobility experience. Primary amongst these are to ensure that state loans and grants are more universally portable (BFUG, 2009; Rauhvargers, Deane, & Pauwels, 2009). Amongst student groups, the ESU (2010a, 2010b) has been particularly vocal on the question of how to use funding mechanisms to incentivise students to become more mobile. Specifically, the ESU has called for more student grants that are specifically available for mobility (rather than relying on existing funding instruments from the state that are not necessarily designed for mobility purposes). The ESU also cautions against relying too heavily on loan schemes for mobility, both in light of concerns about students ability to pay these back in an uncertain job market as well as the already debt-averse nature of underrepresented lower-income students who are still not participating in mobility activities in high numbers. The ESU further advocates for "an EHEA wide mobility fund, based on the CEEPUS contribution scheme and for a synchronisation of existing sources of funding at the European, national, regional and institutional level" (ESU, 2010a, p. 18). And, in the context of the ERASMUS Programme, specifically, there is at least some

evidence that an increase in the value of the ERASMUS grant could stimulate otherwise non-participating students to engage with this programme. Again, according to Vossensteyn et al (2010) 62% of student respondents who did not study abroad with ERASMUS indicated that this would have made an "important" or "very important" impact on their thinking about this mobility opportunity (p. 91).

There is an extraordinary gap in information or analysis about financial incentives for degree mobility across Europe. What is clear is that such issues are almost always considered from the perspective of what the host country or institution can provide to incoming foreign students. This typically involves support through scholarships and grants, and these instruments are probably more readily on offer for students at doctoral and post-doctoral levels, than at the lower degree levels. Again, however, the lack of information in this area makes it virtually impossible to provide any clear picture of the key issues and trends in play.

Ultimately, the previously cited study on *Social and Economic Conditions of Student Life in Europe* (Orr, 2008) provides a key final point that is likely relevant to the discussion of financial incentives across the board: "Financial support schemes that make plans appear feasible are the most decisive instruments by which a positive individual decision can be influenced. Arrangements must be made beforehand in the home country; students should be made aware of these opportunities" (Orr, 2008, p. 153). Providing financial support, making the support intelligible and adequate and getting the word out to students about the 'feasibility' of the bottom line is a message that resonates across the literature.

4.2 Curricular incentives

Mobility must be sensible and manageable from a curricular standpoint as well as a financial and personal one, if greater numbers of individuals are to be encouraged to participate in international study. Momentum for this kind of activity will be difficult to muster and sustain if students must struggle at each stage of the process by identifying overseas options, understanding and complying with bureaucratic processes, and, particularly in the case of credit mobility, figuring out appropriate timing in the programme and calculating the credits, not to mention worrying about the recognition of courses or full degrees. Incentives in this area aim to streamline the full range of steps involved in making this work from an academic perspective. Key issues include more effective recognition of degrees earned abroad (in keeping with the Lisbon Recognition Convention), more widespread and proper application of the Diploma Supplement and continued institutionalisation of ECTS (ESU, 2010a).

Beyond technical instruments, there are programmatic innovations that can also serve to incentivise participation in mobility activities. For credit mobility, "mobility windows" provide set intervals for which international study – in the context of "a fixed curriculum to be studied at a partner university" (Wächter, 2010, p. 5) – is specifically designed. Joint or double degrees can also facilitate mobility in ways that are minimally 'disruptive' (if at all) to the students and institutions involved. In the specific context of the ERASMUS Programme, work by Janson, Schomburg & Teichler (2009) concludes that this highly successful student mobility initiative must become "again more ambitious as far as the quality of the experience abroad is concerned" and draw on its original "strong emphasis… on the curricular integration of the study experience in another country which eventually should ensure a high degree of recognition and a high academic and professional value of learning in a contrasting educational environment" (p. 172).

For both degree and credit mobility students, there is a particularly keen need for information, and for information delivered to students such that it effectively provides insight into the ways in which the mobility experience makes sense for academic reasons. This may be more obvious to individuals in some fields (such as languages, arts and humanities). But for students focused on subjects that have traditionally not engaged in study abroad (at least within the credit mobility

sphere), extra work may need to be done to engage (e.g. students from the STEM fields). It is notable that the Eurobarometer (2009) survey of students found that "engineering students were often more likely than other students to agree that *lack of information about the possibilities of study abroad* and a *lack of funds* [emphasis in original] represented very big or big obstacles to their ambition to study abroad" (p. 34). Likewise, "engineering students and those in other hard sciences were more likely than most of their counterparts to say *language barriers* [emphasis in original] represented an obstacle to studying abroad" (p. 39).

For students who suffer from foreign language deficiencies, another set of specific incentives may serve to get them moving internationally. Providing coursework at the host institution abroad in a widely used language (such as English) may be an option in some cases. This has been proving particularly effective in some countries, especially at the master level and above, to encourage incoming degree mobility. For credit mobility, providing support to strengthen the students' skills in the relevant foreign language within the home institution is another approach (Wächter, 2010).

Making the benefits of study abroad more clearly evident, as well as enabling students to take advantage of this option through clearly defined curricular mechanisms that leave little guess-work in terms of timing, credits and other key variables, stand out in the literature as a very clear-cut set of incentives designed to encourage mobility.

4.3 Personal incentives

Finally, a consideration of incentives for mobility cannot ignore the very real human element in this equation. As was nicely noted by Orr (2008)

> "…personality factors that are embedded in the mental disposition of students exert a strong influence on international mobilisation. To change reluctant mental dispositions is a difficult task that needs more than material incentives. Information policy must be targeted to these groups in particular, pointing out the benefits of foreign experiences." (p. 153-154)

In a policy environment that now seeks to see one in five students studying abroad for some length of time, it is crucial to think about how to reach out strategically to larger numbers of individuals who may not be naturally predisposed to consider this kind of activity. The approach to this work should involve not only providing information about what the international experience will entail. It should consist of more tailored messages that specifically serve to help underrepresented students see how this experience can be meaningful to them. Indeed, Vossensteyn et al (2010) found that 45% of their student respondents who had not participated in ERASMUS thought that having "more information on the benefits of mobility" (p. 91) would, in retrospect, have had a significant (positive) impact on their decision not to go abroad. Meaningful guidance is needed and may need to include, for example, a focus on issues of cultural competence and students' self-esteem (Orr, 2008).

Even for those who might not be difficult to convince attempting study abroad, incentives may be important in terms of the quality of the experience they can expect. In this context, student services for the internationally mobile population are increasingly relevant. Such support may extend beyond the institutional level to the national level, particularly for degree mobile students. Those who make a commitment to pursue a full degree overseas may be motivated to select one country over another if there is a legal and social framework in place that provides a welcoming environment on a variety of levels. Key issues here may include professional development and employment after graduation, long-term immigration possibilities, and family-friendly work and social policies. Promising – and ultimately providing – quality support that effectively meets the needs and expectations of a diversifying student population may prove to be an important incentive to mobility moving forward (Kelo & Rogers, 2010).

Helping students to understand and appreciate the longer-term (hopefully positive) benefits of the experience, for example on employment prospects, could be an effective form of incentive. Of

course, the literature on the benefits of credit mobility to future careers trajectories, salary earnings and overall satisfaction with life do not provide clear evidence of an advantage to those students who have studied abroad. Indeed, recent analysis of the "professional value" of ERASMUS by Janson, Schomburg & Teichler (2009) concludes that the EU's flagship student mobility programme may have lost some of its "exceptionality" (p. 8) over time, paradoxically a victim of the generalised success of internationalisation to permeate the European context in recent years. Still, the levels of satisfaction of study abroad students are anecdotally quite high, an understanding that is also evidenced by some data, for example that collected by the Erasmus Student Network in its annual survey project. Incentivising students from a wide range of backgrounds to commit personally to this experience is important area for consideration moving forward.

5 Conclusions

This chapter has endeavoured to present a comprehensive overview of the discussion of obstacles and incentives to student mobility, as found in the relevant literature. The literature itself includes a wide scope of sources, ranging from official documents (mostly at European and national levels), to scholarly analyses, evaluation studies based on surveys and evaluations, stakeholder position papers, conference materials and agency and programme websites.

There is a significant amount of material dedicated to identifying the fundamental challenges inhibiting greater participation in student mobility, and a considerable amount of convergence on the relevant issues in this area. Less extensive and detailed are the proposed solutions that could serve to incentivise students to participate in greater numbers. Incentives, nonetheless, appear in the literature as a major area for consideration and development moving forward.

In looking at this complete body of information, several important issues stand out. The first has to do with the fact that the significance of obstacles, and by extension perhaps incentives, varies notably on the basis of a variety of key factors. Such factors include the specific mobility types under discussion (for example, credit or degree mobility, bachelor or master or other levels of education; short versus longer-term experiences; or for purposes of study, participation in an academically oriented placement or research). Variations in the seriousness of obstacles and the relevance of proposed incentives also differ quite notably across national contexts, with key variables including whether a country enjoys high or low incomes; a strong or weak framework of portability of funding instruments for higher education; a more or less attractive profile for higher education provision and/or quality of life; the use of rare or widely-used languages in the local culture or higher education system, and the foreign language proficiency of students; or family dynamics or cultural traditions that encourage or inhibit student mobility. The complexity of Europe, with its many distinct national realities, makes it challenging to draw conclusions about obstacles and incentives to mobility. Some issues do generate broad consensus, but a look under the surface of most reveals that what is relevant in Lithuania and/or Greece is not necessarily so central to Ireland or Portugal; or the issues do resonate in both places, but somehow play out differently. To understand the full scope of the mobility picture, and to tease out these important national differences more effectively, there is indeed much convergence around call for more and better data (and analysis) on student mobility.

Meanwhile, even in the face of the inconsistency across national experiences, the literature points to a great deal of *overlap across the content of the discussions of obstacles and incentives*. For example, the notion of 'information' (lack thereof and/or keen need for) stands out as a fundamental issue almost everywhere. The same can be seen in terms of funding and other basic resources. Insufficient information and tangible support for students and programmes is widely recognised as both a key problem *and* a crucial element for successful expansion of the mobility agenda moving forward. In a similar vein, another common theme of much of the literature on this topic has to do with the perceived *need to align rhetoric and reality,* particularly when it comes to

providing effective support to encourage increased participation, and *to synchronise efforts* in a meaningful fashion to the extent possible.

Literature

Apsalone, M., Bort, T., Fiedrich, S., Filoni, T., Panny, J., & Scherer, D. (2009). PRIME 2009. Problems of recognition in making ERASMUS. Brussels: Erasmus Student Network (ESN).

Bologna Coordination Group on Mobility. (2009). Report endorsed by BFUG at its meeting in prague on 12-13 February 2009. Retrieved from http://www.ond.vlaanderen.be/hogeronderwijs/bologna/conference/documents/2009_Mobility_Report.pdf

Compostela Group. (n.d.). STELLA - Staff Mobility Programme. Retrieved from http://gcompostela.org/index.php?option=com_content&view=article&id=272&Itemid=127

Compostela Group, Santander Group, UNICA, & Coimbra Group. (2003, June). The European Higher Education Area. Joint Declaration of the European University Networks Retrieved from http://www.bologna-berlin2003.de/pdf/Networks.pdf

Crosier, D., Purser, L., & Smidt, H. (2007). Trends V: Universities shaping the European Higher Education Area. Brussels: European University Association (EUA). Retrieved from http://www.eua.be/fileadmin/user_upload/files/Publications/Final_Trends_Report__May_10.pdf

European Commission. (2010, October). A rationale for action. Accompanying document to the communication from the Commission the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions. Europe 2020 Flagship Initiative "Innovation Union". Retrieved from http://ec.europa.eu/research/innovation-union/pdf/rationale_en.pdf

European Students' Union (ESU). (2008, May). Policy paper "mobility". Retrieved from http://www.esib.org/index.php/documents/policy-papers/336-policy-paper-qmobilityq

European Students' Union (ESU). (2010a). Bologna at the finish line. Retrieved from http://www.esib.org/documents/publications/ESU_BAFL_publication.pdf

European Students' Union (ESU). (2010b). Bologna with student eyes 2009 (Revised online edition v1.2 ed.). Retrieved from http://www.esib.org/documents/publications/official_publications/BWSE2009-final.pdf

European Students' Union (ESU). (2010c). European Students' Union reaction to the Youth on the Move communication. Retrieved from http://www.esib.org/documents/statements/1009_ESU_YoM_reaction.pdf

Flash Eurobarometer Nº. 260. Students and higher education reform (2009, April). Retrieved from http://ec.europa.eu/public_opinion/flash/fl_260_en.pdf

Janson, K., Schomburg, H., & Teichler, U. (2009). The professional value of ERASMUS mobility. ACA Papers on International Cooperation in Education. Bonn: Lemmens.

Kelo, M., Rogers, T., & (with Rumbley, L. E.). (2010). International student support in European higher education. ACA papers on International Higher Education. Bonn: Lemmens.

Orr, D. (Ed.). (2008). Social and economic conditions of student life in Europe. Bielefeld, Germany: W. Bertelsmann Verlag.

Rauhvargers, A., Deane, C., & Pauwels, W. (2009). Bologna process stocktaking report 2009 Retrieved from http://www.ond.vlaanderen.be/hogeronderwijs/bologna/conference/documents/Stocktaking_report_2009_FINAL.pdf

Report of the High Level Expert Forum on Mobility. Making learning mobility an opportunity for all (2008). Retrieved from ec.europa.eu/education/doc/2008/mobilityreport_en.pdf

Sursock, A., & Smidt, H. (2010). Trends 2010: A decade of change in European higher education Brussels: European University Association. Retrieved from http://www.eua.be/eua-work-and-policy-area/building-the-european-higher-education-area/trends-in-european-higher-education/trends-vi.aspx

Vossensteyn, H. (2010, July). Improving the participation in the ERASMUS programme Study requested by the European Parliament's Committee on Culture and Education. IP/B/CULT/IC/2009-053, PE 438.603. Retrieved from

http://www.europarl.europa.eu/activities/committees/studies/download.do?language=en&file=32130#search=%20improving%20participation%20in%20ERASMUS%20

Wächter, B. (2010). Background paper. Belgian EU Presidency Conference "Youth on the Move – Achieving mobility for all!", Antwerp, 5-6 October 2010. Retrieved from http://www.education2010.be/wp-content/uploads/Conference-brochure-Background-paper-EN-Antwerpen.pdf

Wächter, B., & Maiworm, F. (2008). English-taught programmes in European higher education. ACA Papers on International Cooperation In Education. Bonn: Lemmens.

Wuttig, S., & Rohde, N. (2010). Synthesis report of responses to the European Commission's green paper on promoting the learning mobility of young people. Unpublished report.

Chapter VII: Conclusions and recommendations

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We have already underlined, in various parts of this study, that our focus of research has been twofold. We have, on the one hand, analysed the status quo and discussed progress made in collecting adequate data on international student and academic staff mobility. On the other hand, we have examined trends and mobility patterns of students (and to an extent of academic staff) moving to, between and out of the 32 countries of analysis, with a view to identify proper ways to support and facilitate this process in the future.

In this final part, we are drawing the conclusions from our finding and we are making, in line with the double focus of the study, recommendations both for future data collection improvements and for measures to further increase mobility in the years to come.

1 Data collection

1.1 International mobility of students

In the past two decades, the international mobility of students has been very much at the heart of higher education reforms and agendas within, but not only restricted to, Europe. We note an increased interest in European and national-level policy circles to promote student mobility and to gather appropriate data to measure this phenomenon. Indeed, major efforts have been made to improve the quality of student mobility statistics and visible progress has been made in the past 5 to 10 years in existing national, European and international statistics. Depsite of this, and for understandable reasons, the importance attached to mobility by decision-makers and the public has evolved at a much faster pace than the data collection on student mobility.[38] Therefore, the mobility data collection needs to continue to 'catch up' on a number of fronts. Taking into account these developments and current mobility-related debates, we have identified a number of *data needs* and related *recommendations*, which if addressed, should enable actors to better answer the politically salient questions.

Collection of data on genuine mobility, in addition to data on nationality/citizenship

As we have commented in Chapters I, II and V, there has been remarkable progress in gathering data on *genuine mobility (i.e. on incoming mobile students)* within the UOE data collection. The number of European countries that collect mobility data (on the criterion prior education or prior/permanent residence, or both) has increased from nine in 2002/03 to 24 in 2006/07. Nevertheless, these states account for only a share of all countries that report mobility data to UOE. Because of this incomplete transition to an international data collection on *incoming mobile students*, it will take longer to collect data on *outgoing mobile students*.

We therefore recommend making increased efforts for a complete transition to the collection of data on mobility, in addition to data on nationality.

[38] Statistical systems are inherently conservative by nature. They react to new realities only with a time lag.

Statistics on mobility in a cycle system

As highlighted above, the current UOE data collection allows for differentiation between programmes at the ISCED 5B (short cycle, to use 'Bologna language'), ISCED 5A (bachelor and master) and ISCED 6 (PhD). We welcome the announced change in the ISCED 97 classification to separate, within the ISCED 5A level, between bachelor programmes and master programmes, which are currently lumped together in this category.

Clarification of criteria for country of prior education/residence

Related to the change mentioned above, there would be different points of departure in measuring mobility at different stages/cycles

- *Education/*residence *prior to any stage of higher education* – the current UOE practice, that takes into account the country where the upper-secondary school leaving certificate (or equivalent) was obtained, irrespective of the current level of higher education study (ISCED 5B, 5A or 6), and the *country or permanent residence*, irrespective whether the mobile student has lived or not in the respective country immediately prior to study, or
- *Education/residence prior to the current stage of higher education* – i.e. the country where the upper-secondary school leaving certificate (or equivalent) was obtained for students currently enrolled at sub-bachelor and bachelor level, the country of the bachelor degree for current master level students, and the country of the master degree for doctoral students.

In line with the future division of ISCED 5A, into bachelor level and master level programmes, we regard the second option as by far preferable. Without this change from option a) to option b), it would be impossible to gather any information about the international mobility of students between different levels of higher education.

Clear delineation between degree/diploma mobility and credit/temporary mobility in existing statistical databases

In our analysis we noted that the current UOE data collection continues to be a mix of *diploma* and *credit mobility*, as many reporting countries do not abide by the rule not to report students enrolled for less than one academic year (i.e. *credit mobile students*). As a result, the UOE data collection is an overestimate of diploma mobility and an undercount of credit mobility. We regard this as a major shortcoming and see two possible solutions

- Recommend to countries to report data on *all mobile students*, i.e. diploma and credit mobility lumped together. We see this, however, as the *least favourite option*; the two types of mobility are generally determined by different rationales, are characterised by different mobility patterns, have to overcome different types of obstacles and need different support measures. As a result, lumping together the two types of mobility, as it is currently done in some country datasets, does not seem advisable.
- Recommend to countries to *report separately* on *diploma mobility* and on *credit mobility*. This would necessitate an adaptation of the current UOE data collection, to additionally and separately gather data on credit mobile students. As we said above, we regard this as the by far preferable option.

Both approaches would necessitate a clear and commonly agreed definition of what credit mobility is, i.e. what types of activities abroad fall under the aegis of this concept and what the minimum duration of such activities should be, in order to count meaningful experiences and exclude 'academic tourism'.

Information on the occurrence (event) of mobility in the course of study

We note increased interest in recent years in finding out how many students or graduates have had a study abroad experience in the course of their studies. Having been mobile in the course of study is, statistically speaking, the sum of two different measures: a study period for a full degree abroad and/or for a shorter period(s), as temporary stays abroad in the context of studies at the home institution. In order to be able to gather this sort of data, however, another type of data collection instrument than the UOE collection is needed. The latter records annual flows of students, i.e. students that are mobile at a certain point in time and not throughout their studies. Events of mobility can be captured retrospectively via surveys of students (preferably in the final year of study) and/or of graduates (who do not continue studying at the next level of higher education upon graduation). Each of the two collection options has its advantages and disadvantages.

Given the increased interest in this aspect, we recommend to start a data collection on the event(s) (occurrence) of mobility in the course of study, by means of a Europe-wide graduate, or alternatively, a student survey. The event(s) of mobility could be measured separately for each cycle of higher education (i.e. sub-bachelor, bachelor, master, and PhD separately) or for all levels together.

We regard this instrument as a *complementary* one and not as a substitute for a possible UOE data collection on annual *credit mobility*.

To sum up, our five proposals for the improvement of the international data collection on student mobility are

Recommendation 1: Increase the number of countries that report data on mobility in addition to data on nationality in the UOE data collection;

Recommendation 2: Clearly delineate degree/diploma from credit/temporary mobility in the UOE data collection, by creating a separate category for the latter type of mobility;

Recommendation 3: Present mobility data differentiated between four different cycles of higher education: sub-bachelor, bachelor, master and PhD;

Recommendation 4: Work towards a uniform operationalisation of the country of prior education/residence principles, as the country of education/residence immediately prior to the current level of study; and

Recommendation 5: Collect information on the event of mobility in the course of study by means of graduate and/or student surveys

1.2 International mobility of academic staff

The challenges regarding data on the international mobility of staff are far bigger than the challenges in the area of international student mobility. The problems are manifold, but three clusters stand out.

First, while the available data on student mobility leave much to be desired, the information/data situation with regard to staff mobility is simply deplorable. We are far from an acceptable minimum level of knowledge on the phenomenon. We have very few data, and those we have are not comparable.

Second, practically none of the few data and information sets available measure international *mobility* at all. They exclusively measure the foreign nationality of researchers. In the case of statistics on student mobility, a beginning has been made to collect data on genuine mobility. This needs to happen in the area of researcher statistics as well.

Third, staff mobility is a far more complex phenomenon than student mobility. There is no agreement

- on the "population" (i.e. on who is and who is not staff);
- on a categorisation of this population, however defined, into sub-groups;
- on a differentiation into different modes and functions of international mobility of staff (sabbaticals and short-term exchanges; long periods of competence-enhancing stays/employment abroad; mid-term professional mobility; migration; etc). There is no agreement on reference points for location (i.e. from where/when mobility moves should be defined); and
- on how to exactly analyse mobility over the course of life / career.

Before one can hope to try and set up meaningful data collection systems in the future, an international or, at least, European consensus on the above issues must be established and existing data collections and approaches more fully explored. We therefore regret that the following recommendations only very broadly outline future data collection systems, and do not yet contain definitions and sub-differentiations for "staff" and "mobility". In order to be able to make proposals on these, more exploratory work (possibly in the form of a study) is necessary.

We would want to point out that very considerable efforts and a strong political will are necessary to overcome the present pitiful state of (non) knowledge. One might argue that the foreseeable volume of activities necessary is not justified by the foreseeable knowledge gains. We do not share this point of view: the high importance that the European Union and its member states attach to staff mobility in their policy statements does not let that appear to be an intellectually and politically tenable option.

We therefore propose to collect data on four different themes of academic staff mobility; i.e.

- the *current mobility* of academic staff;
- the mobility of PhD students and of PhD awards;
- short-term visits, exchanges and sabbaticals; and
- academic career mobility;

And we propose to establish *four separate data systems* on the above themes.

Recommendation 6

We recommend the establishment of a *comprehensive statistical data collection system on academic staff* in general, which would also comprise information on international mobility. *This would require major* improvements from the present situation, including the harmonisation of definitions of scholars across sectors, and the establishment of similar standards and modes of data collections in the various sectors (higher education, public research institutes, research and similar academic activities in the public sector, research and similar academic activities in the private production and in service sectors). In this framework, it is necessary to *widen the list of items for measuring international mobility* beyond that of current foreign citizenship. Of course, if agreement could be reached that all European countries establish a register of scholars and if the same format of register would be implemented in all European countries, one could collect more comparable "factual" data than in the usual statistics, for example more than a single reference point for identifying mobility. But the measurement of international academic staff mobility can also be substantially improved in the framework of statistical data collections and of representative surveys.

Recommendation 7

We propose that the current *data system of measuring mobility at the first academic career level, i.e. the doctoral level*, should, in principle, be kept in place, but be improved. The number of (recent) *doctoral awards* (not the number of doctoral candidates and doctoral students) should be viewed as the key information. Ways of identifying mobility have to be found, because most data currently available are confined to foreign citizenship.

Recommendation 8

We propose that a *completely new system of collecting data on visits, exchanges and sabbaticals* be created. We suggest calling upon institutions of higher education, research institutes and like entities, to collect such data, both regarding their outgoing academic staff and their incoming guests. Any data collection solely based on scholarship statistics from funding agencies (e.g. ERASMUS teaching staff mobility) is bound to be incomplete. We also point out that the analysis of CVs could be a useful instrument, but only if CVs were similarly standardised as the "Diploma Supplement" standardises reports on curricula and students' study activities and achievements. No matter how the data are collected, a need arises to create common guidelines for the types of short-term mobility to be included, the minimum duration, and similar issues.

Recommendation 9

We propose the establishment of a Europe-wide survey system on *international academic mobility in the course of the career*, i.e. on all events of mobility up to the point of the data collection. This could be a survey system of university graduates many years after graduation, of doctoral awardees some years later, or of the academic professors, the researchers at different stages of their career or different age groups, for example. In those cases, retrospective questions could be formulated suitable to elicit information on all of the respondents' previous international moves linked to their academic activities. Moreover, such a survey can also comprise so-called "subjective" information, e.g. if a currently mobile scholar intends to return to the home country or to the previous country, or if the respondent intends to remain in the country where she or he is currently located. Information could be collected as well on the motives for mobility, the length of the sojourn, the career stage of the mobile person and the impact of the experience abroad on the individual person.

Altogether, we note that the collection of data on the international mobility of scholars (academic staff, researchers, etc.) is still at its infancy. Major steps towards improved data collection are strongly recommended. The importance of the availability of good data on academic mobility will certainly increase in future years, when the knowledge society is likely to progress further.

2 Measures to increase the international mobility of students

One of the issues that led to the commissioning of this study was the belief that the extent of student mobility inside and into Europe was unsatisfactory, and that therefore action would need to be taken to increase international student mobility in the future. By and large, our findings do not confirm this fear. Mobility levels are high in Europe. Degree mobility into European countries – and particularly from outside of Europe – has risen very considerably in the period from 1998/99 to

2006/07. Temporary mobility, widely believed to be insufficiently developed, has in a number of countries (for which we have data) come close to or surpassed the 20% target set by education ministers of the European Higher Education Area in Leuven /Louvain-la-Neuve, at least by the (probably too soft) measure of 'study-related stays' abroad. Fears that the Bologna reforms would undermine mobility appear to have been unfounded. In degree mobility, the creation of the new degree structure provided an entry point for (non-European) students which was lacking under the old single-cycle degrees. In credit mobility, the Bologna reforms do not appear to have prevented sizeable flows.

At the same time, the generally satisfactory development of student mobility in Europe does not necessarily mirror the situation in individual countries. In fact, one of the most striking findings of this study is the existence (and persistence) of enormous disparities of both incoming and outgoing mobility amongst countries. For this reason, we believe that the most urgent need for action exists at the level of individual countries, as well as their higher education institutions. This does not mean that there is no role for the European Union. We see a double role: that of directly contributing to the increase of mobility levels, through its funding programmes, and an indirect one, by supporting and reinforcing member state-led activities to boost mobility.

Because of the radically different nature of the two forms of mobility, we would like to make separate proposals for degree mobility and for temporary mobility. In the area of degree mobility, our recommendations are focusing on inflows of students from outside of the EU into the Union. In the area of temporary mobility, our emphasis is on intra-European flows, but we are making also one recommendation on mobility to non-European destinations.

2.1 Incoming degree mobility

Restart marketing Europe as a study destination

We have noticed strong differences in the ability of individual countries – and, indeed, higher education institutions – to effectively inform about and promote their higher education offer in the international arena and particularly outside of Europe. We observe that international higher education marketing is very unevenly developed across the countries covered in this study. Some – often smaller – countries which are not "traditional" destinations of mobile students show particular shortcomings in this respect. In most cases, these countries also have a low inflow of non-European students. The levels of inflows could be substantially increased by appropriate marketing and promotion measures.

We see the prime responsibility for international marketing and branding measures at the national and the institutional level. Many countries and institutions would be well-advised to engage in international marketing activities aimed at attracting high-quality degree-seeking students who have the potential to make highly positive long-term contributions in key areas where the human resource needs are especially acute (for example, the STEM fields). National and institutional marketing campaigns are the obvious answer to address this challenge. Further, we see the possibility – indeed, the need – for European-level measures to support and complement such efforts. In particular, many smaller European countries which are less clearly perceived outside of Europe would benefit from a European 'umbrella' campaign.

Recommendation 10: We recommend that the abandoned Global Promotion Project (2007-2009) be re-launched, and particularly the 'Study-in-Europe' Portal, developed as part of it, be further maintained and updated. We further propose to integrate into the re-launched initiative a peer-learning element in which countries experienced in international marketing would act as mentors of countries still at the beginning in this regard.

Boost teaching in widely spoken languages

Our findings indicate that countries with a less-often-spoken language are at a disadvantage in their efforts to attract sizeable numbers of incoming degree students, in particular from outside of Europe. Likewise, this study, as well as earlier research clearly shows that such a "linguistic disadvantage" can be overcome by a quantitatively strong and qualitatively attractive offer of programmes in internationally more frequently spoken languages (such as English). The creation of such an offer is, in the first place, an institutional and national responsibility. But, once again, we see a supporting role for the European Union.

Recommendation 11: We recommend that European countries with less-often-spoken national languages and low numbers of incoming degree students create a strong provision of programmes taught in internationally frequently spoken languages (such as English), particularly at the postgraduate level. We further recommend that a European-level support mechanism be put in place for institutions in countries where the provision of programmes in internationally often spoken languages is low.

Attract high achievers in critical subject areas

To increase the quantity of inflows, i.e. to attract sizeable numbers of non-European students, is one matter. To aim for quality, i.e. to target students with a high potential, is another. To attract students in disciplines of special strategic importance and where Europe has shortages both in higher education (young researchers) and in the labour market, is yet another issue, and speaks for targeted attraction policies, especially in the STEM subjects.

Again, we see the prime responsibility for attracting top talent, and particularly in subject areas of special concern, at the national and institutional levels. But the European Union can and must support such efforts.

Recommendation 12: We recommend a sizeable increase in the budget for the third phase of the ERASMUS MUNDUS Programme, in order to be able to attract more high achievers into European higher education. We also propose that the present subject-neutral approach be at least slightly modified in favour of a positive bias for certain subject areas, particularly the STEM subjects. Overall, we would strongly recommend that ERASMUS MUNDUS remains, or again becomes, a 'brain gain' programme.

Set quantitative targets for incoming degree mobility

In the context of the European Higher Education Area, a quantitative target has been set for mobility levels to be reached by the year 2020. We support the effort to set a meaningful target (and indicators) for outgoing temporary mobility, as elaborated on further down in this chapter. But we believe that the setting of a target is also very desirable in the area of *incoming* degree mobility. Incoming mobility – from within Europe, but at least as much from outside - has great benefits for Europe's higher education institutions, societies and economies, and increases of mobility into and within Europe are a clear sign of the attractiveness of European higher education. Regardless of whether or not such a target is to be set in a Bologna context, the European Union – and its member states – should try to agree targets for this type of mobility.

As this study has shown, incoming degree mobility levels differ greatly between countries. To set one and the same percentage target for all European countries would therefore translate into highly discrepant levels of improvement (or the opposite). We would therefore rather recommend a more customised approach, in which countries with a low share of incoming students would set themselves higher growth targets than those at the top end. Overall, an average Europe-wide share of 10% should be reached.

Recommendation 13: We recommend that by 2020, the countries covered by this study should, on average, have reached a 10% share of incoming degree mobile students (of the total student population), which would be an increase of about 50% from 2006/07. Further, we suggest that individual country targets be set. Countries which in 2006/07 had reached a share of between 5 and 10% would be expected to grow by the European average, i.e. by 50%. Countries with a share of under 5% would be expected to grow by 100%. Countries between 10 and 15% would be expected to grow by 25%. Countries above 15% would be expected to at least maintain cuurent levels. We do not recommend setting separate (sub-) targets for students from Europe and outside of Europe.

2.2 Temporary (credit) intra-European mobility

Strengthen ERASMUS and maintain its "for all" character

There is less clarity than desirable about the real extent of temporary mobility in Europe. But it is safe to assume that in every country, the share of ERASMUS funded movements of total temporary mobility is substantial. Therefore, the future ability of ERASMUS to generate more mobility is crucial for the total volumes of temporary mobility in Europe. Fromr this would follow the need for a sizeable increase in the budget of the ERASMUS Programme after 2013. A very palpable increase in funding had already found a broad consensus before the adoption of the present Lifelong Learning Programme (LLP), which did not come about for unfortunate and complicated reasons.

Second, we strongly feel that the inclusive ("for all") character of the ERASMUS Programme should be maintained. As repeated evaluations have revealed, the programmes' main achievement has been students' cultural learning and the contribution of the programme to European nation-building, by providing future generations with a European outlook. Such wider effects – which go beyond disciplinary learning – can only be maintained and sustained if the programme continues to address students in all disciplines and at all levels. This does not mean that the programme cannot aim to redress certain imbalances – for example the relative under-representation of certain subject areas or groups of students (if any).

Recommendation 14: The ERASMUS Programme needs a substantially increased budget to further increase temporary mobility in Europe. It should be kept open for all subject areas and levels of study. This does not exclude "positive action" to redress possible imbalances in participation.

Create more mobility windows

We have already underlined that intra-European temporary mobility is generally higher than anticipated (or feared, in the Bologna debate), at least in most of the countries where information is available. This notwithstanding, there are remarkable differences between countries in intra-European temporary mobility, too. A better provision of curricular-embedded "mobility paths" or "mobility windows" can be a means to increase mobility rates. Such "windows" can be integrated study abroad modules, or fully-fledged double and joint degree programmes, amongst others. To avoid any misunderstanding, we would like to underline that our concept of "mobility windows" encompasses both compulsory and voluntary phases abroad, as long as these are embedded (integrated) in the curriculum.

The creation of curricula with "mobility windows" is obviously, first and foremost, a task for higher education institutions (and, to an extent, for national governments which must create the legal base

for them). However, the European Union can provide incentives for their creation, through ERASMUS or other funding mechanisms.

We are aware that the majority of programmes in European higher education will, at least in the nearer future, not have any mobility windows. For this reason, it is important that European efforts aimed at improving the recognition of study periods (credits) abroad will be sustained and even increased.

Recommendation 15: We recommend strengthening the already existing funding mechanisms for the creation of mobility windows. Such efforts at "institutionalizing" mobility must be complemented by continued efforts aimed at enhancing recognition of periods spent abroad.

Targets for outgoing credit/temporary mobility

With regard to the setting of a quantitative target for outgoing credit/temporary mobility, we take note of the Bologna Process mobility benchmark, as well as of the recent proposal of the European Commission for a matching EU mobility target[39]. The two benchmarks – the Bologna and the EU one – seem, at a first glance, to be identical[40]: 20% of graduates by 2020 should have had a study (or training) period abroad. We find it nevertheless crucial that not only the mobility targets set in the two contexts coincide, but also that the indicators which will be used to measure progress towards them are one and the same. This does not seem to be fully the case, though, based on current developments. In order to avoid confusion (or worse), particularly in those countries that are both EU member states and signatories of the Bologna Declaration, the overarching mobility targets and indicators set in the Bologna and EU contexts should be identical. We therefore hope that the definition of indicators in the two contexts will evolve towards full convergence.

Furthermore, we welcome two recommendations made under the EU mobility target:

- to count only international mobility of no less than 3 months (for *study* abroad) and not shorter than 2 months (for *placement* mobility). We would find it sensible for the Bologna indicator to move in this direction as well, and thus move away from the current discussion of measuring any mobility of more than 1 ECTS point.
- not to impose this benchmark as an individual target in each EU member state, but leave it for the latter to decide how and to what extent they can each contribute to the achievement of the overall target, depending on current outgoing mobility levels.

Despite this progress in further defining the target(s), we see a serious danger in both contexts, which hopefully can still be avoided, namely that both temporary and degree mobility would be counted towards the targets.

Recommendation 16: We recommend one and the same *target* and *indicator* for *outgoing temporary mobility* in the Bologna and the Community context. The indicator should exclude outgoing degree mobility and any mobility other than for study or traineeships purposes, as well as any mobility period shorter than 3 months (for study) and 2 months (for placements).

Securing a minimum of mobility to emerging academic and economic leader countries

Earlier in this study, we remarked on the very low study abroad numbers of European students outside of Europe, and, in particular, in single large countries of increasing importance, such as China and India. In principle, limited outflows in degree mobility are a good sign, indicating that

[39] http://ec.europa.eu/education/lifelong-learning-policy/doc/sec670_en.pdf. In this study, we comment on the target for learning mobility in higher education only. We do not refer to the target set for the VET sector.

[40] Provided that no substantial changes are decided, on the one hand by the Council of Ministers of the European Union, which is to endorse the proposal made by the European Commission, and on the other hand, in the Bologna Process context by the Ministerial Conference, which is to meet in 2012.

students regard the higher education provision in their own country as superior to that elsewhere. This notwithstanding, it is desirable that a minimum number of future European leaders be knowledgeable about the academic and societal realities in the world's fastest growing economies (and academic systems) of the world. This would not need to necessarily have to happen only in the form of degree mobility, though temporary mobility should be included.

Recommendation 17: We recommend that existing mechanisms be strengthened and possibly additional ones created for the support of degree and temporary study of European students at selected high class institutions in key countries, of the BRIC sort.

Annexes

ANNEX I – Foreign students in Europe 32 countries in 2006/07 - country sheets

AT AUSTRIA

All students	All *foreign students*	% of foreign among all students	% of female among *foreign students*
260 975	43 572	16.7	53.8

	ISCED levels		
	5A	5B	6
absolute	38 379	1 287	3 906
%	88.0	3.0	9.0

Countries of nationality of *foreign students*

Rank	Country	Absolute	%
1	Germany	12 386	28.4
2	Italy	6 209	14.2
3	Bosnia and Herzegovina	2 582	5.9
4	Turkey	2 245	5.2
5	Poland	1 472	3.4
6	China	1 391	3.2
7	Serbia and Montenegro	1 303	3.0
8	Slovakia	1 301	3.0
9	Bulgaria	1 288	3.0
10	Croatia	1 259	2.9
Top ten countries		**31 436**	**72.1**

Fields of study of *foreign students*

Rank	Field of study	Absolute	%
1	Social sciences, business and law	15 747	36.1
2	Humanities and arts	9 911	22.7
3	Engineering, manufacturing and construction	5 211	12.0
4	Science	5 184	11.9
5	Health & welfare	3 259	7.5
6	Education	2 686	6.2
7	Agriculture	742	1.7
8	Services	678	1.6
9	Unknown/not specified	154	0.4
Total		**43 572**	**100.0**

BE BELGIUM

All students	All *foreign students*	% of foreign among all students	% of female among *foreign students*
393 687	47 218	12.0	57.2

	ISCED levels*		
	5A	5B	6
absolute	25 353	13 790	2 208
%	61.3	33.3	5.3

Countries of nationality of *foreign students

Rank	Country	Absolute	%
1	France	17 882	37.9
2	Netherlands	3 447	7.3
3	Morocco	2 650	5.6
4	Italy	2 219	4.7
5	Luxembourg	1 667	3.5
6	Congo, DR	1 542	3.3
7	Cameroon	1 301	2.8
8	China (incl. HK)	1 182	2.5
9	Spain	1 101	2.3
10	Portugal	843	1.8
Top ten countries		**33 834**	**71.7**

Fields of study of *foreign students

Rank	Field of study	Absolute	%
1	Health & welfare	14 350	34.7
2	Social sciences, business and law	9 615	23.3
3	Humanities and arts	5 949	14.4
4	Engineering, manufacturing and construction	3 280	7.9
5	Science	2 950	7.1
6	Agriculture	2 422	5.9
7	Education	2 015	4.9
8	Services	741	1.8
9	Unknown/not specified	29	0.1
Total		**41 351**	**100.0**

* Without data for the (higher) social advancement education in the Flemish Community of Belgium (total: 41 351)

BG BULGARIA

All students	All *foreign students*	% of foreign among all students	% of female among *foreign students*
258 513	9 351	3.6	41.1

	ISCED levels		
	5A	5B	6
absolute	8 691	369	291
%	92.9	3.9	3.1

Countries of nationality of *foreign students*

Rank	Country	Absolute	%
1	Macedonia	3 696	39.5
2	Turkey	2 099	22.4
3	Greece	671	7.2
4	Cyprus	564	6.0
5	Moldova	385	4.1
6	Serbia and Montenegro	322	3.4
7	Ukraine	319	3.4
8	Albania	176	1.9
9	Russian Federation	122	1.3
10	Israel	82	0.9
Top ten countries		**8 436**	**90.2**

Fields of study of *foreign students*

Rank	Field of study	Absolute	%
1	Health & welfare	2 762	29.5
2	Social sciences, business and law	2 286	24.4
3	Engineering, manufacturing and construction	1 853	19.8
4	Humanities and arts	1 026	11.0
5	Education	541	5.8
6	Science	297	3.2
7	Services	293	3.1
8	Agriculture	151	1.6
9	Unknown/not specified	142	1.5
Total		**9 351**	**100.0**

CH SWITZERLAND

All students	All *foreign students*	% of foreign among all students	% of female among *foreign students*
213 112	41 058	19.3	46.9

	ISCED levels		
	5A	5B	6
absolute	27 239	5 918	7 901
%	66.3	14.4	19.2

Countries of nationality of *foreign students*

Rank	Country	Absolute	%
1	Germany	9 770	23.8
2	Italy	4 598	11.2
3	France	4 335	10.6
4	Spain	1 496	3.6
5	Portugal	1 015	2.5
6	Austria	970	2.4
7	Turkey	826	2.0
8	China (incl. HK)	821	2.0
9	Serbia and Montenegro	760	1.9
10	Russian Federation	706	1.7
Top ten countries		**25 297**	**61.6**

Fields of study of *foreign students*

Rank	Field of study	Absolute	%
1	Social sciences, business and law	14 502	35.3
2	Engineering, manufacturing and construction	6 424	15.6
3	Humanities and arts	6 088	14.8
4	Science	5 740	14.0
5	Health & welfare	3 311	8.1
6	Services	2 351	5.7
7	Education	1 728	4.2
8	Agriculture	284	0.7
9	Unknown/not specified	630	1.5
Total		**41 058**	**100.0**

CY CYPRUS

All students	All *foreign students*	% of foreign among all students	% of female among *foreign students*
22 227	5 973	26.9	25.6

	ISCED levels		
	5A	5B	6
absolute	445	5 497	31
%	7.5	92.0	0.5

Countries of nationality of *foreign students*

Rank	Country	Absolute	%
1	Bangladesh	1 173	19.6
2	China (incl. HK)	909	15.2
3	India	838	14.0
4	Greece	463	7.8
5	Pakistan	440	7.4
6	Sri Lanka	424	7.1
7	Russian Federation	280	4.7
8	Nepal	242	4.1
9	Cameroon	112	1.9
10	Iran	105	1.8
Top ten countries		**4 986**	**83.5**

Fields of study of *foreign students*

Rank	Field of study	Absolute	%
1	Social sciences, business and law	4 424	74.1
2	Science	564	9.4
3	Services	404	6.8
4	Humanities and arts	278	4.7
5	Engineering, manufacturing and construction	145	2.4
6	Education	108	1.8
7	Health & welfare	42	0.7
8	Agriculture	8	0.1
9	Unknown/not specified	0	0.0
Total		**5 973**	**100.0**

CZ CZECH REPUBLIC

All students	All *foreign students*	% of foreign among all students	% of female among *foreign students*
362 630	24 483	6.8	51.2

	ISCED levels		
	5A	5B	6
absolute	22 040	332	2 111
%	90.0	1.4	8.6

Countries of nationality of *foreign students*

Rank	Country	Absolute	%
1	Slovakia	16 505	67.4
2	Russian Federation	1 088	4.4
3	Ukraine	774	3.2
4	Vietnam	561	2.3
5	United Kingdom	405	1.7
6	Belarus	317	1.3
7	Portugal	270	1.1
8	Poland	262	1.1
9	Germany	254	1.0
10	Kazakhstan	238	1.0
Top ten countries		**20 674**	**84.4**

Fields of study of *foreign students*

Rank	Field of study	Absolute	%
1	Social sciences, business and law	8 694	35.5
2	Health & welfare	4 766	19.5
3	Engineering, manufacturing and construction	2 709	11.1
4	Science	2 586	10.6
5	Humanities and Arts	1 974	8.1
6	Education	1 275	5.2
7	Agriculture	605	2.5
8	Services	411	1.7
9	Unknown/not specified	1 463	6.0
Total		**24 483**	**100.0**

DE GERMANY

All students	All *foreign students*	% of foreign among all students	% of female among *foreign students*
2 278 897	258 513	11.3	50.9

	ISCED levels		
	5A	5B	6
absolute	246 161	12 352	*
%	95.2	4.8	

Countries of nationality of *foreign students**			
Rank	Country	Absolute	%
1	China (incl. HK)	27 117	10.5
2	Turkey	24 601	9.5
3	Poland	15 347	5.9
4	Russian Federation	12 831	5.0
5	Bulgaria	12 218	4.7
6	Ukraine	9 222	3.6
7	Morocco	8 095	3.1
8	Italy	7 457	2.9
9	Austria	6 564	2.5
10	France	6 274	2.4
Top ten countries		129 726	50.2

Fields of study of *foreign students*			
Rank	Field of study	Absolute	%
1	Social sciences business and law	70 296	27.2
2	Humanities and arts	51 021	19.7
3	Engineering, manufacturing and construction	48 606	18.8
4	Science	42 032	16.3
5	Health & welfare	15 232	5.9
6	Education	11 739	4.5
7	Services	3 884	1.5
8	Agriculture	3 110	1.2
9	Unknown/not specified	12 593	4.9
Total		258 513	100.0

DK DENMARK

All students	All *foreign students*	% of foreign among all students	% of female among *foreign students*
232 194	20 851	9.0	55.4

	ISCED levels		
	5A	5B	6
absolute	16 745	3 067	1 039
%	80.3	14.7	5.0

Countries of nationality of *foreign students*			
Rank	Country	Absolute	%
1	Norway	2 251	10.8
2	China (incl. HK)	2 037	9.8
3	Iceland	1 741	8.3
4	Sweden	1 586	7.6
5	Germany	1 260	6.0
6	Poland	686	3.3
7	United Kingdom	479	2.3
8	Russian Federation	430	2.1
9	Lithuania	376	1.8
10	India	355	1.7
Top ten countries		11 201	53.7

Fields of study of *foreign students*			
Rank	Field of study	Absolute	%
1	Social sciences, business and law	6 737	32.3
2	Engineering, manufacturing and construction	4 154	19.9
3	Health & welfare	3 859	18.5
4	Humanities and arts	2 579	12.4
5	Science	2 001	9.6
6	Education	865	4.1
7	Agriculture	556	2.7
8	Services	100	0.5
9	Unknown/not specified	0	0.0
Total		20 851	100.0

EE ESTONIA

All students	All *foreign students*	% of foreign among all students	% of female among *foreign students*
68 767	2 200	3.2	57.8

	ISCED levels		
	5A	5B	6
absolute	1 405	709	86
%	63.9	32.2	3.9

Countries of nationality of *foreign students*

Rank	Country	Absolute	%
1	Russian Federation	1 095	49.8
2	Finland	467	21.2
3	Latvia	170	7.7
4	China (incl. HK)	123	5.6
5	Ukraine	95	4.3
6	Lithuania	61	2.8
7	Germany	22	1.0
8	India	17	0.8
9	United States	16	0.7
10	Belarus	13	0.6
Top ten countries		**2 079**	**94.5**

Fields of study of *foreign students*

Rank	Field of study	Absolute	%
1	Social sciences, business and law	1 103	50.1
2	Humanities and arts	315	14.3
3	Health & welfare	220	10.0
4	Engineering, manufacturing and construction	169	7.7
5	Science	165	7.5
6	Agriculture	91	4.1
7	Education	79	3.6
8	Services	58	2.6
9	Unknown/not specified	0	0.0
Total		**2 200**	**100.0**

ES SPAIN

All students	All *foreign students*	% of foreign among all students	% of female among *foreign students*
1 777 498	59 814	3.4	56.1

	ISCED levels		
	5A	5B	6
absolute	32 918	10 965	15 931
%	55.0	18.3	26.6

Countries of nationality of *foreign students*

Rank	Country	Absolute	%
1	Morocco	5 328	8.9
2	Colombia	5 194	8.7
3	Peru	3 905	6.5
4	Mexico	3 789	6.3
5	Argentina	3 636	6.1
6	Italy	3 226	5.4
7	Portugal	2 785	4.7
8	Ecuador	2 611	4.4
9	Venezuela	2 371	4.0
10	Brazil	2 106	3.5
Top ten countries		**34 951**	**58.4**

Fields of study of *foreign students*

Rank	Field of study	Absolute	%
1	Social sciences, business and law	12 185	20.4
2	Health & welfare	7 139	11.9
3	Engineering, manufacturing and construction	4 418	7.4
4	Humanities and arts	3 658	6.1
5	Science	2 702	4.5
6	Services	1 458	2.4
7	Education	899	1.5
8	Agriculture	459	0.8
9	Unknown/not specified	26 896	45.0
Total		**59 814**	**100.0**

FI FINLAND

All students	All *foreign students*	% of foreign among all students	% of female among *foreign students*
309 163	10 066	3.3	44.3

	ISCED levels		
	5A	5B	6
absolute	8 319	0	1 747
%	82.6	0.0	17.4

Countries of nationality of *foreign students*			
Rank	**Country**	**Absolute**	**%**
1	China (incl. HK)	1 678	16.7
2	Russian Federation	1 182	11.7
3	Estonia	664	6.6
4	Sweden	572	5.7
5	Germany	399	4.0
6	Kenya	312	3.1
7	Nigeria	233	2.3
8	United States	212	2.1
9	Ghana	211	2.1
10	India	197	2.0
Top ten countries		**5 660**	**56.2**

Fields of study of *foreign students*			
Rank	**Field of study**	**Absolute**	**%**
1	Engineering, manufacturing and construction	2 988	29.7
2	Social sciences, business and law	2 778	27.6
3	Humanities and arts	1 426	14.2
4	Science	1 144	11.4
5	Health & welfare	1 009	10.0
6	Services	419	4.2
7	Education	160	1.6
8	Agriculture	142	1.4
9	Unknown/not specified	0	0.0
Total		**10 066**	**100.0**

FR FRANCE

All students	All *foreign students*	% of foreign among all students	% of female among *foreign students*
2 179 505	246 612	11.3	49.9

	ISCED levels		
	5A	5B	6
absolute	194 885	24 550	27 177
%	79.0	10.0	11.0

Countries of nationality of *foreign students*			
Rank	**Country**	**Absolute**	**%**
1	Morocco	27 684	11.2
2	Algeria	20 125	8.2
3	China (incl. HK)	18 836	7.6
4	Tunisia	10 533	4.3
5	Senegal	9 302	3.8
6	Germany	6 947	2.8
7	Cameroon	5 570	2.3
8	Lebanon	5 391	2.2
9	Vietnam	5 164	2.1
10	Italy	4 790	1.9
Top ten countries		**114 342**	**46.4**

Fields of study of *foreign students*			
Rank	**Field of study**	**Absolute**	**%**
1	Social sciences, business and law	98 187	39.8
2	Humanities and arts	49 664	20.1
3	Science	38 873	15.8
4	Engineering, manufacturing and construction	31 070	12.6
5	Health & welfare	21 532	8.7
6	Services	3 682	1.5
7	Education	2 824	1.1
8	Agriculture	488	0.2
9	Unknown/not specified	292	0.1
Total		**246 612**	**100.0**

UK UNITED KINGDOM

All students	All *foreign students*	% of foreign among all students	% of female among *foreign students*
2 362 815	459 987*	19.5	50.7

	ISCED levels		
	5A	5B	6
absolute	351 525	62 710	45 752
%	76.4	13.6	9.9

Countries of nationality of *foreign students**			
Rank	Country	Absolute	%
1	China (incl. HK)	57 746	12.6
2	India	29 881	6.5
3	Ireland	27 098	5.9
4	Nigeria	19 223	4.2
5	United States	17 633	3.8
6	Greece	17 523	3.8
7	Germany	17 254	3.8
8	France	15 809	3.4
9	Malaysia	12 617	2.7
10	Pakistan	12 571	2.7
Top ten countries		227 355	49.4

Fields of study of *foreign students*			
Rank	Field of study	Absolute	%
1	Social sciences, business and law	172 749	23.6
2	Health & welfare	64 968	8.9
3	Science	61 860	8.5
4	Humanities and arts	61 273	8.4
5	Engineering, manufacturing and construction	59 854	8.2
6	Education	22 128	3.0
7	Services	5 682	0.8
8	Agriculture	3 259	0.4
9	Unknown/not specified	279 918	38.3
Total		731 691*	100.0

GR GREECE

All students	All *foreign students*	% of foreign among all students	% of female among *foreign students*
602 858	21 160	3.5	*

	ISCED levels		
	5A	5B	6
absolute	13 817	7 343	*
%	65.3	34.7	*

Countries of nationality of *foreign students**			
Rank	Country	Absolute	%
1	Cyprus	11 449	54.1
2	Albania	4 253	20.1
3	Bulgaria	562	2.7
4	Germany	396	1.9
5	Syria	309	1.5
6	Russian Federation	299	1.4
7	Jordan	237	1.1
8	Ukraine	202	1.0
9	Georgia	184	0.9
10	Niger	180	0.9
Top ten countries		18 071	85.4

Fields of study of *foreign students*			
Rank	Field of study	Absolute	%
	*		

* Totals do not match because of the high number of unknown students by fields of study

HU HUNGARY

All students	All *foreign students*	% of foreign among all students	% of female among *foreign students*
431 572	15 110	3.5	47.0

	ISCED levels		
	5A	5B	6
absolute	14 395	133	582
%	95.3	0.9	3.9

Countries of nationality of *foreign students*

Rank	Country	Absolute	%
1	Romania	3 296	21.8
2	Slovakia	2 296	15.2
3	Germany	1 520	10.1
4	Ukraine	1 475	9.8
5	Serbia and Montenegro	1 223	8.1
6	Israel	754	5.0
7	Norway	715	4.7
8	Iran	496	3.3
9	Cyprus	293	1.9
10	Sweden	270	1.8
Top ten countries		**12 338**	**81.7**

Fields of study of *foreign students*

Rank	Field of study	Absolute	%
1	Health & welfare	4 359	28.8
2	Social sciences, business and law	3 766	24.9
3	Humanities and arts	1 646	10.9
4	Agriculture	1 448	9.6
5	Engineering, manufacturing and construction	1 269	8.4
6	Science	1 188	7.9
7	Education	980	6.5
8	Services	454	3.0
9	Unknown/not specified	0	0.0
Total		**15 110**	**100.0**

IE IRELAND*

All students	All inwards mobile students	% of incoming among all students	% of female among *incoming students*
190 349	16 758	8.8	59.7

	ISCED levels		
	5A	5B	6
absolute		*	
%			

Countries of permanent residence of *incoming students*

Rank	Country	Absolute	%
1	United States	2 500	14.9
2	United Kingdom	2 282	13.6
3	China (incl. HK)	1 309	7.8
4	Malaysia	1 133	6.8
5	France	855	5.1
6	Germany	773	4.6
7	Canada	491	2.9
8	Spain	350	2.1
9	India	345	2.1
10	Italy	278	1.7
Top ten countries		**10 316**	**61.6**

Fields of study of *incoming students*

Rank	Field of study	Absolute	%
	*		

* IE no foreign students data.

IS ICELAND

All students	All *foreign students*	% of foreign among all students	% of female among *foreign students*
15 821	783	4.9	60.9

	ISCED levels		
	5A	5B	6
absolute	751	3	29
%	95.9	0.4	3.7

Countries of nationality of *foreign students**			
Rank	Country	Absolute	%
1	Germany	112	14.3
2	France	60	7.7
3	Denmark	50	6.4
4	United States	49	6.3
5	Sweden	40	5.1
6	Finland	34	4.3
7	Italy	34	4.3
8	Norway	32	4.1
9	Spain	26	3.3
10	Russian Federation	25	3.2
Top ten countries		462	59.0

Fields of study of *foreign students*			
Rank	Field of study	Absolute	%
1	Humanities and arts	336	42.9
2	Social sciences, business and law	176	22.5
3	Science	141	18.0
4	Engineering, manufacturing and construction	47	6.0
5	Education	41	5.2
6	Health & welfare	23	2.9
7	Services	10	1.3
8	Agriculture	9	1.1
9	Unknown/not specified	0	0.0
Total		783	100.0

IT ITALY

All students	All *foreign students*	% of foreign among all students	% of female among *foreign students*
2 033 642	57 271	2.8	58.8

	ISCED levels		
	5A	5B	6
absolute	53 210	1 685	2 376
%	92.9	2.9	4.1

Countries of nationality of *foreign students**			
Rank	Country	Absolute	%
1	Albania	11 883	20.7
2	Greece	5 054	8.8
3	Romania	2 456	4.3
4	Germany	2 067	3.6
5	China (incl. HK)	1 684	2.9
6	Cameroon	1 614	2.8
7	Poland	1 478	2.6
8	Switzerland	1 371	2.4
9	Croatia	1 353	2.4
10	Peru	1 243	2.2
Top ten countries		30 203	52.7

Fields of study of *foreign students*			
Rank	Field of study	Absolute	%
1	Social sciences, business and law	18 206	31.8
2	Health & welfare	11 662	20.4
3	Humanities and arts	11 390	19.9
4	Engineering, manufacturing and construction	8 281	14.5
5	Science	3 768	6.6
6	Education	1 341	2.3
7	Agriculture	1 139	2.0
8	Services	994	1.7
9	Unknown/not specified	490	0.9
Total		57 271	100.0

LI LIECHTENSTEIN

All students	All *foreign students*	% of foreign among all students	% of female among *foreign students*
673	594	88.3	33.0

	ISCED levels		
	5A	5B	6
absolute	578	0	16
%	97.3	0.0	2.7

Countries of nationality of *foreign students**			
Rank	Country	Absolute	%
1	Austria	288	59.1
2	Switzerland	138	28.3
3	Germany	35	7.2
4	Turkey	5	1.0
5	Russian Federation	4	0.8
6	Senegal	3	0.6
7	Brazil	2	0.4
8	China (incl. HK)	2	0.4
9	Bosnia and Herzegowina	2	0.4
10	Czech Republic	2	0.4
(10	Italy	2	0.4)
Top ten countries		462	59.0

Fields of study of *foreign students*			
Rank	Field of study	Absolute	%
1	Social sciences, business and law	431	72.6
2	Engineering, manufacturing and construction	146	24.6
3	Health % welfare	12	2.0
4	Humanities and arts	5	0.8
Total		783	100.0

LT LITHUANIA

All students	All *foreign students*	% of foreign among all students	% of female among *foreign students*
199 855	1 920	1.0	48.3

	ISCED levels		
	5A	5B	6
absolute	1 866	49	5
%	97.1	2.6	0.3

Countries of nationality of *foreign students**			
Rank	Country	Absolute	%
1	Belarus	508	26.5
2	Poland	191	9.9
3	Israel	109	5.7
4	Germany	105	5.5
5	Turkey	102	5.3
6	France	93	4.8
7	Lebanon	87	4.5
8	Latvia	79	4.1
9	Portugal	73	3.8
10	Spain	65	3.4
Top ten countries		1 412	73.5

Fields of study of *foreign students*			
Rank	Field of study	Absolute	%
1	Social sciences, business and law	898	46.8
2	Health & welfare	298	15.5
3	Humanities and arts	265	13.8
4	Engineering, manufacturing and construction	211	11.0
5	Education	192	10.0
6	Science	34	1.8
7	Agriculture	13	0.7
8	Services	9	0.5
9	Unknown/not specified	0	0.0
Total		1 920	100.0

LU LUXEMBOURG

All students	All *foreign students*	% of foreign among all students	% of female among *foreign students*
	*		

	ISCED levels		
	5A	5B	6
absolute		*	
%			

Countries of nationality of *foreign students*			
Rank	Country	Absolute	%
	*		

Fields of study of *foreign students*			
Rank	Field of study	Absolute	%
	*		

LV LATVIA*

All students	All inwards mobile students	% of incoming among all students	% of female among *incoming students*
129 497	1 433	1.1	*

	ISCED levels		
	5A	5B	6
absolute		*	
%			

Countries of permanent residence of *incoming students*			
Rank	Country	Absolute	%
1	Lithuania	415	29.0
2	Russian Federation	382	26.7
3	Germany	75	5.2
4	Sri Lanka	73	5.1
5	Estonia	60	4.2
6	Belarus	51	3.6
7	Ukraine	48	3.3
8	Syria	24	1.7
9	Kazakhstan	21	1.5
10	Israel	19	1.3
Top ten countries		**1 168**	**81.5**

Fields of study of *foreign students*			
Rank	Field of study	Absolute	%
1	Social sciences, business and law	804	56.1
2	Health & welfare	203	14.2
3	Services	199	13.9
4	Humanities and arts	141	9.8
5	Engineering, manufacturing and construction	50	3.5
6	Science	28	2.0
7	Education	8	0.6
8	Agriculture	0	0.0
9	Unknown/not specified	0	0.0
Total		**1 433**	**100.0**

* LV no foreign students data

MT MALTA

All students	All *foreign students*	% of foreign among all students	% of female among *foreign students*
9 811	607	6.2	56.8

	ISCED levels		
	5A	5B	6
absolute	563	40	4
%	92.8	6.6	0.7

Countries of nationality of *foreign students*			
Rank	Country	Absolute	%
1	China (incl. HK)	165	27.2
2	Bulgaria	67	11.0
3	Russian Federation	46	7.6
4	Kuweit	25	4.1
5	United Kingdom	19	3.1
6	Germany	17	2.8
7	Nigeria	15	2.5
8	Albania	13	2.1
9	United States	11	1.8
10	Palestinian Territory	11	1.8
Top ten countries		**389**	**64.1**

Fields of study of *foreign students*			
Rank	Field of study	Absolute	%
1	Social sciences, business and law	289	47.6
2	Humanities and arts	147	24.2
3	Health & welfare	88	14.5
4	Services	45	7.4
5	Science	19	3.1
6	Engineering, manufacturing and construction	14	2.3
7	Education	5	0.8
8	Agriculture	0	0.0
9	Unknown/not specified	0	0.0
Total		**607**	**100.0**

NL THE NETHERLANDS

All students*	All *foreign students*	% of foreign among all students	% of female among *foreign students***
590 121	37 815	6.4	55.8

	ISCED levels		
	5A	5B	6
absolute		*	
%			

Countries of nationality of *foreign students*			
Rank	Country	Absolute	%
1	Germany	13 990	37.0
2	China (incl. HK)	3 584	9.5
3	Belgium	2 154	5.7
4	Indonesia	1 077	2.8
5	Suriname	874	2.3
6	Poland	840	2.2
7	Spain	821	2.2
8	United Kingdom	802	2.1
9	France	801	2.1
10	Morocco	760	2.0
Top ten countries		**25 703**	**68.0**

Fields of study of *foreign students*			
Rank	Field of study	Absolute	%
1	Social sciences, business and law	15 260	40.6
2	Humanities and arts	6 387	17.0
3	Health & welfare	5 553	14.8
4	Engineering, manufacturing and construction	2 804	7.5
5	Services	2 717	7.2
6	Science	2 437	6.5
7	Education	1 401	3.7
8	Agriculture	733	1.9
9	Unknown/not specified	315	0.8
Total**		**37 607**	**100.0**

* According to EUROSTAT the number 590 121 includes around 17 000 from open university.

** According to EUROSTAT the number for 208 *foreign students* with unknown nationality is not included, so that the female proportion is calculated from a total of 37 607.

NO NORWAY

All students	All *foreign students*	% of foreign among all students	% of female among *foreign students*
215 237	15 618	7.3	57.6

	ISCED levels		
	5A	5B	6
absolute	14 233	61	1 324
%	91.1	0.4	8.6

Countries of nationality of *foreign students*

Rank	Country	Absolute	%
1	Sweden	1 264	8.1
2	Denmark	840	5.4
3	Russian Federation	798	5.1
4	China (incl. HK)	725	4.6
5	Germany	656	4.2
6	United Kingdom	343	2.2
7	United States	325	2.1
8	Iran	318	2.0
9	Finland	293	1.9
10	Ethiopia	281	1.8
Top ten countries		**5 843**	**37.4**

Fields of study of *foreign students*

Rank	Field of study	Absolute	%
1	Social sciences, business and law	4 576	29.3
2	Humanities and arts	2 598	16.6
3	Health & welfare	2 422	15.5
4	Science	2 261	14.5
5	Education	1 246	8.0
6	Engineering, manufacturing and construction	1 157	7.4
7	Services	541	3.5
8	Agriculture	215	1.4
9	Unknown/not specified	602	3.9
Total		**15 618**	**100.0**

PL POLAND

All students	All *foreign students*	% of foreign among all students	% of female among *foreign students*
2 146 926	13 021	0.6	50.4

	ISCED levels		
	5A	5B	6
absolute	12 135	0	886
%	93.2	0.0	6.8

Countries of nationality of *foreign students*

Rank	Country	Absolute	%
1	Ukraine	2 672	20.5
2	Belarus	1 780	13.7
3	Norway	911	7.0
4	United States	817	6.3
5	Sweden	516	4.0
6	Russian Federation	488	3.7
7	Kazakhstan	449	3.4
8	China (incl. HK)	423	3.2
9	Germany	398	3.1
10	Lithuania	397	3.0
Top ten countries		**8 851**	**68.0**

Fields of study of *foreign students*

Rank	Field of study	Absolute	%
1	Social sciences, business and law	4 577	35.2
2	Health & welfare	3 677	28.2
3	Humanities and arts	2 384	18.3
4	Science	728	5.6
5	Engineering, manufacturing and construction	597	4.6
6	Education	547	4.2
7	Services	440	3.4
8	Agriculture	71	0.5
9	Unknown/not specified	0	0.0
Total		**13 021**	**100.0**

PT PORTUGAL

All students	All *foreign students*	% of foreign among all students	% of female among *foreign students*
366 729	17 950	4.9	47.9

	ISCED levels		
	5A	5B	6
absolute	15 947	202	1 801
%	88.8	1.1	10.0

Countries of nationality of *foreign students

Rank	Country	Absolute	%
1	Angola	4 794	26.7
2	Cape verde	4 342	24.2
3	Brazil	2 204	12.3
4	Mozambique	1 006	5.6
5	France	653	3.6
6	Spain	648	3.6
7	Sao Tome and Principe	644	3.6
8	Venezuela	452	2.5
9	Guinea-Bissau	426	2.4
10	Germany	303	1.7
Top ten countries		**15 472**	**86.2**

Fields of study of *foreign students*

Rank	Field of study	Absolute	%
1	Social sciences, business and law	8 810	49.1
2	Engineering, manufacturing and construction	3 293	18.3
3	Humanities and arts	1 523	8.5
4	Health & welfare	1 304	7.3
5	Science	1 303	7.3
6	Services	894	5.0
7	Education	652	3.6
8	Agriculture	171	1.0
9	Unknown/not specified	0	0.0
Total		**17 950**	**100.0**

RO ROMANIA

All students	All *foreign students*	% of foreign among all students	% of female among *foreign students*
928 175	12 188	1.3	10.3

	ISCED levels		
	5A	5B	6
absolute	11 311	27	850
%	92.8	0.2	7.0

Countries of nationality of *foreign students

Rank	Country	Absolute	%
1	Moldova	5 948	48.8
2	Tunisia	767	6.3
3	Greece	612	5.0
4	Israel	555	4.6
5	Ukraine	382	3.1
6	Serbia and Montenegro	290	2.4
7	Germany	247	2.0
8	Bulgaria	222	1.8
9	Jordan	206	1.7
10	Albania	205	1.7
Top ten countries		**9 434**	**77.4**

Fields of study of *foreign students*

Rank	Field of study	Absolute	%
1	Health & welfare	4 361	35.8
2	Social sciences, business and law	3 845	31.5
3	Engineering, manufacturing and construction	1 486	12.2
4	Humanities and arts	1 444	11.8
5	Science	508	4.2
6	Services	221	1.8
7	Agriculture	174	1.4
8	Education	89	0.7
9	Unknown/not specified	60	0.5
Total		**12 188**	**100.0**

SE SWEDEN

All students	All *foreign students*	% of foreign among all students	% of female among *foreign students*
413 710	42 769	10.3	50.1

	ISCED levels		
	5A	5B	6
absolute	37 394	866	4 509
%	87.4	2.0	10.5

Countries of nationality of *foreign students

Rank	Country	Absolute	%
1	Finland	3 602	8.4
2	Germany	3 301	7.7
3	China (incl. HK)	1 779	4.2
4	France	1 730	4.0
5	Norway	1 314	3.1
6	Spain	1 195	2.8
7	Denmark	953	2.2
8	Poland	918	2.1
9	United States	912	2.1
10	Pakistan	853	2.0
Top ten countries		**16 557**	**38.7**

Fields of study of *foreign students*

Rank	Field of study	Absolute	%
1	Social sciences, business and law	11 319	26.5
2	Engineering, manufacturing and construction	10 149	23.7
3	Humanities and arts	6 237	14.6
4	Science	6 221	14.5
5	Health & welfare	4 992	11.7
6	Education	2 576	6.0
7	Services	810	1.9
8	Agriculture	366	0.9
9	Unknown/not specified	99	0.2
Total		**42 769**	**100.0**

SI SLOVENIA

All students	All *foreign students*	% of foreign among all students	% of female among *foreign students*
115 944	1 511	1.3	57.2

	ISCED levels		
	5A	5B	6
absolute	1 060	352	99
%	70.2	23.3	6.6

Countries of nationality of *foreign students

Rank	Country	Absolute	%
1	Croatia	648	42.9
2	Bosnia and Herzegowina	212	14.0
3	Macedonia	168	11.1
4	Serbia and Montenegro	124	8.2
5	Italy	104	6.9
6	Russian Federation	28	1.9
7	Ukraine	23	1.5
8	India	21	1.4
9	Romania	15	1.0
10	Hungary	13	0.9
Top ten countries		**1 356**	**89.7**

Fields of study of *foreign students*

Rank	Field of study	Absolute	%
1	Social sciences, business and law	487	32.2
2	Humanities and arts	292	19.3
3	Engineering, manufacturing and construction	235	15.6
4	Health & welfare	178	11.8
5	Science	144	9.5
6	Services	78	5.2
7	Education	68	4.5
8	Agriculture	29	1.9
9	Unknown/not specified	0	0.0
Total		**1 511**	**100**

SK SLOVAKIA

All students	All *foreign students*	% of foreign among all students	% of female among *foreign students*
217 952	2 010	0.9	48.7

	ISCED levels		
	5A	5B	6
absolute	1 904	11	95
%	94.7	0.5	4.7

Countries of nationality of *foreign students

Rank	Country	Absolute	%
1	Czech Republic	485	24.1
2	Serbia and Montenegro	208	10.3
3	Greece	184	9.2
4	Israel	146	7.3
5	Norway	146	7.3
6	Ukraine	75	3.7
7	Romania	74	3.7
8	Poland	47	2.3
9	Kuweit	44	2.2
10	Hungary	36	1.8
Top ten countries		**1 445**	**71.9**

Fields of study of *foreign students*

Rank	Field of study	Absolute	%
1	Health & welfare	664	33.0
2	Humanities and arts	294	14.6
3	Social sciences, business and law	250	12.4
4	Engineering, manufacturing and construction	249	12.4
5	Agriculture	233	11.6
6	Science	127	6.3
7	Education	102	5.1
8	Services	91	4.5
9	Unknown/not specified	0	0.0
Total		**2 010**	**100.0**

TR TURKEY

All students	All *foreign students*	% of foreign among all students	% of female among *foreign students*
2 453 664	19 257	0.8	32.7

	ISCED levels		
	5A	5B	6
absolute	17 391	974	892
%	90.3	5.1	4.6

Countries of nationality of *foreign students

Rank	Country	Absolute	%
1	Azerbaijan	1 732	9.0
2	Turkmenistan	1 373	7.1
3	Bulgaria	1 169	6.1
4	Greece	884	4.6
5	Iran	859	4.5
6	Kazakhstan	729	3.8
7	Mongolia	712	3.7
8	Kyrgyztan	643	3.3
9	Albania	600	3.1
10	Russian Federation	556	2.9
Top ten countries		**9 257**	**48.1**

Fields of study of *foreign students*

Rank	Field of study	Absolute	%
1	Social sciences, business and law	7 085	36.8
2	Health & welfare	2 824	14.7
3	Engineering, manufacturing and construction	2 819	14.6
4	Humanities and arts	1 937	10.1
5	Education	1 832	9.5
6	Science	1 692	8.8
7	Services	611	3.2
8	Agriculture	457	2.4
9	Unknown/not specified	0	0.0
Total		**19 257**	**100.0**

ANNEX II – Nationals of Europe 32 countries studying abroad in 2006/07

AT AUSTRIA

All resident students with home nationality	Students enrolled abroad	Ratio of students enrolled abroad to all resident students with home nationality	% of female among students enrolled abroad
217 403	12 965	0.060	*

Countries of study abroad of national students			
Rank	Country	Absolute	%
1	Germany	6 564	50,6
2	United Kingdom	1 834	14,1
3	Switzerland	970	7,5
4	United States	862	6,6
5	Sweden	497	3,8
6	France	424	3,3
7	Liechtenstein	288	2,2
8	Spain	241	1,9
9	Netherlands	212	1,6
10	Italy	211	1,6
Top ten countries		12 103	93,4

BE BELGIUM

All resident students with home nationality	Students enrolled abroad	Ratio of students enrolled abroad to all resident students with home nationality	% of female among students enrolled abroad
346 469	10 355	0.030	*

Countries of study abroad of national students			
Rank	Country	Absolute	%
1	France	2 663	25,7
2	Netherlands	2 154	20,8
3	United Kingdom	1 916	18,5
4	Germany	1 015	9,8
5	United States	719	6,9
6	Spain	340	3,3
7	Switzerland	333	3,2
8	Sweden	289	2,8
9	Italy	283	2,7
10	Austria	89	0,9
Top ten countries		9 801	94,6

BG BULGARIA

All resident students with home nationality	Students enrolled abroad	Ratio of students enrolled abroad to all resident students with home nationality	% of female among students enrolled abroad
249 162	26 623	0,074	*

Countries of study abroad of national students			
Rank	Country	Absolute	%
1	Germany	12 218	45,9
2	United States	3 555	13,4
3	France	2 645	9,9
4	Austria	1 288	4,8
5	United Kingdom	1 223	4,6
6	Turkey	1 169	4,4
7	Spain	788	3,0
8	Italy	771	2,9
9	Greece	562	2,1
10	Netherlands	488	1,8
Top ten countries		24 707	92,8

CH SWITZERLAND

All resident students with home nationality	Students enrolled abroad	Ratio of students enrolled abroad to all resident students with home nationality	% of female among students enrolled abroad
172 054	9 850	0.057	*

Countries of study abroad of national students			
Rank	Country	Absolute	%
1	Germany	2 245	22,8
2	France	1 604	16,3
3	Italy	1 371	13,9
4	United States	1 268	12,9
5	United Kingdom	1 190	12,1
6	Spain	357	3,6
7	Austria	355	3,6
8	Australia	313	3,2
9	Sweden	273	2,8
10	Netherlands	157	1,6
Top ten countries		9 133	92,7

CY CYPRUS

All resident students with home nationality	Students enrolled abroad	Ratio of students enrolled abroad to all resident students with home nationality	% of female among students enrolled abroad
16 254	22 411	1.379	*

Countries of study abroad of national students			
Rank	Country	Absolute	%
1	Greece	11 449	51,1
2	United Kingdom	8 180	36,5
3	United States	896	4,0
4	Bulgaria	564	2,5
5	Hungary	293	1,3
6	Germany	227	1,0
7	France	224	1,0
8	Czech Republic	141	0,6
9	Italy	124	0,6
10	Spain	80	0,4
Top ten countries		**22 178**	**99.0**

CZ CZECH REPUBLIC

All resident students with home nationality	Students enrolled abroad	Ratio of students enrolled abroad to all resident students with home nationality	% of female among students enrolled abroad
338 147	8 419	0.025	*

Countries of study abroad of national students			
Rank	Country	Absolute	%
1	Germany	2 205	26,2
2	United Kingdom	1 748	20,8
3	United States	934	11,1
4	France	752	8,9
5	Austria	545	6,5
6	Slovakia	485	5,8
7	Poland	381	4,5
8	Sweden	234	2,8
9	Italy	175	2,1
10	Switzerland	174	2,1
Top ten countries		**7 633**	**90,7**

DE GERMANY

All resident students with home nationality	Students enrolled abroad	Ratio of students enrolled abroad to all resident students with home nationality	% of female among students enrolled abroad
2 020 384	87 750	0.043	*

Countries of study abroad of national students			
Rank	Country	Absolute	%
1	United Kingdom	17 254	19,7
2	Netherlands	13 990	15,9
3	Austria	12 386	14,1
4	Switzerland	9 770	11,1
5	United States	8 847	10,1
6	France	6 947	7,9
7	Sweden	3 301	3,8
8	Italy	2 067	2,4
9	Australia	1 866	2,1
10	Spain	1 854	2,1
Top ten countries		**78 282**	**89,2**

DK DENMARK

All resident students with home nationality	Students enrolled abroad	Ratio of students enrolled abroad to all resident students with home nationality	% of female among students enrolled abroad
211 343	6 838	0.032	*

Countries of study abroad of national students			
Rank	Country	Absolute	%
1	United Kingdom	2 399	35,1
2	United States	984	14,4
3	Sweden	953	13,9
4	Norway	840	12,3
5	Germany	508	7,4
6	France	233	3,4
7	Netherlands	142	2,1
8	Australia	140	2,0
9	Spain	112	1,6
10	Switzerland	90	1,3
Top ten countries		**6 401**	**93,6**

EE ESTONIA

All resident students with home nationality	Students enrolled abroad	Ratio of students enrolled abroad to all resident students with home nationality	% of female among students enrolled abroad
66 567	4 020	0.060	*

Countries of study abroad of national students			
Rank	Country	Absolute	%
1	Germany	740	18,4
2	United Kingdom	710	17,7
3	Finland	664	16,5
4	Russian Federation	558	13,9
5	Sweden	259	6,4
6	United States	245	6,1
7	Denmark	152	3,8
8	France	122	3,0
9	Spain	104	2,6
10	Netherlands	76	1,9
Top ten countries		**3 630**	**90,3**

ES SPAIN

All resident students with home nationality	Students enrolled abroad	Ratio of students enrolled abroad to all resident students with home nationality	% of female among students enrolled abroad
1 717 684	29 027	0.017	*

Countries of study abroad of national students			
Rank	Country	Absolute	%
1	United Kingdom	8 930	30,8
2	Germany	4 974	17,1
3	France	3 860	13,3
4	United States	3 654	12,6
5	Switzerland	1 496	5,2
6	Sweden	1 195	4,1
7	Belgium	1 101	3,8
8	Netherlands	821	2,8
9	Portugal	648	2,2
10	Italy	519	1,8
Top ten countries		**27 198**	**93,7**

FI FINLAND

All resident students with home nationality	Students enrolled abroad	Ratio of students enrolled abroad to all resident students with home nationality	% of female among students enrolled abroad
299 097	9 838	0.033	*

Countries of study abroad of national students			
Rank	Country	Absolute	%
1	Sweden	3 602	36,6
2	United Kingdom	2 353	23,9
3	Germany	862	8,8
4	United States	579	5,9
5	Estonia	467	4,7
6	France	334	3,4
7	Norway	293	3,0
8	Denmark	207	2,1
9	Netherlands	191	1,9
10	Austria	177	1,8
Top ten countries		**9 065**	**92,1**

FR FRANCE

All resident students with home nationality	Students enrolled abroad	Ratio of students enrolled abroad to all resident students with home nationality	% of female among students enrolled abroad
1 932 893	61 593	0.032	*

Countries of study abroad of national students			
Rank	Country	Absolute	
1	Belgium	17 882	29
2	United Kingdom	15 809	25,7
3	United States	6 852	11,1
4	Germany	6 274	10,2
5	Switzerland	4 335	7,0
6	Spain	1 907	3,1
7	Sweden	1 730	2,8
8	Italy	1 083	1,8
9	Australia	872	1,4
10	Ireland	855	1,4
Top ten countries		**57 599**	**93,5**

UK UNITED KINGDOM

All resident students with home nationality	Students enrolled abroad	Ratio of students enrolled abroad to all resident students with home nationality	% of female among students enrolled abroad
1 902 828	23 393	0.012	*

Countries of study abroad of national students			
Rank	Country	Absolute	
1	United States	8 625	36,9
2	France	2 595	11,1
3	Ireland	2 282	9,8
4	Germany	1 854	7,9
5	Australia	1 687	7,2
6	Netherlands	802	3,4
7	Sweden	789	3,4
8	Spain	662	2,8
9	Denmark	479	2,0
10	New Zealand	431	1,8
Top ten countries		**20 206**	**86,4**

GR GREECE

All resident students with home nationality	Students enrolled abroad	Ratio of students enrolled abroad to all resident students with home nationality	% of female among students enrolled abroad
581 698	38 231	0.066	*

Countries of study abroad of national students			
Rank	Country	Absolute	
1	United Kingdom	17 523	45,8
2	Germany	6 077	15,9
3	Italy	5 054	13,2
4	United States	2 030	5,3
5	France	1 952	5,1
6	Turkey	884	2,3
7	Bulgaria	671	1,8
8	Romania	612	1,6
9	Netherlands	601	1,6
10	Cyprus	463	1,2
Top ten countries		**35 867**	**93,8**

HU HUNGARY

All resident students with home nationality	Students enrolled abroad	Ratio of students enrolled abroad to all resident students with home nationality	% of female among students enrolled abroad
416 462	8 551	0.021	*

Countries of study abroad of national students			
Rank	Country	Absolute	
1	Germany	2 518	29,4
2	United Kingdom	1 613	18,9
3	Austria	1 219	14,3
4	United States	751	8,8
5	France	712	8,3
6	Netherlands	244	2,9
7	Italy	206	2,4
8	Switzerland	199	2,3
9	Sweden	165	1,9
10	Belgium	115	1,3
Top ten countries		**7 742**	**90,5**

IE IRELAND

All resident students with home nationality	Students enrolled abroad	Ratio of students enrolled abroad to all resident students with home nationality	% of female among students enrolled abroad
173 591	30 204	0,121	*

Countries of study abroad of national students			
Rank	Country	Absolute	
1	United Kingdom	27 098	89,7
2	United States	1 105	3,7
3	France	454	1,5
4	Germany	419	1,4
5	Sweden	172	0,6
6	Australia	171	0,6
7	Netherlands	134	0,4
8	Spain	108	0,4
9	Hungary	79	0,3
10	Belgium	64	0,2
Top ten countries		**29 804**	**98,7**

IS ICELAND

All resident students with home nationality	Students enrolled abroad	Ratio of students enrolled abroad to all resident students with home nationality	% of female among students enrolled abroad
15 038	3 771	0,174	*

Countries of study abroad of national students			
Rank	Country	Absolute	
1	Denmark	1 741	46,2
2	United Kingdom	452	12
3	United States	431	11,4
4	Sweden	409	10,8
5	Norway	252	6,7
6	Germany	113	3,0
7	Netherlands	80	2,1
8	Hungary	50	1,3
9	France	47	1,2
10	Spain	31	0,8
Top ten countries		3 606	95,6

IT ITALY

All resident students with home nationality	Students enrolled abroad	Ratio of students enrolled abroad to all resident students with home nationality	% of female among students enrolled abroad
1 976 371	45 044	0.023	*

Countries of study abroad of national students			
Rank	Country	Absolute	
1	United Kingdom	9 691	21,5
2	Germany	7 457	16,6
3	Austria	6 209	13,8
4	France	4 790	10,6
5	Switzerland	4 598	10,2
6	United States	3 416	7,6
7	Spain	3 226	7,2
8	Belgium	2 219	4,9
9	Sweden	826	1,8
10	Netherlands	584	1,3
Top ten countries		43 016	95,5

LI LIECHTENSTEIN

All resident students with home nationality	Students enrolled abroad	Ratio of students enrolled abroad to all resident students with home nationality	% of female among students enrolled abroad
79	747	9.456	*

Countries of study abroad of national students			
Rank	Country	Absolute	
1	Switzerland	546	73,1
2	Austria	150	20,1
3	Germany	24	3,2
4	United Kingdom	9	1,2
5	United States	6	0,8
6	France	4	0,5
7	Sweden	2	0,3
8	Denmark	1	0,1
9	Spain	1	0,1
10	Ireland	1	0,1
(10	Italy	1	0,1)
(10	Netherlands	1	0,1)
(10	Australia	1	0,1)
Top ten countries		744	99,6

LT LITHUANIA

All resident students with home nationality	Students enrolled abroad	Ratio of students enrolled abroad to all resident students with home nationality	% of female among students enrolled abroad
197 935	8 532	0.043	*

Countries of study abroad of national students			
Rank	Country	Absolute	
1	United Kingdom	2 364	27,7
2	Germany	1 719	20,1
3	Russian Federation	869	10,2
4	United States	548	6,4
5	Latvia	415	4,9
6	Poland	397	4,7
7	Denmark	376	4,4
8	Sweden	298	3,5
9	France	257	3
10	Belarus	219	2,6
Top ten countries		7 462	87,5

LU LUXEMBOURG

All resident students with home nationality	Students enrolled abroad	Ratio of students enrolled abroad to all resident students with home nationality	% of female among students enrolled abroad
*	7 148	*	*

Countries of study abroad of national students			
Rank	Country	Absolute	
1	Germany	2 450	34,3
2	Belgium	1 667	23,3
3	France	1 575	22,0
4	Austria	470	6,6
5	United Kingdom	428	6,0
6	Switzerland	297	4,2
7	United States	57	0,8
8	Italy	49	0,7
9	Netherlands	47	0,7
10	Portugal	30	0,4
Top ten countries		**7 070**	**98,9**

LV LATVIA

All resident students with home nationality	Students enrolled abroad	Ratio of students enrolled abroad to all resident students with home nationality	% of female among students enrolled abroad
128 064	4 680	0.037	*

Countries of study abroad of national students			
Rank	Country	Absolute	
1	United Kingdom	1 098	23,5
2	Germany	910	19,4
3	Russian Federation	788	16,8
4	United States	440	9,4
5	Denmark	179	3,8
6	Estonia	170	3,6
7	France	147	3,1
8	Sweden	147	3,1
9	Norway	100	2,1
10	Netherlands	98	2,1
Top ten countries		**4 077**	**87,1**

MT MALTA

All resident students with home nationality	Students enrolled abroad	Ratio of students enrolled abroad to all resident students with home nationality	% of female among students enrolled abroad
9 204	1 074	0,081	*

Countries of study abroad of national students			
Rank	Country	Absolute	
1	United Kingdom	858	79,9
2	Italy	44	4,1
3	Germany	28	2,6
4	United States	28	2,6
5	Spain	26	2,4
6	Australia	20	1,9
7	France	19	1,8
8	Sweden	12	1,1
9	Netherlands	7	0,7
10	Switzerland	6	0,6
Top ten countries		**1 048**	**97,6**

NL THE NETHERLANDS

All resident students with home nationality	Students enrolled abroad	Ratio of students enrolled abroad to all resident students with home nationality	% of female among students enrolled abroad
552 306	14 433	0.026	*

Countries of study abroad of national students			
Rank	Country	Absolute	
1	United Kingdom	4 464	30,9
2	Belgium	3 447	23,9
3	United States	1 622	11,2
4	Germany	1 558	10,8
5	Sweden	691	4,8
6	France	626	4,3
7	Switzerland	350	2,4
8	Spain	265	1,8
9	Australia	261	1,8
10	Denmark	201	1,4
Top ten countries		**13 485**	**93,4**

NO NORWAY

All resident students with home nationality	Students enrolled abroad	Ratio of students enrolled abroad to all resident students with home nationality	% of female among students enrolled abroad
199 619	13 646	0.068	*

Countries of study abroad of national students			
Rank	Country	Absolute	
1	United Kingdom	3 196	23,4
2	Denmark	2 251	16,5
3	Australia	1 479	10,8
4	Sweden	1 314	9,6
5	United States	1 217	8,9
6	Poland	911	6,7
7	Hungary	715	5,2
8	Germany	594	4,4
9	France	367	2,7
10	Netherlands	307	2,2
Top ten countries		**12 351**	**90,5**

PL POLAND

All resident students with home nationality	Students enrolled abroad	Ratio of students enrolled abroad to all resident students with home nationality	% of female among students enrolled abroad
2 133 905	41 896	0.020	*

Countries of study abroad of national students			
Rank	Country	Absolute	
1	Germany	15 347	36,6
2	United Kingdom	11 151	26,6
3	France	3 396	8,1
4	United States	2 872	6,9
5	Italy	1 478	3,5
6	Austria	1 472	3,5
7	Sweden	918	2,2
8	Netherlands	840	2,0
9	Spain	754	1,8
10	Denmark	686	1,6
Top ten countries		**38 914**	**92,9**

PT PORTUGAL

All resident students with home nationality	Students enrolled abroad	Ratio of students enrolled abroad to all resident students with home nationality	% of female among students enrolled abroad
348 779	16 639	0.048	*

Countries of study abroad of national students			
Rank	Country	Absolute	
1	United Kingdom	5 477	32,9
2	Spain	2 785	16,7
3	France	2 664	16,0
4	Germany	1 556	9,4
5	Switzerland	1 015	6,1
6	United States	873	5,2
7	Belgium	843	5,1
8	Netherlands	274	1,6
9	Czech Republic	270	1,6
10	Sweden	212	1,3
Top ten countries		**15 969**	**96,0**

RO ROMANIA

All resident students with home nationality	Students enrolled abroad	Ratio of students enrolled abroad to all resident students with home nationality	% of female among students enrolled abroad
915 987	24 597	0.027	*

Countries of study abroad of national students			
Rank	Country	Absolute	
1	France	4 617	18,8
2	Germany	4 373	17,8
3	Hungary	3 296	13,4
4	United States	3 203	13,0
5	Italy	2 456	10,0
6	Spain	1 725	7,0
7	United Kingdom	1 133	4,6
8	Austria	697	2,8
9	Switzerland	584	2,4
10	Belgium	414	1,7
Top ten countries		**22 498**	**91,5**

SE SWEDEN

All resident students with home nationality	Students enrolled abroad	Ratio of students enrolled abroad to all resident students with home nationality	% of female among students enrolled abroad
370 941	15 791	0.043	*

Countries of study abroad of national students			
Rank	Country	Absolute	
1	United Kingdom	4 735	30,0
2	United States	2 985	18,9
3	Denmark	1 586	10,0
4	Norway	1 264	8,0
5	Australia	879	5,6
6	Germany	712	4,5
7	Finland	572	3,6
8	France	538	3,4
9	Poland	516	3,3
10	Hungary	270	1,7
Top ten countries		**14 057**	**89,0**

SI SLOVENIA

All resident students with home nationality	Students enrolled abroad	Ratio of students enrolled abroad to all resident students with home nationality	% of female among students enrolled abroad
114 433	2 699	0.024	*

Countries of study abroad of national students			
Rank	Country	Absolute	
1	Germany	599	22,2
2	Austria	556	20,6
3	Italy	387	14,3
4	United Kingdom	334	12,4
5	United States	203	7,5
6	Croatia	100	3,7
7	France	87	3,2
8	Netherlands	73	2,7
9	Sweden	58	2,1
10	Spain	52	1,9
Top ten countries		**2 449**	**90,7**

SK SLOVAKIA

All resident students with home nationality	Students enrolled abroad	Ratio of students enrolled abroad to all resident students with home nationality	% of female among students enrolled abroad
215 942	25 466	0,082	*

Countries of study abroad of national students			
Rank	Country	Absolute	
1	Czech Republic	16 505	64,8
2	Hungary	2 296	9,0
3	United Kingdom	1 626	6,4
4	Germany	1 611	6,3
5	Austria	1 301	5,1
6	United States	605	2,4
7	France	380	1,5
8	Italy	186	0,7
9	Switzerland	163	0,6
10	Poland	139	0,5
Top ten countries		**24 812**	**97,4**

TR TURKEY

All resident students with home nationality	Students enrolled abroad	Ratio of students enrolled abroad to all resident students with home nationality	% of female among students enrolled abroad
2 434 407	56 555	0.023	*

Countries of study abroad of national students			
Rank	Country	Absolute	
1	Germany	24 601	43,5
2	United States	11 760	20,8
3	United Kingdom	3 552	6,3
4	Azerbaijan	3 050	5,4
5	France	2 339	4,1
6	Austria	2 245	4,0
7	Bulgaria	2 099	3,7
8	Kyrgyzstan	1 003	1,8
9	Switzerland	826	1,5
10	Netherlands	706	1,2
Top ten countries		**52 181**	**92,3**

ANNEX III – Foreign students vs. incoming (mobile) students in Europe 32 countries in 2006/07 – country sheets (24 out of 32 countries)

AT AUSTRIA

Foreign nationality students				*Incoming students*			
All students	**All *foreign students***	**% of foreign among all students**	**% of female among *foreign students***	**All students**	**All *incoming students* (p.r.)**	**% of incoming among all students**	**% of female among *incoming students***
260 975	43 572	16.7	53.8	260 975	32 430	12.4	53.6

	ISCED levels				ISCED levels		
	5A	**5B**	**6**		**5A**	**5B**	**6**
absolute	38 379	1 287	3 906	**absolute**	29 250	447	2 733
%	88.0	3.0	9.0	**%**	90.2	1.4	8.4

Countries of nationality of *foreign students*				**Countries of permanent residence of *incoming students***			
Rank	**Country**	**Absolute**	**%**	**Rank**	**Country**	**Absolute**	**%**
Germany		12 386	28.4	**1**			
2	Italy	6 209	14.2	**2**			
3	Bosnia and Herzegovina	2 582	5.9	**3**			
4	Turkey	2 245	5.2	**4**			
5	Poland	1 472	3.4	**5**			
6	China	1 391	3.2	**6**		*	
7	Serbia and Montenegro	1 303	3.0	**7**			
8	Slovakia	1 301	3.0	**8**			
9	Bulgaria	1 288	3.0	**9**			
10	Croatia	1 259	2.9	**10**			
Top ten countries		**31 436**	**72.1**	**Top ten countries**			

Fields of study of *foreign students*				**Fields of study of *incoming students***			
Rank	**Field of study**	**Absolute**	**%**	**Rank**	**Field of study**	**Absolute**	**%**
1	Social sciences, business and law	15 747	36.1	**1**	Social sciences, business and law	12 036	37.1
2	Humanities and arts	9 911	22.7	**2**	Humanities and arts	7 432	22.9
3	Engineering, manufacturing and construction	5 211	12.0	**3**	Engineering, manufacturing and construction	3 832	11.8
4	Science	5 184	11.9	**4**	Science	3 417	10.5
5	Health & welfare	3 259	7.5	**5**	Health & welfare	2 502	7.7
6	Education	2 686	6.2	**6**	Education	1 935	6
7	Agriculture	742	1.7	**7**	Agriculture	665	2.1
8	Services	678	1.6	**8**	Services	476	1.5
9	Unknown/not specified	154	0.4	**9**	Unknown/not specified	135	0.4
Total		**43 572**	**100.0**	**Total**		**32 430**	**100.0**

BE BELGIUM

Foreign nationality students				*Incoming students* (p.e.)				*Incoming students* (p.r.)			
All students	All *foreign students*	% of foreign among all students	% of female among *foreign students*	All students	All *incoming students* (p.e.)	% of incoming among all students	% of female among *incoming students*	All students	All *incoming students* (p.r.)	% of incoming among all students	% of female among *incoming students*
393 687	47 218	12.0	57.2	393 687	32 869	8.3	57.6	393 687	25 202	6.4	60.8

	ISCED levels*				ISCED levels				ISCED levels		
	5A	5B	6		5A	5B	6		5A	5B	6
absolute	25 353	13 790	2 208	absolute	22 576	8 221	2 072	absolute	15 975	7 715	1 512
%	61.3	33.3	5.3	%	68.7	25	6.3	%	63.4	30.6	6

Countries of nationality of *foreign students**				Countries of permanent residence of *incoming students*				Countries of permanent residence of *incoming students*			
Rank	Country	Absolute	%	Rank	Country	Absolute	%	Rank	Country	Absolute	%
1	France	17 882	37.9	1				1	France	8 949	35.5
2	Netherlands	3 447	7.3	2				2	Netherlands	2 089	8.3
3	Morocco	2 650	5.6	3				3	Luxembourg	1 077	4.3
4	Italy	2 219	4.7	4				4	China (incl. HK)	530	2.1
5	Luxembourg	1 667	3.5	5		*		5	Germany	242	1
6	Congo, DR	1 542	3.3	6				6	India	200	0.8
7	Cameroon	1 301	2.8	7				7	Russian Federation	132	0.5
8	China (incl. HK)	1 182	2.5	8				8	Vietnam	121	0.5
9	Spain	1 101	2.3	9				9	Nigeria	103	0.4
10	Portugal	843	1.8	10				10	United States	103	0.4
Top ten countries		33 834	71.7	Top ten countries				Top ten countries		13 546	53.7

Fields of study of *foreign students**				Fields of study of *incoming students*				Fields of study of *incoming students*			
Rank	Field of study	Absolute	%	Rank	Field of study	Absolute	%	Rank	Field of study	Absolute	%
1	Health & welfare	14 350	34.7	1	Social sciences	6 766	20.6	1			
2	Social sciences	9 615	23.3	2	Health & welfare	4 543	13.8	2			
3	Humanities etc.	5 949	14.4	3	Humanities etc.	4 097	12.5	3			
4	Engineering, etc.	3 280	7.9	4	Agriculture	2 289	7	4			
5	Science	2 950	7.1	5	Science	2 227	6.8	5		*	
6	Agriculture	2 422	5.9	6	Engineering, etc.	1 775	5.4	6			
7	Education	2 015	4.9	7	Services	597	1.8	7			
8	Services	741	1.8	8	Education	286	0.9	8			
9	Unknown/not spec.	29	0.1	9	Unknown/not spec.	10 289	31.3	9			
Total		41 351	100.0	Total		32 869	100	Total			

BG BULGARIA

Foreign nationality students				*Incoming students*			
All students	**All *foreign students***	**% of foreign among all students**	**% of female among *foreign students***	**All students**	**All *incoming students* (p.e.)**	**% of incoming among all students**	**% of female among *incoming students***
258 513	9 351	3.6	41.1	258 513	9 100	3.5	41.6

	ISCED levels				ISCED levels		
	5A	**5B**	**6**		**5A**	**5B**	**6**
absolute	8 691	369	291	**absolute**	8 561	360	179
%	92.9	3.9	3.1	**%**	94.1	4	2

Countries of nationality of *foreign students*				Countries of permanent residence of *incoming students*			
Rank	**Country**	**Absolute**	**%**	**Rank**	**Country**	**Absolute**	**%**
1	Macedonia	3 696	39.5	**1**	Macedonia	3 632	39.9
2	Turkey	2 099	22.4	**2**	Turkey	2 029	22.3
3	Greece	671	7.2	**3**	Greece	617	6.8
4	Cyprus	564	6.0	**4**	Cyprus	552	6.1
5	Moldova	385	4.1	**5**	Moldova	370	4.1
6	Serbia and Montenegro	322	3.4	**6**	Ukraine	316	3.5
7	Ukraine	319	3.4	**7**	Serbia and Montenegro	313	3.4
8	Albania	176	1.9	**8**	Albania	168	1.8
9	Russian Federation	122	1.3	**9**	Russian Federation	126	1.4
10	Israel	82	0.9	**10**	United States	102	1.1
Top ten countries		**8 436**	**90.2**	**Top ten countries**		**8 225**	**90.4**

Fields of study of *foreign students*				Fields of study of *incoming students*			
Rank	**Field of study**	**Absolute**	**%**	**Rank**	**Field of study**	**Absolute**	**%**
1	Health & welfare	2 762	29.5	**1**			
2	Social sciences, business and law	2 286	24.4	**2**			
3	Engineering, manufacturing and construction	1 853	19.8	**3**			
4	Humanities and arts	1 026	11.0	**4**		*	
5	Education	541	5.8	**5**			
6	Science	297	3.2	**6**			
7	Services	293	3.1	**7**			
8	Agriculture	151	1.6	**8**			
9	Unknown/not specified	142	1.5	**9**			
Total		**9 351**	**100.0**	**Total**			

CH SWITZERLAND

Foreign nationality students				*Incoming students*			
All students	**All *foreign students***	**% of foreign among all students**	**% of female among *foreign students***	**All students**	**All *incoming students* (p.e.)**	**% of incoming among all students**	**% of female among *incoming students***
213 112	41 058	19.3	46.9	213 112	29 777	14.0	48.0

	ISCED levels				ISCED levels		
	5A	**5B**	**6**		**5A**	**5B**	**6**
absolute	27 239	5 918	7 901	**absolute**	21 881	*	7 896
%	66.3	14.4	19.2	**%**	73.4	*	26.6

Countries of nationality of *foreign students*				Countries of permanent residence of *incoming students*			
Rank	**Country**	**Absolute**	**%**	**Rank**	**Country**	**Absolute**	**%**
1	Germany	9 770	23.8	**1**	Germany	7 502	25.2
2	Italy	4 598	11.2	**2**	France	4 605	15.5
3	France	4 335	10.6	**3**	Italy	2 005	6.7
4	Spain	1 496	3.6	**4**	China (incl. HK)	681	2.3
5	Portugal	1 015	2.5	**5**	Austria	619	2.1
6	Austria	970	2.4	**6**	Liechtenstein	598	2
7	Turkey	826	2.0	**7**	Russian Federation	586	2
8	China (incl. HK)	821	2.0	**8**	Romania	556	1.9
9	Serbia and Montenegro	760	1.9	**9**	United States	529	1.8
10	Russian Federation	706	1.7	**10**	Turkey	485	1.6
Top ten countries		**25 297**	**61.6**	**Top ten countries**		**18 166**	**61.0**

Fields of study of *foreign students*				Fields of study of *incoming students*			
Rank	**Field of study**	**Absolute**	**%**	**Rank**	**Field of study**	**Absolute**	**%**
1	Social sciences, business and law	14 502	35.3	**1**	Social sciences, business and law	10 193	34.2
2	Engineering, manufacturing and construction	6 424	15.6	**2**	Humanities and arts	5 174	17.4
3	Humanities and arts	6 088	14.8	**3**	Science	4 962	16.7
4	Science	5 740	14.0	**4**	Engineering, manufacturing and construction	4 760	16
5	Health & welfare	3 311	8.1	**5**	Health & welfare	2 101	7.1
6	Services	2 351	5.7	**6**	Education	1 069	3.6
7	Education	1 728	4.2	**7**	Services	622	2.1
8	Agriculture	284	0.7	**8**	Agriculture	254	0.9
9	Unknown/not specified	630	1.5	**9**	Unknown/not specified	642	2.2
Total		**41 058**	**100.0**	**Total**		**29 777**	**100.0**

CY CYPRUS

Foreign nationality students				*Incoming students*			
All students	**All *foreign students***	**% of foreign among all students**	**% of female among *foreign students***	**All students**	**All *incoming students* (p.r.)**	**% of incoming among all students**	**% of female among *incoming students***
22 227	5 973	26.9	25.6	22 227	5 590	25.1	23.3

	ISCED levels				ISCED levels		
	5A	**5B**	**6**		**5A**	**5B**	**6**
absolute	445	5 497	31	**absolute**	371	5 207	12
%	7.5	92.0	0.5	**%**	6.6	93.1	0.2

Countries of nationality of *foreign students*				Countries of permanent residence of *incoming students*			
Rank	**Country**	**Absolute**	**%**	**Rank**	**Country**	**Absolute**	**%**
1	Bangladesh	1 173	19.6	**1**	Bangladesh	1 170	20.9
2	China (incl. HK)	909	15.2	**2**	China (incl. HK)	901	16.1
3	India	838	14.0	**3**	India	838	15
4	Greece	463	7.8	**4**	Pakistan	437	7.8
5	Pakistan	440	7.4	**5**	Sri Lanka	424	7.6
6	Sri Lanka	424	7.1	**6**	Greece	359	6.4
7	Russian Federation	280	4.7	**7**	Nepal	239	4.3
8	Nepal	242	4.1	**8**	Russian Federation	183	3.3
9	Cameroon	112	1.9	**9**	Cameroon	109	1.9
10	Iran	105	1.8	**10**	Iran	90	1.6
Top ten countries		**4 986**	**83.5**	**Top ten countries**		**4 750**	**85.0**

Fields of study of *foreign students*				Fields of study of *incoming students*			
Rank	**Field of study**	**Absolute**	**%**	**Rank**	**Field of study**	**Absolute**	**%**
1	Social sciences, business and law	4 424	74.1	**1**	Social sciences, business and law	4 194	75.0
2	Science	564	9.4	**2**	Science	517	9.2
3	Services	404	6.8	**3**	Services	389	7
4	Humanities and arts	278	4.7	**4**	Humanities and arts	231	4.1
5	Engineering, manufacturing and construction	145	2.4	**5**	Engineering, manufacturing and construction	125	2.2
6	Education	108	1.8	**6**	Education	87	1.6
7	Health & welfare	42	0.7	**7**	Health & welfare	39	0.7
8	Agriculture	8	0.1	**8**	Agriculture	8	0.1
9	Unknown/not specified	0	0.0	**9**	Unknown/not specified	0	0
Total		**5 973**	**100.0**	**Total**		**5 590**	**100.0**

CZ CZECH REPUBLIC

Foreign nationality students				*Incoming students*			
All students	**All *foreign students***	**% of foreign among all students**	**% of female among *foreign students***	**All students**	**All *incoming students* (p.r.)**	**% of incoming among all students**	**% of female among *incoming students***
362 630	24 483	6.8	51.2	362 630	20 175	5.6	49.3

	ISCED levels				ISCED levels		
	5A	**5B**	**6**		**5A**	**5B**	**6**
absolute	22 040	332	2 111	**absolute**	18 265	214	1 696
%	90.0	1.4	8.6	**%**	90.5	1.1	8.4

Countries of nationality of *foreign students*				**Countries of permanent residence of *incoming students***			
Rank	**Country**	**Absolute**	**%**	**Rank**	**Country**	**Absolute**	**%**
1	Slovakia	16 505	67.4	**1**			
2	Russian Federation	1 088	4.4	**2**			
3	Ukraine	774	3.2	**3**			
4	Vietnam	561	2.3	**4**			
5	United Kingdom	405	1.7	**5**		*	
6	Belarus	317	1.3	**6**			
7	Portugal	270	1.1	**7**			
8	Poland	262	1.1	**8**			
9	Germany	254	1.0	**9**			
10	Kazakhstan	238	1.0	**10**			
Top ten countries		**20 674**	**84.4**	**Top ten countries**			

Fields of study of *foreign students*				**Fields of study of *incoming students***			
Rank	**Field of study**	**Absolute**	**%**	**Rank**	**Field of study**	**Absolute**	**%**
1	Social sciences, business and law	8 694	35.5	**1**			
2	Health & welfare	4 766	19.5	**2**			
3	Engineering, manufacturing and construction	2 709	11.1	**3**			
4	Science	2 586	10.6	**4**		*	
5	Humanities and Arts	1 974	8.1	**5**			
6	Education	1 275	5.2	**6**			
7	Agriculture	605	2.5	**7**			
8	Services	411	1.7	**8**			
9	Unknown/not specified	1 463	6.0	**9**			
Total		**24 483**	**100.0**	**Total**			

DE GERMANY

Foreign nationality students				*Incoming students*			
All students	**All *foreign students***	**% of foreign among all students**	**% of female among *foreign students***	**All students**	**All *incoming students* (p.e.)**	**% of incoming among all students**	**% of female among *incoming students***
2 278 897	258 513	11.3	50.9	2 278 897	206 875	9.1	51.6

	ISCED levels				ISCED levels		
	5A	**5B**	**6**		**5A**	**5B**	**6**
absolute	246 161	12 352	*	**absolute**		*	
%	95.2	4.8		**%**			

Countries of nationality of *foreign students*				**Countries of permanent residence of *incoming students****			
Rank	**Country**	**Absolute**	**%**	**Rank**	**Country**	**Absolute**	**%**
1	China (incl. HK)	27 117	10.5	**1**	China (incl. HK)	23 791	11.5
2	Turkey	24 601	9.5	**2**	Poland	12 592	6.1
3	Poland	15 347	5.9	**3**	Russian Federation	12 047	5.8
4	Russian Federation	12 831	5.0	**4**	Bulgaria	11 486	5.6
5	Bulgaria	12 218	4.7	**5**	Turkey	7 165	3.5
6	Ukraine	9 222	3.6	**6**	Ukraine	6 870	3.3
7	Morocco	8 095	3.1	**7**	France	5 960	2.9
8	Italy	7 457	2.9	**8**	Cameroon	5 139	2.5
9	Austria	6 564	2.5	**9**	Austria	5 010	2.4
10	France	6 274	2.4	**10**	Morocco	4 369	2.1
Top ten countries		**129 726**	**50.2**	**Top ten countries**		**94 429**	**45.8**

Fields of study of *foreign students*				**Fields of study of *incoming students***			
Rank	**Field of study**	**Absolute**	**%**	**Rank**	**Field of study**	**Absolute**	**%**
1	Social sciences business and law	70 296	27.2	**1**	Social sciences, business and law	57 029	27.6
2	Humanities and arts	51 021	19.7	**2**	Humanities and arts	44 382	21.5
3	Engineering, manufacturing and construction	48 606	18.8	**3**	Engineering, manufacturing and construction	40 364	19.5
4	Science	42 032	16.3	**4**	Science	35 108	17
5	Health & welfare	15 232	5.9	**5**	Health & welfare	13 040	6.3
6	Education	11 739	4.5	**6**	Education	10 155	4.9
7	Services	3 884	1.5	**7**	Services	3 427	1.7
8	Agriculture	3 110	1.2	**8**	Agriculture	3 127	1.5
9	Unknown/not specified	12 593	4.9	**9**	Unknown/not specified	243	0.1
Total		**258 513**	**100.0**	**Total**		**206 875**	**100.0**

* Only for ISCED 5A

DK DENMARK

Foreign nationality students				*Incoming students*			
All students	All *foreign students*	% of foreign among all students	% of female among *foreign students*	All students	All *incoming students* (p.r.)	% of incoming among all students	% of female among *incoming students*
232 194	20 851	9.0	55.4	232 194	12 695	5.5	59.5

	ISCED levels				ISCED levels		
	5A	5B	6		5A	5B	6
absolute	16 745	3 067	1 039	**absolute**	11 178	1 196	321
%	80.3	14.7	5.0	**%**	88.1	9.4	2.5

Countries of nationality of *foreign students*				Countries of permanent residence of *incoming students*			
Rank	Country	Absolute	%	Rank	Country	Absolute	%
1	Norway	2 251	10.8	**1**	Norway	1 935	15.2
2	China (incl. HK)	2 037	9.8	**2**	United Kingdom	1 485	11.7
3	Iceland	1 741	8.3	**3**	Germany	1 158	9.1
4	Sweden	1 586	7.6	**4**	Sweden	1 127	8.9
5	Germany	1 260	6.0	**5**	Iceland	963	7.6
6	Poland	686	3.3	**6**	China (incl. HK)	885	7.0
7	United Kingdom	479	2.3	**7**	United States	608	4.8
8	Russian Federation	430	2.1	**8**	France	542	4.3
9	Lithuania	376	1.8	**9**	Spain	350	2.8
10	India	355	1.7	**10**	Australia	310	2.4
Top ten countries		**11 201**	**53.7**	**Top ten countries**		**9 363**	**73.8**

Fields of study of *foreign students*				Fields of study of *incoming students*			
Rank	Field of study	Absolute	%	Rank	Field of study	Absolute	%
1	Social sciences, business and law	6 737	32.3	**1**	Social sciences, business and law	4 439	35.0
2	Engineering, manufacturing and construction	4 154	19.9	**2**	Health &welfare	2 492	19.6
3	Health & welfare	3 859	18.5	**3**	Humanities and arts	2 270	17.9
4	Humanities and arts	2 579	12.4	**4**	Engineering, manufacturing and construction	1 709	13.5
5	Science	2 001	9.6	**5**	Science	902	7.1
6	Education	865	4.1	**6**	Education	519	4.1
7	Agriculture	556	2.7	**7**	Agriculture	270	2.1
8	Services	100	0.5	**8**	Services	94	0.7
9	Unknown/not specified	0	0.0	**9**	Unknown/not specified	0	0
Total		**20 851**	**100.0**	**Total**		**12 695**	**100.0**

EE ESTONIA

Foreign nationality students				*Incoming students*			
All students	**All *foreign students***	**% of foreign among all students**	**% of female among *foreign students***	**All students**	**All *incoming students* (p.r.)**	**% of incoming among all students**	**% of female among *incoming students***
68 767	2 200	3.2	57.8	68 767	966	1.4	52.6

	ISCED levels				ISCED levels		
	5A	**5B**	**6**		**5A**	**5B**	**6**
absolute	1 405	709	86	**absolute**	851	44	71
%	63.9	32.2	3.9	**%**	88.1	4.6	7.3

Countries of nationality of *foreign students*				**Countries of permanent residence of *incoming students***			
Rank	**Country**	**Absolute**	**%**	**Rank**	**Country**	**Absolute**	**%**
1	Russian Federation	1 095	49.8	**1**	Finland	441	45.7
2	Finland	467	21.2	**2**	Latvia	137	14.2
3	Latvia	170	7.7	**3**	Russian Federation	93	9.6
4	China (incl. HK)	123	5.6	**4**	China (incl. HK)	92	9.5
5	Ukraine	95	4.3	**5**	Lithuania	32	3.3
6	Lithuania	61	2.8	**6**	Switzerland	28	2.9
7	Germany	22	1.0	**7**	India	16	1.7
8	India	17	0.8	**8**	Ukraine	15	1.6
9	United States	16	0.7	**9**	Germany	14	1.4
10	Belarus	13	0.6	**10**	United States	12	1.2
Top ten countries		**2 079**	**94.5**	**Top ten countries**		**880**	**91.1**

Fields of study of *foreign students*				**Fields of study of *incoming students***			
Rank	**Field of study**	**Absolute**	**%**	**Rank**	**Field of study**	**Absolute**	**%**
1	Social sciences, business and law	1 103	50.1	**1**	Social sciences, business and law	551	57.0
2	Humanities and arts	315	14.3	**2**	Humanities and arts	172	17.8
3	Health & welfare	220	10.0	**3**	Health & welfare	114	11.8
4	Engineering, manufacturing and construction	169	7.7	**4**	Agriculture	68	7.0
5	Science	165	7.5	**5**	Science	37	3.8
6	Agriculture	91	4.1	**6**	Engineering, manufacturing and construction	9	0.9
7	Education	79	3.6	**7**	Education	8	0.8
8	Services	58	2.6	**8**	Services	7	0.7
9	Unknown/not specified	0	0.0	**9**	Unknown/not specified	0	0.0
Total		**2 200**	**100.0**	**Total**		**966**	**100.0**

ES SPAIN

Foreign nationality students				*Incoming students*			
All students	**All *foreign students***	**% of foreign among all students**	**% of female among *foreign students***	**All students**	**All *incoming students* (p.r.)**	**% of incoming among all students**	**% of female among *incoming students***
1 777 498	59 814	3.4	56.1	1 777 498	32 281	1.8	56.2

	ISCED levels				ISCED levels		
	5A	**5B**	**6**		**5A**	**5B**	**6**
absolute	32 918	10 965	15 931	**absolute**	14 125	10 965	7 191
%	55.0	18.3	26.6	**%**	43.8	34.0	22.2

Countries of nationality of *foreign students*				**Countries of permanent residence of *incoming students***			
Rank	**Country**	**Absolute**	**%**	**Rank**	**Country**	**Absolute**	**%**
1	Morocco	5 328	8.9	**1**	Portugal	2 272	7.0
2	Colombia	5 194	8.7	**2**	Mexico	2 053	6.4
3	Peru	3 905	6.5	**3**	Morocco	1 782	5.5
4	Mexico	3 789	6.3	**4**	Colombia	1 343	4.2
5	Argentina	3 636	6.1	**5**	Peru	1 319	4.1
6	Italy	3 226	5.4	**6**	Italy	1 012	3.1
7	Portugal	2 785	4.7	**7**	Argentina	967	3.0
8	Ecuador	2 611	4.4	**8**	Germany	837	2.6
9	Venezuela	2 371	4.0	**9**	France	833	2.6
10	Brazil	2 106	3.5	**10**	Andorra	812	2.5
Top ten countries		**34 951**	**58.4**	**Top ten countries**		**13 230**	**41.0**

Fields of study of *foreign students*				**Fields of study of *incoming students***			
Rank	**Field of study**	**Absolute**	**%**	**Rank**	**Field of study**	**Absolute**	**%**
1	Social sciences, business and law	12 185	20.4	**1**	Health & welfare	4 906	15.2
2	Health & welfare	7 139	11.9	**2**	Social sciences, business and law	4 421	13.7
3	Engineering, manufacturing and construction	4 418	7.4	**3**	Humanities and arts	1 792	5.6
4	Humanities and arts	3 658	6.1	**4**	Science	988	3.1
5	Science	2 702	4.5	**5**	Engineering, manufacturing and construction	954	3.0
6	Services	1 458	2.4	**6**	Services	472	1.5
7	Education	899	1.5	**7**	Education	414	1.3
8	Agriculture	459	0.8	**8**	Agriculture	176	0.5
9	Unknown/not specified	26 896	45.0	**9**	Unknown/not specified	18 158	56.2
Total		**59 814**	**100.0**	**Total**		**32 281**	**100.0**

FI FINLAND

Foreign nationality students				*Incoming students*			
All students	**All *foreign students***	**% of foreign among all students**	**% of female among *foreign students***	**All students**	**All *incoming students* (p.e.)**	**% of incoming among all students**	**% of female among *incoming students***
309 163	10 066	3.3	44.3	309 163	12 683	4.1	43.2

	ISCED levels				ISCED levels		
	5A	**5B**	**6**		**5A**	**5B**	**6**
absolute	8 319	0	1 747	**absolute**	10 979	*	1 704
%	82.6	0.0	17.4	**%**	86.6	*	13.4

Countries of nationality of *foreign students*				**Countries of permanent residence of *incoming students***			
Rank	**Country**	**Absolute**	**%**	**Rank**	**Country**	**Absolute**	**%**
1	China (incl. HK)	1 678	16.7	**1**			
2	Russian Federation	1 182	11.7	**2**			
3	Estonia	664	6.6	**3**			
4	Sweden	572	5.7	**4**			
5	Germany	399	4.0	**5**		*	
6	Kenya	312	3.1	**6**			
7	Nigeria	233	2.3	**7**			
8	United States	212	2.1	**8**			
9	Ghana	211	2.1	**9**			
10	India	197	2.0	**10**			
Top ten countries		**5 660**	**56.2**	**Top ten countries**			

Fields of study of *foreign students*				**Fields of study of *incoming students***			
Rank	**Field of study**	**Absolute**	**%**	**Rank**	**Field of study**	**Absolute**	**%**
1	Engineering, manufacturing and construction	2 988	29.7	**1**	Engineering, manufacturing and construction	3 799	30.0
2	Social sciences, business and law	2 778	27.6	**2**	Social sciences, business and law	3 248	25.6
3	Humanities and arts	1 426	14.2	**3**	Humanities and arts	1 911	15.1
4	Science	1 144	11.4	**4**	Health & welfare	1 469	11.6
5	Health & welfare	1 009	10.0	**5**	Science	1 270	10.0
6	Services	419	4.2	**6**	Services	500	3.9
7	Education	160	1.6	**7**	Education	248	2.0
8	Agriculture	142	1.4	**8**	Agriculture	238	1.9
9	Unknown/not specified	0	0.0	**9**	Unknown/not specified	0	0.0
Total		**10 066**	**100.0**	**Total**		**12 683**	**100.0**

UK UNITED KINGDOM

Foreign nationality students				*Incoming students*			
All students	**All *foreign students***	**% of foreign among all students**	**% of female among *foreign students***	**All students**	**All *incoming students* (p.r.)**	**% of incoming among all students**	**% of female among *incoming students***
2 362 815	459 987	19.5	50.7	2 362 815	351 470	14.9	47.7

	ISCED levels				ISCED levels		
	5A	**5B**	**6**		**5A**	**5B**	**6**
absolute	351 525	62 710	45 752	**absolute**	277 549	32 029	41 892
%	76.4	13.6	9.9	**%**	79.0	9.1	11.9

Countries of nationality of *foreign students**				**Countries of permanent residence of *incoming students***			
Rank	**Country**	**Absolute**	**%**	**Rank**	**Country**	**Absolute**	**%**
1	China (incl. HK)	57 746	12.6	**1**	China (incl. HK)	68 872	19.6
2	India	29 881	6.5	**2**	India	23 833	6.8
3	Ireland	27 098	5.9	**3**	Ireland	16 254	4.6
4	Nigeria	19 223	4.2	**4**	Greece	16 051	4.6
5	United States	17 633	3.8	**5**	United States	15 956	4.5
6	Greece	17 523	3.8	**6**	Germany	14 011	4.0
7	Germany	17 254	3.8	**7**	France	13 068	3.7
8	France	15 809	3.4	**8**	Malaysia	11 811	3.4
9	Malaysia	12 617	2.7	**9**	Nigeria	11 136	3.2
10	Pakistan	12 571	2.7	**10**	Pakistan	9 307	2.6
Top ten countries		**227 355**	**49.4**	**Top ten countries**		**200 299**	**57.0**

Fields of study of *foreign students*				**Fields of study of *incoming students***			
Rank	**Field of study**	**Absolute**	**%**	**Rank**	**Field of study**	**Absolute**	**%**
1	Social sciences, business and law	172 749	23.6	**1**	Social sciences, business and law	134 792	40.8
2	Health & welfare	64 968	8.9	**2**	Engineering, manufacturing and construction	48 983	14.8
3	Science	61 860	8.5	**3**	Science	46 624	14.1
4	Humanities and arts	61 273	8.4	**4**	Humanities and arts	45 900	13.9
5	Engineering, manufacturing and construction	59 854	8.2	**5**	Health & welfare	30 000	9.1
6	Education	22 128	3.0	**6**	Education	12 969	3.9
7	Services	5 682	0.8	**7**	Services	4 063	1.2
8	Agriculture	3 259	0.4	**8**	Agriculture	2 699	0.8
9	Unknown/not specified	279 918	38.3	**9**	Unknown/not specified	4 048	1.2
Total*		**731 691**	**100.0**	**Total****		**330 078**	**100.0**

* Total includes students with unknown/not specified nationality, hence the difference between this number and the number of "All students" above (459 987).

**According to EUROSTAT the different number in this table is due to the fact that different sources of information have been used by the national experts who filled in the data for UK.

HU HUNGARY

Foreign nationality students				*Incoming students*			
All students	All *foreign students*	% of foreign among all students	% of female among *foreign students*	All students	All *incoming students* (p.r.)	% of incoming among all students	% of female among *incoming students*
431 572	15 110	3.5	47.0	431 572	12 946	3	46.7

	ISCED levels				ISCED levels		
	5A	5B	6		5A	5B	6
absolute	14 395	133	582	absolute	12 329	93	524
%	95.3	0.9	3.9	%	95.2	0.7	4.0

Countries of nationality of *foreign students*				Countries of permanent residence of *incoming students*			
Rank	Country	Absolute	%	Rank	Country	Absolute	%
1	Romania	3 296	21.8	1			
2	Slovakia	2 296	15.2	2			
3	Germany	1 520	10.1	3			
4	Ukraine	1 475	9.8	4			
5	Serbia and Montenegro	1 223	8.1	5		*	
6	Israel	754	5.0	6			
7	Norway	715	4.7	7			
8	Iran	496	3.3	8			
9	Cyprus	293	1.9	9			
10	Sweden	270	1.8	10			
Top ten countries		12 338	81.7	Top ten countries			

Fields of study of *foreign students*				Fields of study of *incoming students*			
Rank	Field of study	Absolute	%	Rank	Field of study	Absolute	%
1	Health & welfare	4 359	28.8	1	Health & welfare	4 233	32.7
2	Social sciences, business and law	3 766	24.9	2	Social sciences, business and law	2 784	21.5
3	Humanities and arts	1 646	10.9	3	Agriculture	1 438	11.1
4	Agriculture	1 448	9.6	4	Humanities and arts	1 378	10.6
5	Engineering, manufacturing and construction	1 269	8.4	5	Engineering, manufacturing and construction	1 172	9.1
6	Science	1 188	7.9	6	Science	1 060	8.2
7	Education	980	6.5	7	Education	542	4.2
8	Services	454	3.0	8	Services	339	2.6
9	Unknown/not specified	0	0.0	9	Unknown/not specified	0	0.0
Total		15 110	100.0	Total		12 946	100.0

IE IRELAND

NO *Foreign students* data

Incoming students			
All students	**All inwards mobile students**	**% of incoming among all students**	**% of female among *incoming students***
190 349	16 758	8.8	59.7

	ISCED levels		
	5A	**5B**	**6**
absolute	*		
%			

Countries of permanent residence of *incoming students*			
Rank	**Country**	**Absolute**	**%**
1	United States	2 500	14.9
2	United Kingdom	2 282	13.6
3	China (incl. HK)	1 309	7.8
4	Malaysia	1 133	6.8
5	France	855	5.1
6	Germany	773	4.6
7	Canada	491	2.9
8	Spain	350	2.1
9	India	345	2.1
10	Italy	278	1.7
Top ten countries		**10 316**	**61.6**

Fields of study of *incoming students*			
Rank	**Field of study**	**Absolute**	**%**
	*		

IS ICELAND

Foreign nationality students				*Incoming students*			
All students	**All *foreign students***	**% of foreign among all students**	**% of female among *foreign students***	**All students**	**All *incoming students* (p.e.)**	**% of incoming among all students**	**% of female among *incoming students***
15 821	783	4.9	60.9	15 821	823	5.2	61.7

	ISCED levels				ISCED levels		
	5A	**5B**	**6**		**5A**	**5B**	**6**
absolute	751	3	29	**absolute**	794	5	24
%	95.9	0.4	3.7	**%**	96.5	0.6	2.9

Countries of nationality of *foreign students**				**Countries of permanent residence of *incoming students***			
Rank	**Country**	**Absolute**	**%**	**Rank**	**Country**	**Absolute**	**%**
1	Germany	112	14.3	**1**	Germany	108	13.1
2	France	60	7.7	**2**	United States	64	7.8
3	Denmark	50	6.4	**3**	France	63	7.7
4	United States	49	6.3	**4**	Sweden	54	6.6
5	Sweden	40	5.1	**5**	Denmark	48	5.8
6	Finland	34	4.3	**6**	Italy	33	4.0
7	Italy	34	4.3	**7**	Poland	33	4.0
8	Norway	32	4.1	**8**	Finland	31	3.8
9	Spain	26	3.3	**9**	Norway	31	3.8
10	Russian Federation	25	3.2	**10**	United Kingdom	29	3.5
Top ten countries		**462**	**59.0**	**Top ten countries**		**494**	**60.0**

Fields of study of *foreign students*				**Fields of study of *incoming students***			
Rank	**Field of study**	**Absolute**	**%**	**Rank**	**Field of study**	**Absolute**	**%**
1	Humanities and arts	336	42.9	**1**	Humanities and arts	349	42.4
2	Social sciences, business and law	176	22.5	**2**	Social sciences, business and law	176	21.4
3	Science	141	18.0	**3**	Science	134	16.3
4	Engineering, manufacturing and construction	47	6.0	**4**	Education	71	8.6
5	Education	41	5.2	**5**	Engineering, manufacturing and construction	47	5.7
6	Health & welfare	23	2.9	**6**	Health & welfare	28	3.4
7	Services	10	1.3	**7**	Agriculture	9	1.1
8	Agriculture	9	1.1	**8**	Services	9	1.1
9	Unknown/not specified	0	0.0	**9**	Unknown/not specified	0	0.0
Total		**783**	**100.0**	**Total**		**823**	**100.0**

LI LIECHTENSTEIN

Foreign nationality students				*Incoming students*			
All students	**All *foreign students***	**% of foreign among all students**	**% of female among *foreign students***	**All students**	**All *incoming students* (p.r.)**	**% of incoming among all students**	**% of female among *incoming students***
673	594	88.3	33.0	673	582	86.5	32.5

	ISCED levels				ISCED levels		
	5A	**5B**	**6**		**5A**	**5B**	**6**
absolute	578	0	16	**absolute**	567	*	15
%	97.3	0.0	2.7	**%**	97.4	*	2.6

Countries of nationality of *foreign students**				**Countries of permanent residence of *incoming students***			
Rank	**Country**	**Absolute**	**%**	**Rank**	**Country**	**Absolute**	**%**
1	Austria	288	59.1	**1**	Austria	297	51.0
2	Switzerland	138	28.3	**2**	Switzerland	160	27.5
3	Germany	35	7.2	**3**	Germany	12	2.1
4	Turkey	5	1.0	**4**	Senegal	3	0.5
5	Russian Federation	4	0.8	**5**	Czech Republic	1	0.2
6	Senegal	3	0.6	**(5**	Italy	1	0.2)
7	Brazil	2	0.4				
8	China (incl. HK)	2	0.4				
9	Bosnia and Herzegowina	2	0.4				
10	Czech Republic	2	0.4				
(10	Italy	2	0.4)				
Top ten countries		**462**	**59.0**	**Top ten countries**		**474**	**81.4**

Fields of study of *foreign students*				**Fields of study of *incoming students***			
Rank	**Field of study**	**Absolute**	**%**	**Rank**	**Field of study**	**Absolute**	**%**
1	Social sciences, business and law	431	72.6	**1**	Social sciences, business and law	427	73.4
2	Engineering, manufacturing and construction	146	24.6	**2**	Engineering, manufacturing and construction	139	23.9
3	Health % welfare	12	2.0	**3**	Health & welfare	11	1.9
4	Humanities and arts	5	0.8	**4**	Humanities and arts	5	0.9
Total		**783**	**100.0**	**Total**		**582**	**100.0**

LT LITHUANIA

Foreign nationality students				*Incoming students* (p.e.)				*Incoming students* (p.r.)			
All students	All *foreign students*	% of foreign among all students	% of female among *foreign students*	All students	All *incoming students* (p.e.)	% of incoming among all students	% of female among *incoming students*	All students	All *incoming students* (p.r.)	% of incoming among all students	% of female among *incoming students*
199 855	1 920	1.0	48.3	199 855	1 991	1.0	48.8	199 855	1 901	1.0	48.3

	ISCED levels				ISCED levels				ISCED levels		
	5A	5B	6		5A	5B	6		5A	5B	6
absolute	1 866	49	5	absolute	1 907	61	23	absolute	1 848	48	5
%	97.1	2.6	0.3	%	95.8	3.0	1.2	%	97.2	2.5	0.3

Countries of nationality of *foreign students**				Countries of permanent residence of *incoming students*				Countries of permanent residence of *incoming students*			
Rank	Country	Absolute	%	Rank	Country	Absolute	%	Rank	Country	Absolute	%
1	Belarus	508	26.5	1	Belarus	526	26.4	1	Belarus	510	26.8
2	Poland	191	9.9	2	Poland	186	9.3	2	Poland	192	10.1
3	Israel	109	5.7	3	Israel	108	5.4	3	Israel	109	5.7
4	Germany	105	5.5	4	Germany	108	5.4	4	Germany	106	5.6
5	Turkey	102	5.3	5	Turkey	103	5.2	5	Turkey	103	5.4
6	France	93	4.8	6	France	93	4.7	6	France	93	4.9
7	Lebanon	87	4.5	7	Lebanon	78	3.9	7	Lebanon	89	4.7
8	Latvia	79	4.1	8	Russian Federation	78	3.9	8	Latvia	74	3.9
9	Portugal	73	3.8	9	United States	73	3.7	9	Portugal	73	3.8
10	Spain	65	3.4	10	Portugal	73	3.7	10	Spain	65	3.4
Top ten countries		1 412	73.5	Top ten countries		1 426	71.6	Top ten countries		1 414	74.4

Fields of study of *foreign students*				Fields of study of *incoming students*				Fields of study of *incoming students*			
Rank	Field of study	Absolute	%	Rank	Field of study	Absolute	%	Rank	Field of study	Absolute	%
1	Social sciences, etc.	898	46.8	1	Social sciences, etc.	952	47.8	1	Social sciences, etc.	894	47.0
2	Health & welfare	298	15.5	2	Health & welfare	305	15.3	2	Health & welfare	291	15.3
3	Humanities, etc.	265	13.8	3	Humanities, etc.	256	12.9	3	Humanities, etc.	266	14.0
4	Engineering, etc.	211	11.0	4	Engineering, etc.	220	11.0	4	Engineering, etc.	211	11.1
5	Education	192	10.0	5	Education	194	9.7	5	Education	184	9.7
6	Science	34	1.8	6	Science	41	2.1	6	Science	33	1.7
7	Agriculture	13	0.7	7	Agriculture	13	0.7	7	Agriculture	13	0.7
8	Services	9	0.5	8	Services	10	0.5	8	Services	9	0.5
9	Unknown/not spec.	0	0.0	9	Unknown/not spec.	0	0.0	9	Unknown/not spec.	0	0.0
Total		1 920	100.0	Total		1 991	100.0	Total		1 901	100.0

LV LATVIA

NO *Foreign students* data

Incoming students			
All students	**All inwards mobile students**	**% of incoming among all students**	**% of female among *incoming students***
129 497	1 433	1.1	*

	ISCED levels		
	5A	**5B**	**6**
absolute			
%	*		

Countries of permanent residence of *incoming students*			
Rank	**Country**	**Absolute**	**%**
1	Lithuania	415	29.0
2	Russian Federation	382	26.7
3	Germany	75	5.2
4	Sri Lanka	73	5.1
5	Estonia	60	4.2
6	Belarus	51	3.6
7	Ukraine	48	3.3
8	Syria	24	1.7
9	Kazakhstan	21	1.5
10	Israel	19	1.3
Top ten countries		**1 168**	**81.5**

Fields of study of *foreign students*			
Rank	**Field of study**	**Absolute**	**%**
1	Social sciences, business and law	804	56.1
2	Health & welfare	203	14.2
3	Services	199	13.9
4	Humanities and arts	141	9.8
5	Engineering, manufacturing and construction	50	3.5
6	Science	28	2.0
7	Education	8	0.6
8	Agriculture	0	0.0
9	Unknown/not specified	0	0.0
Total		**1 433**	**100.0**

NL THE NETHERLANDS

Foreign nationality students				*Incoming students*			
All students*	All *foreign students*	% of foreign among all students	% of female among *foreign students***	All students	All *incoming students*	% of incoming among all students	% of female among *incoming students*
590 121	37 815	6.4	55.8	590 121	27 449	4.7	42.9

	ISCED levels				ISCED levels		
	5A	5B	6		5A	5B	6
absolute		*		absolute		*	
%				%			

Countries of nationality of *foreign students*				Countries of permanent residence of *incoming students*			
Rank	Country	Absolute	%	Rank	Country	Absolute	%
1	Germany	13 990	37.0	1	Germany	10 170	37.1
2	China (incl. HK)	3 584	9.5	2	China (incl. HK)	1 789	6.5
3	Belgium	2 154	5.7	3	Belgium	991	3.6
4	Indonesia	1 077	2.8	4	Indonesia	442	1.6
5	Suriname	874	2.3	5	Poland	401	1.5
6	Poland	840	2.2	6	France	364	1.3
7	Spain	821	2.2	7	Suriname	313	1.1
8	United Kingdom	802	2.1	8	Bulgaria	310	1.1
9	France	801	2.1	9	Spain	262	1.0
10	Morocco	760	2.0	10	Morocco	234	0.9
Top ten countries		**25 703**	**68.0**	**Top ten countries**		**15 276**	**55.7**

Fields of study of *foreign students*				Fields of study of *incoming students*			
Rank	Field of study	Absolute	%	Rank	Field of study	Absolute	%
1	Social sciences, business and law	15 260	40.6	1	Social sciences, business and law	12 475	45.4
2	Humanities and arts	6 387	17.0	2	Health & welfare	4 601	16.8
3	Health & welfare	5 553	14.8	3	Humanities and arts	3 510	12.8
4	Engineering, manufacturing and construction	2 804	7.5	4	Education	1 707	6.2
5	Services	2 717	7.2	5	Services	1 590	5.8
6	Science	2 437	6.5	6	Science	1 520	5.5
7	Education	1 401	3.7	7	Engineering, manufacturing and construction	1 437	5.2
8	Agriculture	733	1.9	8	Agriculture	404	1.5
9	Unknown/not specified	315	0.8	9	Unknown/not specified	205	0.7
Total**		**37 607**	**100.0**	**Total**		**27 449**	**100.0**

* *According to EUROSTAT the number 590 121 includes around 17 000 from open university.

** According to EUROSTAT the number for 208 *foreign students* with unknown nationality is not included, so that the female proportion is calculated from a total of 37 607.

NO NORWAY

Foreign nationality students				*Incoming students*			
All students	**All *foreign students***	**% of foreign among all students**	**% of female among *foreign students***	**All students**	**All *incoming students* (p.r.)**	**% of incoming among all students**	**% of female among *incoming students***
215 237	15 618	7.3	57.6	215 237	4 808	2.2	55.7

	ISCED levels				ISCED levels		
	5A	**5B**	**6**		**5A**	**5B**	**6**
absolute	14 233	61	1 324	**absolute**	4 526	13	269
%	91.1	0.4	8.6	**%**	94.1	0.3	5.6

Countries of nationality of *foreign students*				Countries of permanent residence of *incoming students*			
Rank	**Country**	**Absolute**	**%**	**Rank**	**Country**	**Absolute**	**%**
1	Sweden	1 264	8.1	**1**			
2	Denmark	840	5.4	**2**			
3	Russian Federation	798	5.1	**3**			
4	China (incl. HK)	725	4.6	**4**			
5	Germany	656	4.2	**5**		*	
6	United Kingdom	343	2.2	**6**			
7	United States	325	2.1	**7**			
8	Iran	318	2.0	**8**			
9	Finland	293	1.9	**9**			
10	Ethiopia	281	1.8	**10**			
Top ten countries		**5 843**	**37.4**	**Top ten countries**			

Fields of study of *foreign students*				Fields of study of *incoming students*			
Rank	**Field of study**	**Absolute**	**%**	**Rank**	**Field of study**	**Absolute**	**%**
1	Social sciences, business and law	4 576	29.3	**1**	Social sciences, business and law	1 614	33.6
2	Humanities and arts	2 598	16.6	**2**	Humanities and arts	814	16.9
3	Health & welfare	2 422	15.5	**3**	Science	721	15.0
4	Science	2 261	14.5	**4**	Health & welfare	501	10.4
5	Education	1 246	8.0	**5**	Education	254	5.3
6	Engineering, manufacturing and construction	1 157	7.4	**6**	Engineering, manufacturing and construction	226	4.7
7	Services	541	3.5	**7**	Services	171	3.6
8	Agriculture	215	1.4	**8**	Agriculture	61	1.3
9	Unknown/not specified	602	3.9	**9**	Unknown/not specified	446	9.3
Total		**15 618**	**100.0**	**Total**		**4 808**	**100.0**

RO ROMANIA

Foreign nationality students				*Incoming students*			
All students	**All *foreign students***	**% of foreign among all students**	**% of female among *foreign students***	**All students**	**All *incoming students***	**% of incoming among all students**	**% of female among *incoming students***
928 175	12 188	1.3	10.3	928 175	9 383	1.0	45.8

	ISCED levels				ISCED levels		
	5A	**5B**	**6**		**5A**	**5B**	**6**
absolute	11 311	27	850	**absolute**	9 000	27	356
%	92.8	0.2	7.0	**%**	95.9	0.3	3.8

Countries of nationality of *foreign students**				**Countries of permanent residence of *incoming students***			
Rank	**Country**	**Absolute**	**%**	**Rank**	**Country**	**Absolute**	**%**
1	Moldova	5 948	48.8	**1**	Moldova	4 029	42.9
2	Tunisia	767	6.3	**2**	Tunisia	777	8.3
3	Greece	612	5.0	**3**	Israel	527	5.6
4	Israel	555	4.6	**4**	Greece	382	4.1
5	Ukraine	382	3.1	**5**	Ukraine	275	2.9
6	Serbia and Montenegro	290	2.4	**6**	Serbia and Montenegro	267	2.8
7	Germany	247	2.0	**7**	Bulgaria	205	2.2
8	Bulgaria	222	1.8	**8**	Germany	203	2.2
9	Jordan	206	1.7	**9**	Mauritius	190	2.0
10	Albania	205	1.7	**10**	Jordan	176	1.9
Top ten countries		**9 434**	**77.4**	**Top ten countries**		**7 031**	**74.9**

Fields of study of *foreign students*				**Fields of study of *incoming students***			
Rank	**Field of study**	**Absolute**	**%**	**Rank**	**Field of study**	**Absolute**	**%**
1	Health & welfare	4 361	35.8	**1**	Health & welfare	3 735	39.8
2	Social sciences, business and law	3 845	31.5	**2**	Social sciences, business and law	2 961	31.6
3	Engineering, manufacturing and construction	1 486	12.2	**3**	Humanities and arts	1 036	11.0
4	Humanities and arts	1 444	11.8	**4**	Engineering, manufacturing and construction	981	10.5
5	Science	508	4.2	**5**	Science	254	2.7
6	Services	221	1.8	**6**	Services	217	2.3
7	Agriculture	174	1.4	**7**	Agriculture	119	1.3
8	Education	89	0.7	**8**	Education	44	0.5
9	Unknown/not specified	60	0.5	**9**	Unknown/not specified	36	0.4
Total		**12 188**	**100.0**	**Total**		**9 383**	**100.0**

SE SWEDEN

Foreign nationality students				*Incoming students*			
All students	All *foreign students*	% of foreign among all students	% of female among *foreign students*	All students	All *incoming students* (p.r.)	% of incoming among all students	% of female among *incoming students*
413 710	42 769	10.3	50.1	413 710	22 135	5.4	47.1

	ISCED levels				ISCED levels		
	5A	5B	6		5A	5B	6
absolute	37 394	866	4 509	**absolute**	20 790	121	1 224
%	87.4	2.0	10.5	**%**	94.0	0.5	5.5

Countries of nationality of *foreign students**				Countries of permanent residence of *incoming students*			
Rank	Country	Absolute	%	Rank	Country	Absolute	%
1	Finland	3 602	8.4	**1**	Germany	2 113	9.5
2	Germany	3 301	7.7	**2**	France	1 356	6.1
3	China (incl. HK)	1 779	4.2	**3**	Spain	912	4.1
4	France	1 730	4.0	**4**	Finland	622	2.8
5	Norway	1 314	3.1	**5**	Italy	507	2.3
6	Spain	1 195	2.8	**6**	Netherlands	475	2.1
7	Denmark	953	2.2	**7**	United States	471	2.1
8	Poland	918	2.1	**8**	Poland	387	1.7
9	United States	912	2.1	**9**	Austria	349	1.6
10	Pakistan	853	2.0	**10**	Australia	314	1.4
Top ten countries		**16 557**	**38.7**	**Top ten countries**		**7 506**	**33.9**

Fields of study of *foreign students*				Fields of study of *incoming students*			
Rank	Field of study	Absolute	%	Rank	Field of study	Absolute	%
1	Social sciences, business and law	11 319	26.5	**1**	Social sciences, business and law	6 801	30.7
2	Engineering, manufacturing and construction	10 149	23.7	**2**	Engineering, manufacturing and construction	5 220	23.6
3	Humanities and arts	6 237	14.6	**3**	Humanities and arts	3 541	16.0
4	Science	6 221	14.5	**4**	Science	3 263	14.7
5	Health & welfare	4 992	11.7	**5**	Health & welfare	1 786	8.1
6	Education	2 576	6.0	**6**	Education	849	3.8
7	Services	810	1.9	**7**	Services	407	1.8
8	Agriculture	366	0.9	**8**	Agriculture	225	1.0
9	Unknown/not specified	99	0.2	**9**	Unknown/not specified	43	0.2
Total		**42 769**	**100.0**	**Total**		**22 135**	**100.0**

SI SLOVENIA

Foreign nationality students				*Incoming students* (p.e.)				*Incoming students* (p.r.)			
All students	All *foreign students*	% of foreign among all students	% of female among *foreign students*	All students	All *incoming students* (p.e.)	% of incoming among all students	% of female among *incoming students*	All students	All *incoming students* (p.r.)	% of incoming among all students	% of female among *incoming students*
115 944	1 511	1.3	57.2	115 944	1 713	1.5	59.3	115 944	1 195	1.0	57.3

	ISCED levels				ISCED levels				ISCED levels		
	5A	5B	6		5A	5B	6		5A	5B	6
absolute	1 060	352	99	absolute	1 154	469	90	absolute	909	198	88
%	70.2	23.3	6.6	%	67.4	27.4	5.3	%	76.1	16.6	7.4

Countries of nationality of *foreign students**				Countries of permanent residence of *incoming students*				Countries of permanent residence of *incoming students*			
Rank	Country	Absolute	%	Rank	Country	Absolute	%	Rank	Country	Absolute	%
1	Croatia	648	42.9	1	Croatia	656	38.3	1	Croatia	597	50.0
2	Bosnia and Herzegowina	212	14.0	2	Bosnia and Herzegowina	198	11.6	2	Macedonia	153	12.8
3	Macedonia	168	11.1	3	Serbia and Montenegro	186	10.9	3	Italy	123	10.3
4	Serbia and Montenegro	124	8.2	4	Macedonia	161	9.4	4	Serbia and Montenegro	90	7.5
5	Italy	104	6.9	5	Italy	147	8.6	5	Bosnia and Herzegovina	89	7.4
6	Russian Federation	28	1.9	6	Austria	69	4.0	6	Russian Federation	14	1.2
7	Ukraine	23	1.5	7	United States	35	2.0	7	Austria	13	1.1
8	India	21	1.4	8	Russian Federation	31	1.8	8	Hungary	11	0.9
9	Romania	15	1.0	9	Germany	22	1.3	9	Romania	10	0.8
10	Hungary	13	0.9	10	Ukraine	21	1.2	10	Ukraine	9	0.8
Top ten countries		1 356	89.7	Top ten countries		1 526	89.1	Top ten countries		1 109	92.8

Fields of study of *foreign students*				Fields of study of *incoming students*				Fields of study of *incoming students*			
Rank	Field of study	Absolute	%	Rank	Field of study	Absolute	%	Rank	Field of study	Absolute	%
1	Social sciences, business and law	487	32.2	1	Social sciences, business and law	611	35.7	1	Social sciences, business and law	347	29.0
2	Humanities and arts	292	19.3	2	Humanities and arts	310	18.1	2	Humanities and arts	255	21.3
3	Engineering, manufacturing and construction	235	15.6	3	Engineering, manufacturing and construction	228	13.3	3	Engineering, manufacturing and construction	200	16.7
4	Health & welfare	178	11.8	4	Health & welfare	215	12.6	4	Health & welfare	138	11.5
5	Science	144	9.5	5	Science	137	8.0	5	Science	130	10.9
6	Services	78	5.2	6	Education	92	5.4	6	Education	61	5.1
7	Education	68	4.5	7	Services	89	5.2	7	Services	39	3.3
8	Agriculture	29	1.9	8	Agriculture	31	1.8	8	Agriculture	25	2.1
9	Unknown/not specified	0	0.0	9	Unknown/not specified	0	0.0	9	Unknown/not specified	0	0.0
Total		1 511	100	Total		1 713	100.0	Total		1 195	100.0

SK SLOVAKIA

Foreign nationality students				*Incoming students*			
All students	**All *foreign students***	**% of foreign among all students**	**% of female among *foreign students***	**All students**	**All *incoming students* (p.r.)**	**% of incoming among all students**	**% of female among *incoming students***
217 952	2 010	0.9	48.7	217 952	1 901	0.9	48.6

	ISCED levels				ISCED levels		
	5A	**5B**	**6**		**5A**	**5B**	**6**
absolute	1 904	11	95	**absolute**	1 801	10	90
%	94.7	0.5	4.7	**%**	94.7	0.5	4.7

Countries of nationality of *foreign students**				**Countries of permanent residence of *incoming students***			
Rank	**Country**	**Absolute**	**%**	**Rank**	**Country**	**Absolute**	**%**
1	Czech Republic	485	24.1	**1**	Czech Republic	474	24.9
2	Serbia and Montenegro	208	10.3	**2**	Serbia and Montenegro	205	10.8
3	Greece	184	9.2	**3**	Greece	183	9.6
4	Israel	146	7.3	**4**	Israel	146	7.7
5	Norway	146	7.3	**5**	Norway	146	7.7
6	Ukraine	75	3.7	**6**	Romania	72	3.8
7	Romania	74	3.7	**7**	Ukraine	46	2.4
8	Poland	47	2.3	**8**	Kuweit	43	2.3
9	Kuweit	44	2.2	**9**	Poland	39	2.1
10	Hungary	36	1.8	**10**	Sweden	34	1.8
Top ten countries		**1 445**	**71.9**	**Top ten countries**		**1 388**	**73.0**

Fields of study of *foreign students*				**Fields of study of *incoming students***			
Rank	**Field of study**	**Absolute**	**%**	**Rank**	**Field of study**	**Absolute**	**%**
1	Health & welfare	664	33.0	**1**			
2	Humanities and arts	294	14.6	**2**			
3	Social sciences, business and law	250	12.4	**3**			
4	Engineering, manufacturing and construction	249	12.4	**4**		*	
5	Agriculture	233	11.6	**5**			
6	Science	127	6.3	**6**			
7	Education	102	5.1	**7**			
8	Services	91	4.5	**8**			
9	Unknown/not specified	0	0.0	**9**			
Total		**2 010**	**100.0**	**Total**			