

CMR Working Papers

No. 42/100

Formerly ISS WORKING PAPERS, seria: PRACE MIGRACYJNE

**Student Mobility from New to Old
Member States in the European Union –
Changing Patterns after 1st of May 2004?**

Nina Wolfeil

March 2009

Centre of Migration Research
Warsaw University
Banacha Street 2B
02-097 Warsaw
Poland
Tel.: +48 22 659 74 11
Fax: +48 22 822 74 05
www.migracje.uw.edu.pl
migration.cmr@uw.edu.pl

Parts of this working paper have been written during the author's research stay at the CMR between February and June 2008

The author expresses her gratitude to the Austrian Research Association (Österreichische Forschungsgemeinschaft) for funding the project as part of the MOEL-Plus Program



CONTENTS

ABSTRACT.....	I
STRESZCZENIE.....	I
1. INTRODUCTION.....	1
2. THE LINK BETWEEN STUDENT MOBILITY AND LABOUR MOBILITY.....	2
2.1 POLICY CONTEXT.....	2
2.2 RETENTION RATES IN TARGET COUNTRIES.....	4
2.3 IMPACT OF STUDY ABROAD ON SUBSEQUENT MIGRATION BEHAVIOUR.....	5
2.4 STRUCTURAL LINKS BETWEEN THE EDUCATIONAL SYSTEM AND THE LABOUR MARKET.....	7
2.5 EDUCATIONAL MIGRANTS' INTENTIONS TO BECOME PERMANENT LABOUR MIGRANTS.....	7
3. DETERMINING FACTORS OF STUDENT MOBILITY.....	8
4. DATA ON STUDENT MOBILITY TOWARDS TARGET COUNTRIES.....	11
AT AUSTRIA.....	12
DE GERMANY.....	13
FI FINLAND.....	16
FR FRANCE.....	16
GB UNITED KINGDOM.....	18
IE IRELAND.....	19
NL THE NETHERLANDS.....	20
SE SWEDEN.....	21
5. DATA ON STUDENT MOBILITY FROM SENDING COUNTRIES.....	22
BG BULGARIA.....	23
CZ CZECH REPUBLIC.....	24
EE ESTONIA.....	24
HU HUNGARY.....	24
LT LITHUANIA.....	25
LV LATVIA.....	25
PL POLAND.....	26
RO ROMANIA.....	27
SL SLOVENIA.....	27
SK SLOVAK REPUBLIC.....	27
6. CONCLUSION.....	28

Abstract

Since Poland's accession to the European Union in 2004 traditional target countries of Polish labour migration have lost some of their importance in favour of emerging destinations such as the UK and Ireland. The paper uses this phenomenon as a starting point to analyse whether there are parallels between these labour mobility patterns and recent flows of student mobility from CEE. By means of a literature review it will be shown that student mobility may be understood as a subset of highly skilled migration and as a precursor of permanent migration. The presentation of recent data on the inflow of students from CEE to eight countries (Austria, Germany, Finland, France, United Kingdom, Ireland, the Netherlands, Sweden) of the EU-15 and on the outflow of students from the EU-8+2 reveals that traditional target countries (e.g. DE) have lost some of their attractiveness, while numbers of CEE-students in emerging targets (UK, IE) have been rising steeply since 2004. However, liberal labour market legislation with regard to CEE-graduates in the UK and Ireland is only one possible explaining factor for this. Amongst the complex bundle of determining factors an important role is played by tuition fee policies in the target countries (pull-factors) as well as demographic changes and entrance to tertiary education in the sending countries (push-factors).

Streszczenie

Od momentu przystąpienia Polski do Unii Europejskiej w 2004 r. można zaobserwować zmianę wzorców migracji zarobkowej z Polski do krajów starej Unii. Coraz więcej Polaków wyjeżdża do Wielkiej Brytanii i Irlandii, a atrakcyjność tradycyjnych krajów docelowych takich jak Niemcy maleje. Głównym pytaniem stawianym w niniejszym artykule jest to, czy wspomnianą prawidłowość można również zaobserwować w przypadku mobilności międzynarodowej studentów z EU-8+2. W pierwszej części tekstu przedstawiono mobilność studentów jako formę mobilności osób wysoko wykwalifikowanych, a także jako czynnik wpływający na późniejszą ich migrację. W artykule zaprezentowane zostały najnowsze dane na temat mobilności studentów z krajów Europy Środkowo-Wschodniej do ośmiu krajów docelowych EU-15 (Austrii, Niemiec, Finlandii, Francji, Wielkiej Brytanii, Irlandii, Holandii, Szwecji) jak i dane na temat odpływu studentów z EU-8+2. Dane te pokazują, że w tradycyjnych krajach docelowych, takich jak Niemcy, liczba studentów zagranicznych z Europy Środkowo-Wschodniej spadła, podczas gdy w Irlandii i Wielkiej Brytanii zaobserwowano jednocześnie jej ogromny wzrost w okresie od 2004 r. Polityka w sektorze rynku pracy wobec nowych Europejczyków jest tylko jednym z potencjalnych czynników tłumaczącym tę zmianę. Wśród pozostałych determinant mobilności studentów ważną rolę odgrywają również zmiany w odpłatności za studia w krajach docelowych (czynniki przyciągające) czy zmiany demograficzne i dostęp do szkół wyższych w krajach pochodzenia (czynniki wypychające).

1. Introduction

Recent research on migration of the highly-skilled from the New Member States (NMS) towards those EU-countries that opened their labour markets already in 2004 (e.g. UK, Ireland) has shown that there is a high prevalence of young and well-educated migrants (Kaczmarczyk 2006: 6, 15). At the same time research also indicates that there is a strong interlinkage between student mobility and subsequent labour mobility. Thus, NMS-students who consider studying abroad might head to target countries that opened their labour market already in 2004. This consideration was the starting point for the analysis in this paper. The research focus is on patterns of student mobility from the NMS and on determining factors of these patterns. Two research questions will be answered in this text. 1.) Have the patterns of student mobility from the NMS to Western European countries changed since 2004? 2.) If so, what are the determining factors of this development and what is the special influence of the liberal labour market policy?

The method applied to answer these questions is a literature review and a review of available educational statistics. The literature review provides insights into the interlinkage of student and labour mobility and the determining factors of student flows. Educational statistics supplied by national sources in the target countries deliver an up-to-date picture on the inflow to eight countries (Austria (AT), Germany (DE), Finland (FI), France (FR), the United Kingdom (UK), Ireland (IE), the Netherlands (NL), and Sweden (SE) up to the academic year 2007/08. The data on the outflow from NMS countries that was compiled by the UNESCO and covers the years 2004-2006 helps to compare the development observed in the target countries with the patterns of outflow from the NMS group, i.e. Bulgaria (BG), the Czech Republic (CZ), Estonia (EE), Hungary (HU), Lithuania (LT), Latvia (LV), Poland (PL), Romania (RO), Slovenia (SL), and Slovakia (SK).

The report contains six sections. The second part deals with a theoretical introduction to the links between educational and labour mobility (2.). The content of this section reveals the growing importance of student mobility as a subset of highly skilled migration (HSM) and thus explains why changing patterns do matter. The third part gives an overview of determining factors of student mobility (3.). It thus helps to explain recent changes in enrolment data to which the fourth part (4.) of this report will be devoted. It is a statistical section and introduces the reader to the data on the flow of EU-8+2 students studying in the old member states. The fifth part deals with statistical data on the outflow of students from the sending countries (5.). The last section is a summary but it also answers the research questions and suggests further research in the field (6.).

2. The link between student mobility and labour mobility

2.1 Policy Context

The last decades have brought about a shift in the sphere of highly skilled migration (HSM) and the policy responses to it. Besides a quantitative increase in skilled migration (Abella 2006: 13-17) there is a general trend that indicates liberalisation in the policy area (Cerna 2008: 10). This may also be connected with the intellectual shift that abandoned the brain drain paradigm in research on HSM and promotes brain circulation. Recently, many industrialised countries have introduced targeted policies in order to attract foreign talent (Kaczmarczyk, Okólski 2005:61, 61-72). By doing so they have reacted to a changing environment of skilled migration. The shift towards a knowledge economy and the growth of global supply chains require an increased flow of talent. Furthermore, many countries in the industrialised world are faced with ageing populations – a scenario which they want to overcome inter alia via immigration (compare Abella 2006: 11). While the traditional overseas immigration countries (USA, Australia) were pioneers in this development, European governments have intensified their activities not to stay behind. Their policies aim at attracting IT professionals, managers, engineers, health care professionals, doctors, nurses and other professionals who possess a higher education degree (Suter, Jandl 2008: 402).

Recent research has tried to categorise these policy responses. According to Papademetriou (2003, cit. in Lowell 2005: 5) there are four strategies how countries admit skilled immigrants: In the case of employment based admission employers hire foreign workers. In the case of labour market testing, the main actors are government agencies that identify sectors with labour market shortages. A third strategy is a point-based system and a fourth one is a filtration system in which permanent status is granted to migrants (workers, students) who have demonstrated their value. Another categorisation is that of Abella (2006: 18 sqq.) who also suggests four different approaches towards attracting skilled migrants. The “human capital approach” is used by countries which aim at increasing their stock of human capital and grant permanent residency as an incentive. They use transparent criteria as e.g. allocating points for certain characteristics. In contrast the most common approach is the “labour market needs approach” that responds to medium-term shortages of labour. The admission of skilled migrants to these countries is restricted in time. The third approach is the “business incentive approach” that aims at facilitating the settlement of investors. The fourth approach, the “academic-gate approach”, draws talent from the pool of foreign students in a country.

As was shown by this categorisation, policies targeted at the retention of foreign graduates are an integral part of the bundle of measures to recruit highly skilled migrants. These retention policies will be identified in more detail below (compare Table 1).

Country	Pathways to permanent and temporary residency
USA	Pathway to temporary residency: Annual quota within the H1-B visa scheme for applicants who graduated from a national higher education institution at master's or PhD-level, later on possibility to apply for permanent residency
Australia	Pathway to permanent residency (General Skilled Migration Scheme – Skilled Independent Overseas Student category): Overseas students are granted extra points for at least 2 years of education in Australia
New Zealand	Pathway to permanent residency (Skilled Immigration scheme): International students are granted extra points, no job offer is needed Temporary work permits: Graduate Search Work Permit for 6 months
Canada	Pathway to permanent residency (Skilled Immigration scheme): International students are granted extra points in case they have finished a 2-year-programme at a Canadian institution at postsecondary level Temporary work permits: (Post-Graduation Work Permit Program) graduating students may remain onshore to apply for a work permit for up to one year after graduation, candidates must hold a job offer in their field of qualification, no labour certification needed, extension possible
UK	In May 2007 the International Graduate Scheme (IGS) was launched and functions as a precursor of the Tier 1 post-study category within the general points-based system that came into force in 2008, all non-EEA graduates may remain in the country for up to 12 months in order to compete for work
Ireland	In April 2007 the Third Level Graduate Scheme was implemented, non-EEA graduates are allowed to remain in the country for up to six months in order to apply for a work permit or a green card
Germany	Since 2005 foreign graduates may extend their residence permit for up to one year after graduation in order to find a job that corresponds with their qualifications, for foreign graduates from German higher education institutions the labour market testing was abandoned in late 2007, now only a job offer is required
France	New legislation was introduced in 2006 to encourage the stay of foreign master graduates, they may apply for a residence permit for a period of six months following graduation in order to find a job
The Netherlands	Since 2006 possibility to apply for permanent residency upon graduation, possibility to seek work for six months following graduation
Finland	Migration Policy Programme encourages the immigration of students, upon graduation they may obtain a work permit to search for a job for up to six months

Table 1: Policy responses to the retention of international graduates as highly skilled migrants in selected countries

Source: Suter, Jandl 2008; Tremblay 2005; OECD 2008a; UUK 2008a; BMI 2008; <http://www.edufrance.fr/en/a-etudier/sejour01-6.htm>, last access: 2009-01-13.

Most countries have recently introduced special legislation with regard to the retention of foreign graduates. In general, these policies either pave the way for a stay as a temporary labour migrant or they directly grant access to permanent residency.

While these policies are mainly targeted at third country nationals, European governments also strengthen their activities to attract international graduates from neighbouring European Union countries. They interlink the Bologna process and the Lisbon strategy by introducing common policies to enhance student mobility and labour market mobility. The heart of the 1999's Bologna declaration is a strengthening of teachers' and student mobility. Student mobility is also regarded as a tool for

ensuring employability. The Lisbon strategy aims at making Europe the “most competitive and knowledge-based economy in the world” (Mechtenberg 2005: 39; BPWG 2007: 46; UUK 2008b: 2). Thus, enhanced mobility aims at the best allocation of human capital in Europe. The link between European student and labour mobility is therefore politically desirable.

Nevertheless, policies towards foreign graduates from the NMS remained ambivalent. While certain countries (UK, Ireland, Sweden) opened their labour markets already in 2004 and treated NMS-graduates right from the start as other EU-citizens, other countries (Austria, Germany) apply transitional regulations also to NMS-graduates (BMAS 2006, 2007). However, on the 1st of November 2007 Germany introduced a new regulation and facilitated the labour market entrance of NMS-graduates and foreign graduates from third countries. Although they still need a work permit, the labour market testing is abolished. NMS-graduates (excepted are graduates from Malta and Cyprus who have free access) need to show a work offer and the local labour agency in charge will issue the document. Before the 1st of November 2007, the labour agency checked whether there were any other Germans, EU-citizens or persons holding a permanent work permit before they would issue the work permit for the NMS-graduate (compare: BMAS 2007).

2.2 Retention rates in target countries

The availability of statistical evidence about retention rates is best in overseas immigration countries since their immigration authorities collect data on the change from one visa category to another. Such data shows great variation across disciplines, sending countries and levels of education involved. The data from the Canadian authorities shows that 9% of the 2000 first time student cohort, 15% of the 1995 cohort and 21.5% of the 1990 cohort had settled permanently in Canada (Suter/Jandl 2006: 16). In Australia 15.2% of the graduate cohort in 2001 obtained permanent residency and 18.7% of the 2002 cohort (Tremblay 2005: 211). For the case of the US, a study from 2000 indicates that from a sample of 4.200 H1B-visa holders 21% had previously been in possession of a student visa (Massey, Malone cit. in Tremblay 2005: 208). In the US 71% of former foreign PhD-students who received their PhDs in 2001 settled in the US in 2003. However, retention is even higher for graduates from China (90%) and India (86%). In a long-term perspective it is estimated that around 58% of the former PhD-students are retained (Suter, Jandl 2006: 16).

Data on the retention in Europe is available only in some member states and refers mainly to the retention of third country nationals since EU-citizens do not have to apply for a work permit. In Sweden data on work permits shows that, varying according to nationality, a certain share of guest students applied for a work permit between 2000 and 2005 (32% Iran, 6% USA). The respective percentages for guest students from the EU 8+2 are: Poland 11%, Lithuania 19%, Estonia 16%,

Romania 22%, Hungary 12%, Latvia 16%, and Bulgaria 25% (Suter, Jandl 2006: 52). In the UK there is a reliable source of information on the retention of graduates with EU-citizenships since they are included in a survey six months after graduation. The numbers for the recent years indicate that the retention of EU-graduates in the UK has been rising. While in 2000/01 19.3% of all respondents took up work in the UK, in 2004/05 the number rose to 26.6% (Suter, Jandl 2006: 65). In 2006/07 18% of the non-UK EU students indicated that they wanted to take up a full-time job in the UK six months after graduation (DIUS 2008: Tab. 38).

2.3 Impact of study abroad on subsequent migration behaviour

While the above mentioned data sets tell us about the retention of graduates in the specific host country, a lot of research has been done on the question of how study abroad in general affects labour mobility. Recent studies in economics do back the assumption that studying abroad has a positive influence on the probability of being internationally mobile in professional life. Thus, studying abroad fosters international labour migration.

One stream of literature analyses the impact of Erasmus-stays abroad on future mobile careers. Teichler and Janson (2007: 492) analysed three cohorts of Erasmus students (1988/89, 1994/05, 2000/01) and found that between 18-20% of the students who had spent an Erasmus term abroad were working abroad for some time after having left university education.¹ The percentage of those who were actually thinking about working abroad (approx. 50%) and actively searching placement (approx. 25%) has been decreasing since the first survey (Bracht et al. 2006: xlvii, 75). In a survey that was carried out in 1999 in 11 European countries² among graduates who had completed higher education four years earlier, Jahr and Teichler (2007: 219) found that those who were mobile during their course of studies were 2.7 times more mobile during their professional lives than their counterparts who lacked the study abroad experience.³ These findings correspond with a similar study that was conducted in the UK: King and Ruiz-Gelices (2003) analysed the effect of studying abroad during undergraduate studies at the University of Sussex on future mobility upon graduation by surveying

¹ The first survey (1988/89 cohort) had a longitudinal design. 1.200 Students were surveyed upon return, three years later and five years later. The second study encompassed around 1.000 respondents who were surveyed four years after graduation. The third survey was carried out in 2005 and comprised 4.600 filled-in questionnaires (Teichler, Janson 2007: 487). This corresponds with their finding of a decreasing positive impact of the Erasmus-stay on future careers in the course of two decades. Mobility capital is devaluated as soon as it becomes a mass phenomenon (compare: Favell 2008: 96).

² IT, ES, FR, AT, DE, NL, UK, FI, SE, NO, CZ plus Japan. 40.000 graduates participated (Schomburg, Teichler 2007: 21).

³ Although offering by far the largest data set on the labour migrants with previous study abroad experience, the CHEERS study's research design was criticised from many sides. Wiers-Jenssen (2008: 4) states that the fundament for drawing far-reaching conclusions is weak since the researchers do not control for subjects. Pary and Waldinger (2008: 3) argue that they do not control for possible selection of formerly mobile students.

graduates who spent one year abroad during their studies.⁴ 20% of their respondents were currently working abroad and 43% had acquired some migration experience since graduation (King, Ruiz-Gelices 2003:234). In comparison to their colleagues who did not spend a year abroad they were almost twice as likely to live abroad upon graduation (King, Ruiz-Gelices 2003: 243). The NIFU Graduate Survey from 2002 (Wiers-Jenssen 2008) collected data on Norwegian students who had earned Norwegian or foreign degrees revealing their migratory behaviour during the course of their studies and later on.⁵ 25% of those who graduated in Norway and were mobile were working for some time abroad since graduation, while only 8% of those who were non mobile had the same work-abroad experience (Wiers-Jenssen 2008).

Econometric studies analyse the causal effect of education migration on future labour migration. Dreher and Poutvaara (2005: 17) chose the US as a destination country for highly skilled migrants. Using the data from 1971-2001, they analysed the relation between flows of students from certain sending countries and flows of highly-skilled migrants from the same countries. They find that an increase in student flows of 10% leads to an increase in immigration of 0.3-0.9%.⁶ A very special case is analysed by Oosterbeek and Webbink (2006). They focus on talented Dutch students who had received a scholarship for studying abroad.⁷ They find huge differences with regard to the likelihood of living abroad between two groups: In comparison to non mobile students mobile students have a higher propensity to live abroad. However, there are no differences between to two groups with regard to finding work abroad. One year of studying abroad increases the probability of living abroad by 51-54% (Oosterbeek, Webbink 2006: 30; 32). The most recent analysis (Parey, Waldinger 2008:22) is focused on the causal effect of spending an Erasmus-term abroad on later labour mobility.⁸ Their main finding is that the likelihood of working abroad increases by 18-20% for those who spent an Erasmus term abroad. Furthermore, they provide descriptive evidence on the destination countries of former mobile students and current labour migrants. Students tend to return to the regions abroad where they

⁴ The survey was carried out during 2000-2001. They drew a sample of 1000 graduates who had spent a year abroad from the School of European Studies at the University of Sussex Alumnus Register. The response rate was 26.1%. They also compared these results with data gathered on students who had not studied abroad (King, Ruiz-Gelices 2003: 234 sqq.).

⁵ This survey collected data on 914 Norwegian students who graduated abroad and 1.386 who graduated in Norway. 286 of Norwegian graduates had spent some time studying abroad. The survey targeted graduates 3.5 to 5 years after graduation and received a response rate of 56% (Wiers-Jenssen 2008).

⁶ In order to solve problems with omitted variable bias (student and migratory flows are connected with cultural and economic proximity) they include a lagged endogenous variable (migration in the previous year) (Dreher, Poutvaara 2005: 17).

⁷ Their survey comprised applicants for the grant from 1997-2002. In sum, they received 337 completed questionnaires and reached a response rate of 61% (Oosterbeek, Webbink 2006: 8).

⁸ This survey is based on data about German students who graduated in 1988/89, 1992/93, 1996/97, 2000/01. For each year data from 6.000-8.000 was available and the response rate was 25%. Furthermore, they include data on Erasmus mobility from Germany to other countries between 1993/04 and 1999/00 (Parey, Waldinger 2008: 4 sqq.).

studied. Two thirds (66.4%) of those who studied in a European country end up working abroad in Europe (Parey, Waldinger 2008:39).⁹

2. 4 Structural links between the educational system and the labour market

Looking at certain mechanisms between the university system and the labour market may explain this pattern. In some cases student mobility may be regarded as a subset of highly skilled migration (HSM) if it occurs at an advanced level of studies, e.g. postgraduate studies. PhD-students already contribute to the output in R&D of their host countries. Doing internships during studies also represents a subset of HSM and probably has a positive influence on becoming integrated in the local labour market on a full-time basis upon graduation (Tremblay 2005: 202-204). The study abroad period in general is a probation period for both the prospective migrant as well as for future employers. During the years of their studies abroad students can probe whether living and working conditions satisfy their needs and they can establish contact with future employers (Kuptsch 2006: 39). In times of global HR-strategies employers, get access to workforce that has intercultural competencies, speaks the language of the host country and knows its customs, thus may serve as a bridgehead. In comparison to HS-migrants who are recruited abroad, foreign graduates are already integrated in the host society. Furthermore, if international students have earned a degree from a host university, employers have certitude about the quality of education they have received (Kuptsch 2006: 40; Tremblay 2005: 204). In some cases targeted recruitment of foreign graduates is already observable. Recent research from the UK shows that employers strengthen their activities in this field (Dawson et al. 2006).

2.5 Educational migrants' intentions to become permanent labour migrants

One of the early studies that tries to answer the question whether international students plan to become labour migrants is Li et al.'s (1996) study on students from Hong Kong in the United Kingdom. The survey results show that there are no significant differences in the migration intentions between students abroad and a control group surveyed back home. However, students abroad assess labour opportunities in Britain better than their counterparts back home (Li et al. 1996: 64). A study done by Hazen/Alberts (2006: 208) among international students at the University of Minnesota asked about intentions of settling permanently upon graduation. Only 7.5% of the respondents initially planned to stay permanently in the US, 39% wanted to stay some years after graduation and 28% planned to return home immediately (Hazen, Alberts 2006: 208). Mazzarol, Soutar (2002) did research on factors determining the destination choice of students from Taiwan, India, China and Indonesia who studied overseas. Depending upon the sending country, between 38% (China) and 59% (India) of the

⁹ This also indicates the effectiveness of the Erasmus scheme. Other popular destination countries of highly-skilled migrants (e.g. US) do not benefit from the enhanced student mobility in Europe. Mobile graduates remain in Europe.

respondents said that the intention to migrate was an important factor to choose Australia. This finding is supported by a recent qualitative study that gives insight into this decision-making process. Baas (2006) with his ethnographic work on Indian students in Australia reveals that the education industry channels the flows of international students. He shows that future mobile students back home in India choose their study subjects according to the points they would receive upon graduation if they applied for permanent residency. Furthermore, there are special education agents that do consultancy in those matters.

This introductory section gathered research results on the links between international student mobility and labour market mobility. Although this field of research needs to be explored in more detail and our current knowledge is limited, the state of the art in research allows for the conclusion that strong links exist. In the political sphere, recent legislation in the European member states favours retaining third country graduates and with regard to intra-European retention the member states try to link student and labour mobility. Despite being confronted with data restrictions we may suggest that up to one third of international students in Europe are retained in their study abroad destinations. Furthermore, several studies have proven that student mobility increases the probability of becoming a labour migrant. This mechanism was highlighted by looking at structural links between the university system and the labour market. Finally, research on student migration also leads to the conclusion that a certain share of educational migrants takes permanent migration into account when leaving for studies abroad.

3. Determining factors of student mobility

In spite of the growing importance of cross border student mobility, there is little research carried out on the factors that determine international student flows (Naidoo 2007: 289). In past decades the direction of student flows was mainly explained by colonial ties. Apart from these historical relations between countries and cultural proximity there are several other factors on the macro level that explain patterns of student mobility and act as drivers or barriers. These factors are discussed in the more recent literature and take into consideration newer developments such as demographic change and policy change in times of knowledge economies (compare Table 2).

Determining factors of student mobility on the macro level	
.. in the source country	...in the target country
<ul style="list-style-type: none"> • obstacles with regard to the entrance to tertiary education 	<ul style="list-style-type: none"> • tuition fees + living costs
<ul style="list-style-type: none"> • gap between secondary graduation rate and entrance rate into tertiary education 	<ul style="list-style-type: none"> • admission policies with regard to international students/ retention policies with regard to foreign graduates
<ul style="list-style-type: none"> • demographic trends in the age group 15-24 	<ul style="list-style-type: none"> • language of instruction
<ul style="list-style-type: none"> • German, English or French as foreign language taught in secondary school 	<ul style="list-style-type: none"> • centres of expertise

Table 2: Determining factors of student mobility connected with the source and target country

Source: compare Brandenburg et al. 2008; Aston 2004; Tremblay 2001, 2005; Verbik, Lasanowski 2007; Mazzarol, Soutar 2002.

Some of these determining factors are connected with circumstances in the sending country. A very important driver that pushes potential tertiary education students out of the national system are admission restrictions to national tertiary education. This factor is seen as attributive to the high numbers of Greek students in the UK.¹⁰ The Greek education system has a numerus clausus system and thus “denies access to higher education to a large number of *de facto* high ability candidates” (West et al. 2001: 58) who then go abroad. The same mechanism might work in several education systems in the EU-8+2. Bulgaria, Poland, Romania and Hungary also offer only a limited number of free of charge state funded capacities (Brandenburg et al. 2008: 50, 90; Brandenburg et al. 2007: 27, 30). In the case of restricted admission to tertiary education two additional factors might influence the demand for education abroad and thus influence the outflow of mobile students: First, demographic trends with regard to future 15-24 age groups determine how many students will enter tertiary education in future. Second, if there is a large gap between the secondary graduation rate and the entrance rate into tertiary education there might be potential for further growth of the student body (Brandenburg et al. 2008: 34). Combined with restrictive admission back home the last two factors determine demand for education abroad. The last factor in the sending country refers to foreign language instruction. What foreign languages are taught in secondary school also affects, to some extent, where potential mobile higher education students would go. In general, one may agree with Mazzarol and Soutar (2002) that there are three stages of the decision-making process to study abroad. At the first stage the potential educational migrant decides to study abroad. This decision is mainly influenced by push factors connected with the sending country. At the second stage the student decides on a destination country and at this stage pull-factors connected with the target country play a significant role. At the third stage a choice of a specific institution is made.

With regard to the choice of the destination the cost argument is very important. However, opinions differ whether high tuition fees have a negative impact on the flows of international students to a

¹⁰ Until the academic year 2001/02 Greek students represented the largest group of foreign domiciled students at UK universities.

specific country. On the one hand, it is argued that education migrants are rational consumers and tend to prefer low cost destinations, on the other hand it is argued that education migrants see a connection between price and quality and thus accept higher costs in certain countries with good reputation (Wächter 2002: 2 sqq.). Based on a comparison of international student flows to eleven countries that either have low, moderate or high fee levels, Wächter came to the conclusion that no direct impact of tuition fees on international student flows could be proven but that high tuition fees do not prevent international students from studying in a high fee country (Wächter 2002: 9). This corresponds with the findings of Thissen and Ederveen (2006). They explored determinants of international student mobility by means of an econometric regression analysis. They found that the distance between sending and destination countries has a negative effect, while both quality of education and tuition fees in the target country have a positive impact (Thissen, Ederveen 2006: 23). In contrast to their findings, Naidoo (2007: 300) found a negative impact of tuition fees on the flows of international students when analysing data on the flows of Asian students to the UK between 1985 and 2003. Hence, findings on the impact of tuition fees on international student flows are ambiguous.

Apart from the cost argument, policies with regard to admission are very important pull factors. The importance of the policy argument may be highlighted by looking at the enrolment changes in the United States. It has been argued that the post 9/11 restrictive visa procedure is responsible for the recent drop in enrolments.¹¹ Furthermore, as mentioned earlier (2.5) some international students take the option of permanent migration into consideration when deciding on a study abroad destination. Hence, policies that enable staying on upon graduation are an important pull factor for international students. The language of instruction also influences the choice of destination. As a matter of fact, English language instruction used to be a strategic advantage for the Anglophone countries and explains their attractiveness as a destination for student migrants. Due to the introduction of programmes in English in emerging destinations this advantage is likely to disappear in future (Varghese 2008:23). A last pull factor is centres of expertise. Since educational migrants seek high quality of education they go to countries where their specific needs are met. This argument may particularly highlight destination decisions of students from small sending countries, of students in scientific and technical disciplines and of graduate students (Tremblay 2001:14).

This section discussed the determining factors of student mobility in theory and thus presented a basis for understanding of enrolment changes to which the following section (4.) will be devoted. We will refer to some of the factors presented here when discussing the recent data in (4.).

¹¹ H.C. Alberts (2007) highlights that this policy argument only covers parts of the whole picture. She argues that this factor in combination with better education opportunities in the sending countries and a higher competition on the market for international students explain the recent developments.

4. Data on student mobility towards target countries

The aim of this section is to report the recent changes in enrolment of CEE-students in selected Western European countries. From the group of the 15 old member states eight countries were analysed: Austria (AT), Germany (DE), Finland (FI), France (FR), The United Kingdom (GB), Ireland (IE), The Netherlands (NL), and Sweden (SE)). The first selection criterion was data availability until the academic year 2006/07 and the second selection criterion was the difference in labour market legislation with regard to NMS-citizens after the 1st of May 2004. Before presenting the data sets concerning particular countries in separate chapters, a general overview of trends and patterns of student mobility on the global and European scale will be provided.

In 2006 2.9 million students were enrolled in tertiary education outside of their country of origin (OECD 2008b: 352). On the global scale four countries attract almost half of all foreign students: 20% of all foreign students are enrolled at US-higher education institutions, 11% in the United Kingdom, 9% in Germany and 8% in France. With regard to the source regions, Asia is the most important region providing mobile students (OECD 2008b: 354, 358). Asia (mainly India and China) is also said to be the growth market for student mobility in the future. The emerging players amongst the states involved in the business of providing higher education for mobile students are likely to reap most profit from these growing markets. For this reason mainly Australia, New Zealand, Canada and Japan will see future growth (compare Verbik, Lasanowski 2007: 1).

Student mobility in Europe follows very specific patterns. Former colonial powers (UK, Portugal, France, Belgium and Spain) still attract huge numbers of students from these territories while Austria and Germany import students from CEE. The Nordic countries also show a special relation to transition countries since they host a comparatively huge number of students from the Baltic States (compare Kuptsch 2006: 35). The EU25-countries hosted 1,151,232 international students in 2005 (UNESCO 2007: Table 9,10). Among those international students a considerable part is intra-European mobility. In 2004 2.2% of the total European student population (401,124 students) were mobile, i.e. enrolled at a university in another European country for at least one year (Eurydice 2007: 129). These numbers exclude data on mobility in European programmes so that we should add 144,037 mobile Erasmus-students in the academic year 2004/05 (Erasmus Statistics).¹² Erasmus can be regarded as a motor of European student mobility and the increase in short term mobility is mainly due to European programmes. However, European degree mobility increased only moderately (Rivza, Teichler 2007: 473).

¹² By the academic year 2006/07 the number of European students participating in Erasmus increased to 159,324 (Erasmus statistics).

Before having a closer look at each of the eight target countries, the following table shows the number of EU-8+2 students enrolled in the eight target countries in 2006/07. It shows that Germany is the most important target country for student migration from CEE. Over 40,000 students from the region were enrolled at German higher education institutions. The countries on the 2nd (UK) and 3rd positions (FR) recruited only approximately 15,000 and 11,250 students this year (compare Table 2). The data in this section derives from sources in the target countries.¹³ However, for the sake of more recent data (academic year 2006/07) this brings about the disadvantage of a low comparability since the target countries use different concepts when producing data on student mobility.¹⁴ Whenever possible, data on international students will be used (i.e. inwards mobile students) and in the remaining cases data on foreign students (i.e. students with foreign citizenship).

source country	BG	CZ	EE	HU	LT	LV	PL	RO	SK	SL	total	
target country	DE	12170	2132	724	2434	1667	886	14493	4156	1569	524	40755
	UK	710	1150	535	1040	1485	880	6770	740	890	285	14485
	FR*	2615	772**					3188	4675			11250
	AT	1309	528	40	1199	77	48	1467	707	1301	567	7243
	SE	317	349	393	709	112	142	2781	907	20	46	5776
	NL	500	350	100	400	150	100	1250	300	150		3300
	FI***	32	325	135	265	208	70	500	47	97	52	1731
	IE	117	152	97	41	80	44	539	66	39	11	1186

Table 3: foreign students from EU-8+2 countries in selected target countries in the academic year 2006/07

Source: own calculation based on data in country chapters,*= data contains only foreign students at Universities, ** =year 2006, ***= data on international exchange students

AT Austria

The Austrian tertiary education system is characterised by a high degree of internationalisation. 19.1% of all students enrolled in public universities and universities of applied sciences have a foreign citizenship (Statistik Austria 2008: 195). Amongst the top ten of foreign students in Austria are three nationalities from the EU-8+2. In 2006/07 Bulgarian students were on the fifth position, Polish students on the sixth position and Slovakian students on the eighth position. The number of educational foreigners from EU-8+2 countries has been increasing since 2001 but started to decrease in 2004/05. Since then the numbers have been rising slowly again (Figure 1). A possible explanation

¹³ In general, compiled educational statistics published by the UNESCO, OECD or the European Union have the advantage to include comparable data but the data is published with the average delay of two years (Eurodata 2006: 81). For our purpose – to see the change between 2004 and now- such data compilations are not useful.

¹⁴ Some countries only publish data on foreign students. They thus use the criterion of foreign citizenship and this may lead to a bias. Countries that have huge numbers of immigrants indicate students who have never moved in these numbers. Apart from citizenship, there are other criteria used in several countries. E.g. the UK refers to the country of permanent residency and Germany distinguishes between educational inlanders and educational foreigners. Educational inlanders have a foreign citizenship but they received their university entrance qualification in the study abroad destination. Educational foreigners have both – foreign citizenship and a university entrance qualification from abroad (compare for comparability issues: Eurodata 2006, chap. 4, BPWG 2007: 51 sqq.).

for this pattern might be tuition fees. General tuition fees were introduced in 2001 and there are two different rates. Austrian citizens and EU-citizens pay 363 EUR per semester and non-EU-citizens 726 EUR per semester (CESifo 2007: 56). It is possible that prospective mobile students anticipated this change and delayed their enrolment for one year. Opposite to the general EU-8+2 trend Bulgarian enrolment has been decreasing since 2004/05. Population developments in Bulgaria might explain this recent decrease. Since 2000 the age group of the 15-24 year old Bulgarians has been decreasing drastically and this development is likely to continue in future. Traditionally, entry into tertiary education in Bulgaria is restricted. But since there are now more places available back home, the demand abroad may decrease (Brandenburg et al. 2008: 50). During the academic year 2006/07 Polish students replaced Bulgarian students on the leading position and are now the main source country from the region. Factors that explain the overall pattern of EU-8+2 enrolments in Austria are regional proximity (SK, HU) but also historical ties (tradition of education migration from BG, PL already during the Habsburg Empire).

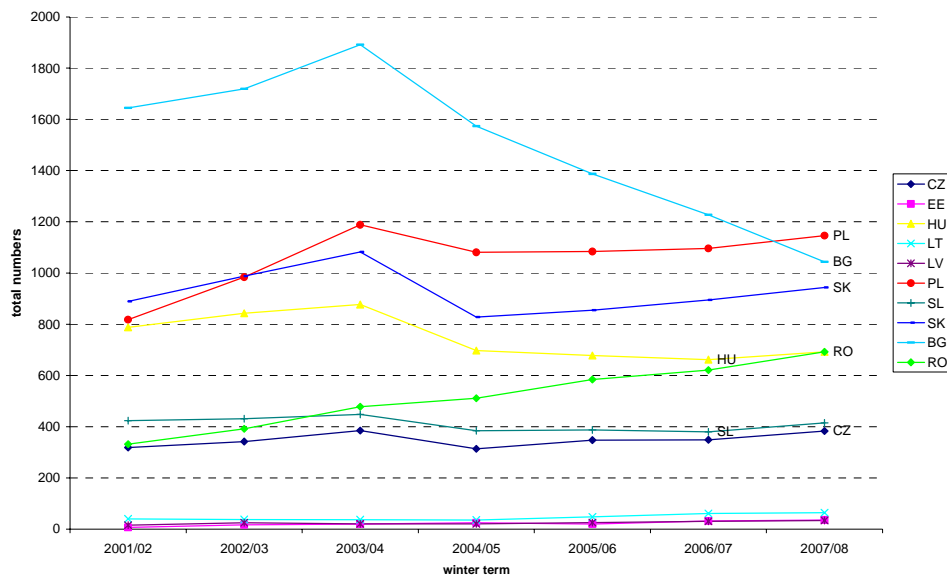


Figure 1: Educational foreigners from EU 8+2 countries at Austrian universities (2001-2008)

Source: bm.wf 2008

DE Germany

In quantitative terms Germany is the second largest target country for international students in Europe and the most important target country for students from the EU-8+2. In winter term 2007/08 the Federal Statistical Office counted 233.606 students with foreign citizenship (Statistisches Bundesamt 2008:18). Foreign students represented 12% of all students enrolled in Germany and educational foreigners represented 9.2% of all students in winter term 2007/08.¹⁵ China is the most important

¹⁵ In winter term 2007/08 1,941,763 students were enrolled in German higher education, compare Statistisches Bundesamt 2008: 18, 23.

sending country of educational foreigners to German universities. But remarkably two of the EU-8+2 countries follow in the ranking. Poland sent 10,289 educational foreigners to Germany in winter term 2007/08. Almost the same number of educational foreigners (10,161) came from Bulgaria. On the fourth and fifth position there were the Russian Federation and Turkey. Although the numbers had been growing considerably over the last decade, recently we observe a decrease for most of the EU-8+2 countries (Figure 2). The trend is also visible if we take the numbers of newly enrolled educational foreigners from the EU8+2 into consideration (Figure 3).

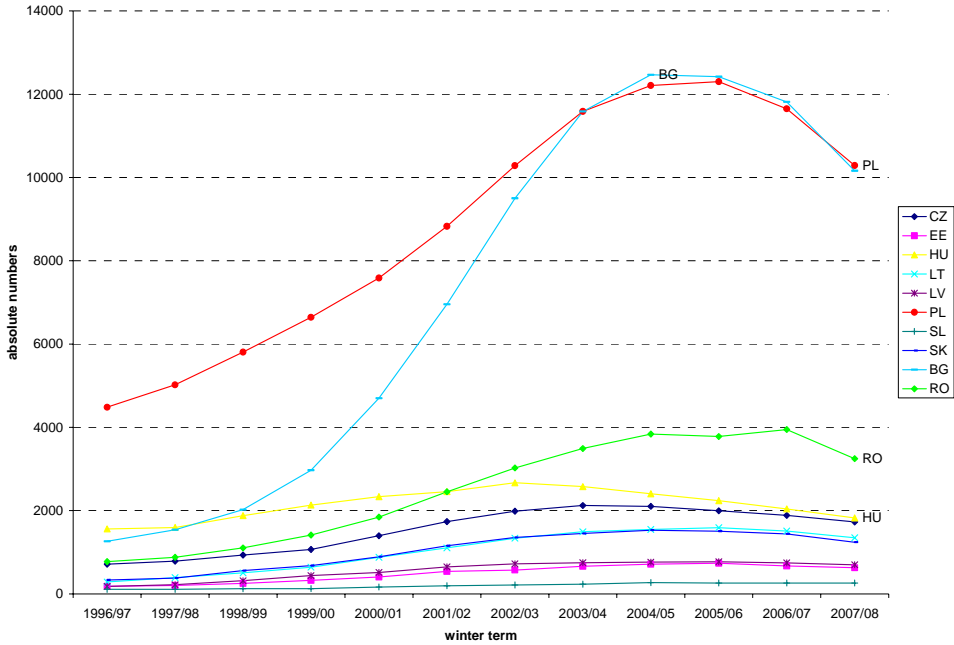


Figure 2: Educational foreigners from EU-8+2 1996-2008

Source: DAAD/HIS various years, Statistisches Bundesamt 2008

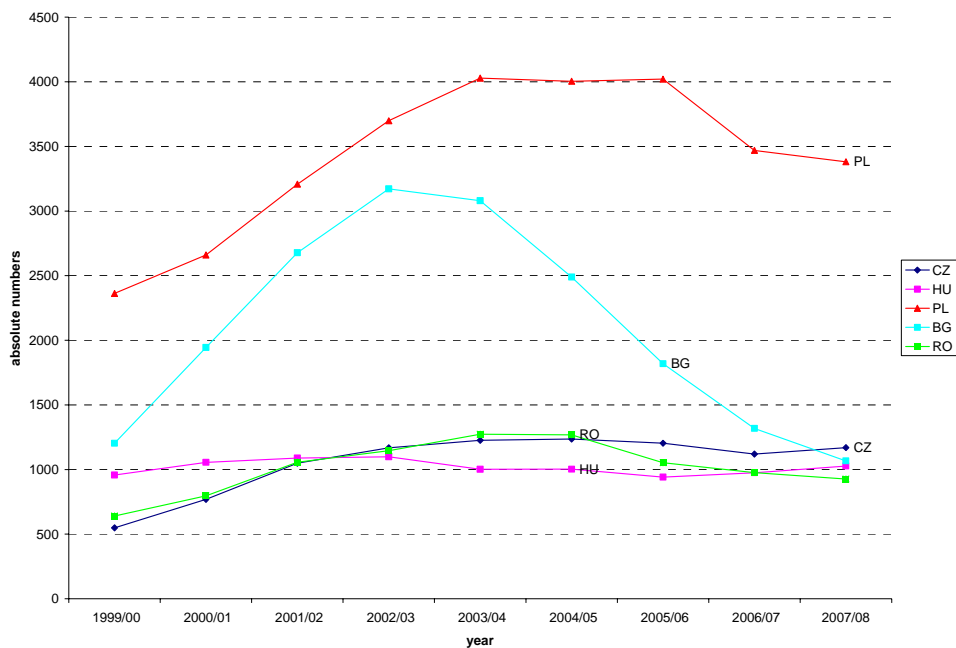


Figure 3: Inwards mobile 1st year students from EU8+2 (1999-2008)

Source: BMI 2007, Table 2-30; BMI 2008, Table 2-35

Official documents indicate the decrease in foreign (1st-year) enrolments (BMI 2007: 59; Isserstedt, Link 2008: 6) but rarely name any causes of the development.¹⁶ A possible explanation for the decreasing numbers of EU8+2-students might be demographic changes in the source countries in combination with entrance criteria for tertiary education (compare Austria). This explanation seems probable if we compare the slow-down in first year enrolments (Figure 3) for the case of Bulgaria and Poland. The decrease in population aged 15-24 started in Bulgaria in 2000 while in Poland only several years later (Brandenburg et al. 2008: 50, 90). The decrease in 1st year enrolments for Bulgarian students began in 2003/04 while the numbers of Polish 1st year students only started to decline in 2006/07. Tuition fees are not responsible for the slow-down. They were only introduced in summer term 2007 in some federal states in Germany but the most recent enrolment data is available for winter term 2007/08. According to experts the tuition fees - foreigners and German students are charged the same amount varying according to the federal state but approximately 500 EUR per semester- will in future show an influence on the enrolment of international students in Germany (CESifo 2007: 56; DAAD 2005). For the most important source countries this might be an argument against the decision to study in Germany. Poland does not charge tuition fees at public universities for full-time students and Bulgaria does not charge fees for students enrolled within the quota of state funded university places (Brandenburg et al. 2008: 51, 91).

¹⁶ A laudable exception is made by Brandenburg et al. (2008: 20). They argue that the decline in international student numbers might be interrelated with the introduction of the bachelor-master structure, which occurred at the same period of time.

FI Finland

In 2004 there were 299.888 students enrolled in Finnish higher education. Of these 7.915 were foreign students earning a degree in Finland and 7.237 were exchange students (credit mobility) (Zirra 2006: Tab. 1.1, 3.1). The rate of foreign students in Finnish higher education is therefore 5.05%. Credit mobility has been rising for the last years (Zirra 2006: Table 3.1; CIMO 2007: Table 2). The most important sending countries of mobile students with a foreign diploma to Finland in 2004 were China (1,308), the Russian Federation (1,140), Estonia (576), Sweden (540), Germany (274), the United States (194), the United Kingdom (172), Poland (126), Romania (114) and Italy (98) (Zirra 2006: 10 sqq.). Combined data on inwards credit mobility for 2006 show that three countries from the EU-8+2 region managed to get into the top ten. Poland is the fourth most important sending country to Finland, following Germany (1,252 students), France (954), Spain (771) and providing 502 students to Finnish higher education. The Czech Republic was sending 347 students and Hungary 275 students (Cimo 2006: Tab.10). The development of credit mobility from the EU-8+2 in the last seven years shows growing numbers until 2006. From 2007 onwards there has been a slight negative trend observable with the exception of growing numbers for Estonia and Romania (Figure 4).

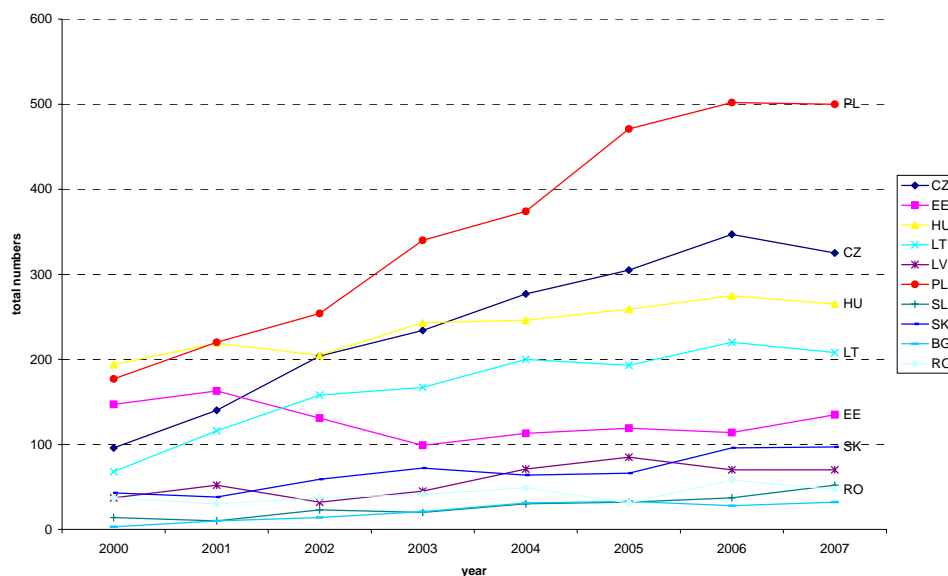


Figure 4 : Credit mobility from the EU8+2 to Finland (2000-2007)

Source: Zirra 2006; CIMO 2006, 2007.

FR France

France is one of the main target countries of student mobility in Europe. However, 2006/07 was the first year in which a decrease in the number of total and foreign enrolments was observable (RERS 2007:172) which continued in 2007/08 (-1.8%). 15.0% of all university students in France in 2007/08

had a foreign citizenship (RERS 2008: 197). The two most important sending countries of foreign students share colonial ties (Algeria) or guest worker migration (Marocco) with this country. In the academic year 2007/08 enrolment of university students from Morocco accounted for 22.411 students and 18.714 students from Algeria. The only EU-8+2 country which is included in the list of the ten most important sending countries is Romania. In 2007/08 there were 3.663 Romanian students studying in France (RERS 2008: 197).

The new downward trend of foreign enrolment is also reflected in the enrolment numbers for EU-8+2 countries (Figure 5):

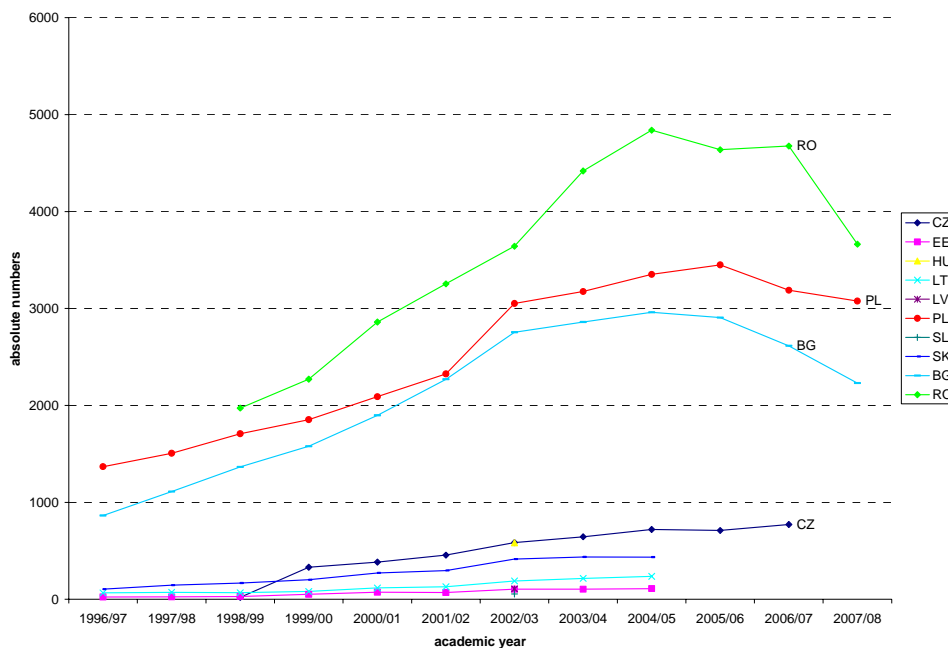


Figure 5: Foreign students from EU 8+2 countries in France 1996-2008

Source: EduFrance 2005-2007; RERS 2007; RERS 2008.

Since France does not charge any tuition fees¹⁷ (CESifo 2007: 56) the probable explanation for the downward trend are the above mentioned reasons for the decline in Polish and Bulgarian enrolment in Germany (compare Germany).¹⁸ The special case of Romania – which is still the most important sending country from the EU 8+2 region – might be explained by linguistic ties and the proximity of French and Romanian language which facilitate the students' adaptation. However, the decrease in the number of Romanian students enrolled is the most severe.

¹⁷ Although there are no tuition fees at public universities students are obliged to pay enrolment fees. They reach 150 to 420 EUR p.a. (CESifo 2007: 56).

¹⁸ Data availability restricts interpretation: Data until 2005 covers all tertiary education institutions whereas data from 2006/07 does only cover universities.

GB United Kingdom

The most interesting case in this report is probably the changing pattern of student mobility towards the UK since 2004. The United Kingdom has a long tradition as a target country for mobile students. General arguments that explain the attractiveness of Great Britain for education migrants are the perception of high quality education, English language instruction and comparatively short degrees (HEPI 2008:13). From all EU15 countries it has the highest intake of mobile students. 2,362,815 students were enrolled in higher education in the academic year 2006/07 (HESA 2008a). Both, the total enrolment and foreign enrolment have been rising. Between 2005/06 and 2006/07 the total number of students increased by 1.1% (HESA 2008a). Between 2004/05 and 2005/06 the enrolment of foreign domicile students in the UK increased from 13.9% to 14.1%. In 2005/06 there were 106,225

foreign domicile students from the EU enrolled in the UK and 223.855 international students (non-EU foreign domicile students) (UUK 2007: 24).

The four most important sending countries to the UK in 2006/07 were China (49,595 students), India (23,835), Ireland (16,255) and Greece (16,050) (HESA 2008a). None of the EU 8+2 countries is a main supplier of student mobility to the UK and included in the top ten list of sending countries. However, this pattern seems to change in the future. The following figure shows that there is a considerable growth in the number of students from EU 8+2 who have enrolled in the UK since 2004:

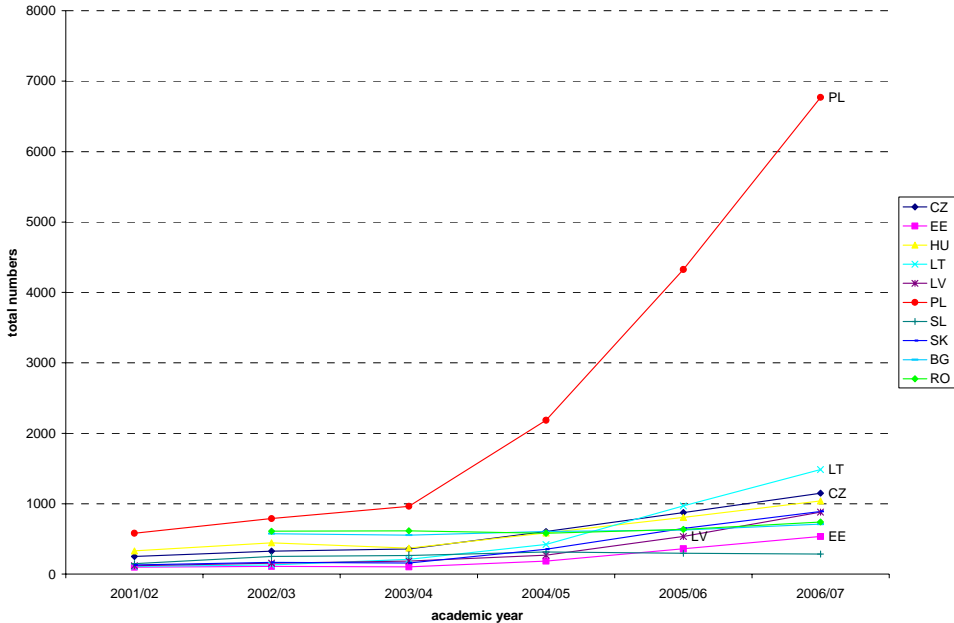


Figure 6: Foreign domicile students from the EU8+2 countries in the UK 2001-2007

Source: HESA 2008a, 2008b; UUK 5th to 7th report.

During the last years especially the number of Polish students in the UK has shown considerable annual growth rates. Between 2005/06 and 2006/07 the numbers of Polish students increased by 56%. Both the numbers of Latvian and Lithuanian students also grew considerably (HESA 2008a). Changing tuition fee policies after the EU-enlargement are possibly the best explanation for the high growth rates of the New Member State citizens. Before the 1st of May 2004 EU-8+2 country citizens were charged much higher fees as international students, but since then they may enrol as EU-citizens. According to the European Union law EU-students have to be treated equally to home students and thus since 2004 EU-8+2 students have paid much lower home student fee (about 1/7 of the previous amount for an undergraduate programme) (Aston 2004: 46). As a consequence, the affordability of study abroad in Great Britain has increased considerably.¹⁹

IE Ireland

In 2004/05 there were 143.546 students enrolled in Irish higher education.²⁰ In 2005/06 25.319 students were classified as international students. Of these 11.146 are only short term enrolments (IEBI 2007: 14-15). The number increased and in 2006/07 there were 27.275 international students studying in Ireland (IEBI 2008: 9). The most important sending country of foreign students to Ireland are the United States (4.408 students), China (3,573), the UK (1,992), France (1,536) and Germany (1,431), Spain (1,395), Malaysia (1,289), Italy (1,253) and India (1,094). In 2006/07 Poland - a EU 8+2 country - is for the first time listed under the top ten and supplies 539 students to Irish higher education (IEBI 2008: 33-34).

¹⁹ However, since 2004 the tuition fee regulations have changed again. Until 2006/07 the home fee/EU-fee for England, Wales and Northern Ireland in undergraduate studies totalled 1.100 GBP and had to be paid in advance. Since the academic year 2006/07 the universities have been free to charge up to 3.000 GBP (and most do so) but these fees are only to be paid upon graduation and only if the graduates annual income is above 15.000 GBP. International undergraduate students pay between 7.000 and 24.400 GBP p.a. (www.gate-germany.de/print.php?print=%2F6.1.3.html).

²⁰ http://www.cso.ie/statistics/per_full_time_edu.htm.

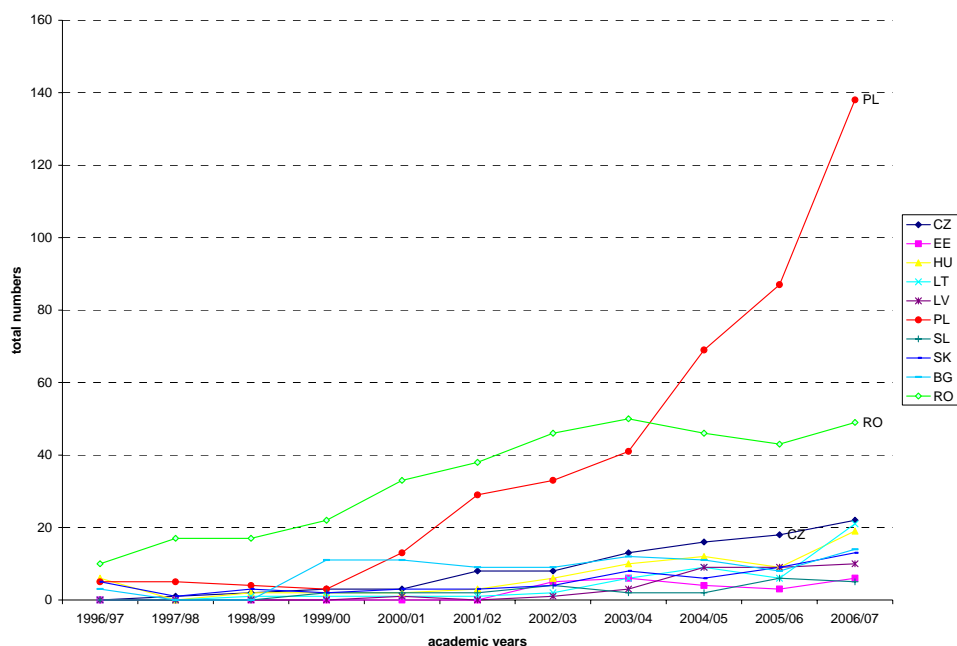


Figure 7: Foreign domicile full-time enrolments from EU 8+2 in Ireland 1996-2007

Source: HEA 2008.

This figure is based on the Higher Education Agency data which offers more longitudinal data, but comprises only fulltime enrolment. Thus of the total of 539 Polish students in Ireland only 138 were enrolled full time (HEA 2007; HEA 2008). Compared to the UK, the increase is impressive but in quantitative terms it remained on a very low level. The same explanation is valid for this increase as NMS-students are not charged the fee for international students since the EU accession.²¹

NL The Netherlands

In the academic year 2006/07 8.7% (49,750) of all students at Dutch higher education had a foreign nationality (Nuffic 2006: 30). 41,000 of the foreign students had come to the Netherlands in order to earn a degree, whereas 6,750 foreign students might be classified as exchange students (Nuffic 2007:3). The enrolment rate of foreign students had been growing considerably over the last years. However, during the last academic year we observe a slower growth with regard to diploma mobility (Nuffic 2007: 2). The main source countries that send foreign students to the Netherlands were either neighbouring countries, former colonies or emerging world class sending countries as China. With regard to students from the EU8+2 countries only Poland managed to get a position (rank 7) on the list of the ten most important sending countries. In the academic year 2006/07 there were 1,280 Polish students studying in the Netherlands (2.6% of all foreign students). 453 of these students may be classified as exchange students, whereas the remaining 827 students aimed at earning a degree in the

²¹ Compare tuition fees in Ireland:
http://www.educationireland.ie/index.php?option=com_content&task=view&id=37&Itemid=48.

Netherlands (Nuffic 2006: 35, Erasmus statistics 2006/07). The enrolment rate of Polish students (diploma mobility) had been growing considerably over the last five years with annual growth rates ranging between +30-50% each year (Nuffic 2006: 18). However, 2006/07 was the first year when numbers declined. From the EU8+2 only Poland, Bulgaria and to some degree Romania and Lithuania have been sending mobile diploma students.

SE Sweden

8.3% (27,904) of all Swedish enrolments are international students. The most important countries that supplied international students in 2006/07 were Germany (2,585), Finland (1,826), France (1,627), China (1,596), Pakistan (1,177), Spain (1,051) and India (844). Poland is also included on the 10th position and is currently supplying 501 students to Swedish higher education. Poland is the most important importer within the EU-8+2 group, followed by Lithuania on the second position (217 students in 2006/07). The Czech Republic is the third most important country from the region and supplied 191 students in 2006/07. The number of Polish students has been decreasing since 2005/06. While enrolments from the Czech Republic decreased until 2005/06 they again increased in 2006/07 (Högskoleverket 2007a: 9, 40; 2008a: 40; 2007b; 2008b).

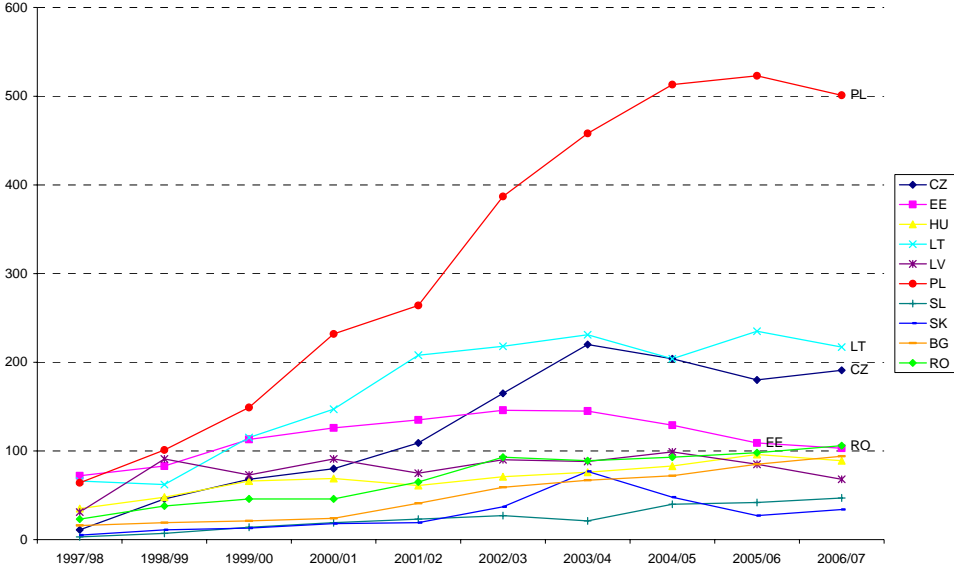


Figure 8: Number of incoming students to Sweden from CEE (1997-2007)

Source: Högskoleverket 2007, 2008a, 2008b, 2008c.

5. Data on student mobility from sending countries

The following section looks at the dynamics of student migration from the perspective of the sending countries, i.e. those countries that became European Union Members in 2004 and 2007. The data presented is from UNESCO education statistics. Due to the delay in data compilation, this section covers only the years until 2006. Declarations about changing patterns are only possible for the period 2004-2006. Table 4 gives an overview of the most important sending countries in quantitative terms, their main destinations and the rate of outbound mobility in comparison to all students enrolled in tertiary education.

	total abroad	most important target countries	outbound mobility ratio %
PL	30.808	DE (13.287); UK (4.325); FR (3.427); USA (3.127); AT (1.341); others (5.301)	1.4
BG	25.156	DE (12.111); USA (3.762); FR (2.876); AT (1.373); TR (1.163); others (3.871)	9.8
SK	22.338	CZ (14.664); HU (2.324); DE (1.269); AT (1.228); USA (722); others (2.131)	10.6
RO	21.307	FR (4.332); DE (4.043); USA (3.339); HU (3.334); IT (1.874); others (4.385)	2.3
HU	7.160	DE (2.290); AT (1.134); USA (860); UK (805); FR (660); others (1.411)	1.4
CZ	7.042	DE (1.999); USA (960); UK (875); FR (694); AT (508); others (2.006)	1.8
LT	6.793	DE (1.451); Russian Fed. (1.039); UK (969); LV (838); USA (676); others (1.820)	3.6
LV	3.524	Russian Fed (818); DE (739); UK (537); USA (396); EE (174); others (860)	2.9
EE	3.395	Russian Fed (812); DE (655); UK (362); USA (332); FR (123); others (1.111)	5.2
SL	2.312	AT (550); IT (397); UK (294); DE (282); USA (227); others (562)	1.9

Table 4: Number of EU8+2 mobile students abroad in 2006

Source: UNESCO Global Education Digest 2008, Table 10, ISCED 5 and 6, International Flows of Mobile Students.

In quantitative terms Poland is the main sending country from the region. In 2006 30,808 Polish students studied outside the borders of their home country. The next positions in this ranking are occupied by Bulgaria (25,156 students abroad), Slovakia (22,338), Romania (21,307), and Hungary (7,160). Germany is the most important target country for six of the ten countries under consideration. This once again underlines the dominant position of Germany as a (former) magnet for CEE-students – a result which was already discussed in the previous section. Nevertheless, the fact that the Russian Federation is the most prominent destination for Estonian as well as Latvian students and the Czech Republic for Slovaks also illustrates that there is some degree of eastward student mobility or student mobility among the former communist states. If we take the outbound mobility rate into consideration, we can see which of the sending countries has the most mobile students. The ranking is headed by Slovakian students. 10.6% of all Slovaks enrolled in higher education study outside of Slovakia. Bulgaria (9.8%) and Estonia (5.2%) follow on the second and third position. Interestingly, Polish students – who represent in quantitative terms the most important sending country – are the least mobile. Only 1.4% of all Polish students are enrolled abroad.

BG Bulgaria

The most important destination countries of Bulgarian students abroad are illustrated in Figure 9:

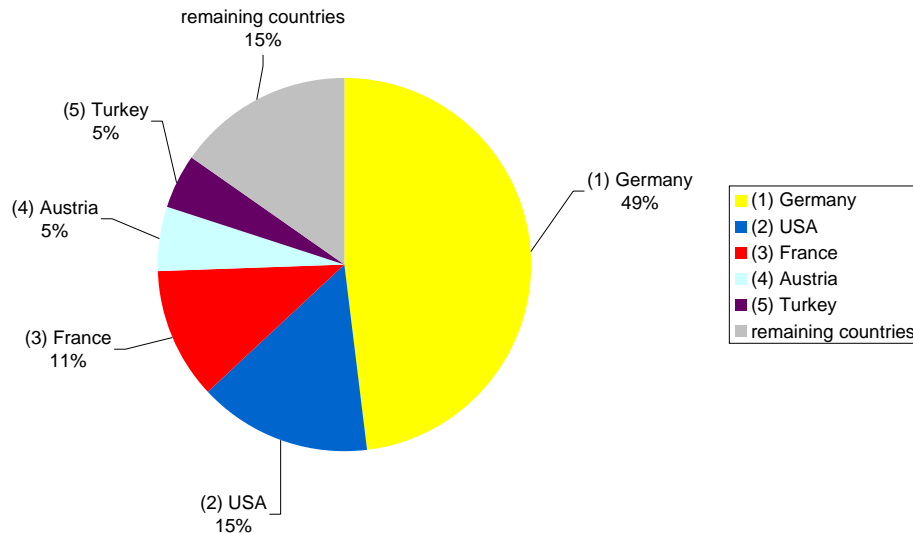


Figure 9: Destination countries of Bulgarian students abroad 2006

Source: UNESCO Global Education Digest 2008, Table 10, ISCED 5 and 6, International Flows of Mobile Students.

Germany is by far the most attractive destination country. 49% of all Bulgarian students enrolled abroad move to Germany. The next countries in this row are the USA (15%), France (11%), Austria (5%) and Turkey (5%). Between 2004 and 2005 the number of study abroad students increased by 1,653 students and all the main destinations with the exception of France reported a higher number of enrolled Bulgarian students than in 2004. In 2006 there was a slight decrease observable which affected all major destinations. In 2006 the number of Bulgarians enrolled abroad was by 1,116 lower than in the previous year (UNESCO 2006, 2007, 2008 Table 10). The data from the Eurostudent 2008 report confirm this pattern.²² Germany and France are the most attractive countries, followed by the UK and Austria. The data from a small scale study on the study abroad intentions of Bulgarian secondary school pupils confirms the high propensity to go abroad for studies. A survey and interviews carried out in four cities (Sofia, Plovdiv, Yambol and Shoumen) in November 2005 asked pupils about their intentions to study abroad. 60% of the respondents indicated that they would apply for study abroad. Pupils from large cities show a rather cosmopolitan attitude and tend to favour the USA, Canada and the UK as target countries, while pupils from more provincial backgrounds show

²² The Eurostudent 2008 report aims at producing comparable data on higher education in Europe. There are 21 European countries participating in the project (AT, BG, CZ, UK, EE, FI, FR, DE, IE, IT, LV, LT, NO, PT, RO, SK, SL, ES, SE, Switzerland, NL, TR). A representative sample of higher education students in the given country (ISCED 5) participates in this survey. For the case of Bulgaria the survey was carried out between 01-03/2007. 1,514 students answered the questionnaire (Response rate 33%). There is also a question with regard to study abroad destination countries. However, answers are given by currently enrolled students who returned to Bulgaria after some time abroad. Compare: www.eurostudent.eu.

nihilistic attitudes (Chavdarova 2006: 57, 58, 61).

CZ Czech Republic

The major destination countries for Czechs studying abroad in 2006 were Germany (28%), the United States (14%), the UK (12%), France (10%), and Austria (7%). In comparison to 2004 the UK improved her position in the ranking of the most popular destination countries. In 2004 the UK was still on the fifth position, on the fourth in 2005 and is now ranking third (UNESCO 2006, 2007, 2008, Tab 10). In 2006/07 5.079 Czech students spent a term abroad within the Erasmus scheme. The most popular countries were Germany (20.1%), France (11.9%), Spain (8.4%), the United Kingdom (8%) and Finland (6%). In terms of their share of the whole Erasmus-outgoing population the target countries- Germany and the UK- both have lost some attractiveness at the expense of a bigger diversity among other target countries. In the first year of the Erasmus-exchange of Czech students (1998/99) 27.1% went to Germany and 18.1% to the UK (NAEP 2008). However, Eurostudent 2008 data also indicates a growing attractiveness of the UK as a destination country. 26% studied abroad in the UK, while 20% went to Germany.²³

EE Estonia

The most attractive destination country for Estonian students in 2006 was the Russian Federation (24%) which was probably due to a relative high share of Estonian citizens with Russian nationality. Germany was only second with 19%. The UK attracts 11% of all study abroad Estonians. 10% are attracted by the United States and 3% by France. In 2005 the United Kingdom was for the first time included in the list of the most popular target countries and in 2006 it was already ranked third (UNESCO 2006, 2007, 2008: Table 10).

HU Hungary

The most popular target country for Hungarian education migrants is Germany where 32% of all Hungarian students abroad are enrolled. Germany is followed by Austria (16%), the United States (12%), the United Kingdom (11%) and France (9%). The remaining 20% decide to go to other countries. The number of Hungarian students enrolled in the UK increased considerably between 2004 and 2006 from 5% in 2004 to 11% in 2006 while numbers in Germany decreased over the same period of time from 40% to the current 32% (UNESCO 2006, 2007, 2008: Tab.10).

²³ Up to date there is no data available on the sample size, response rate and the month in which the survey was carried out, compare www.eurostudent.eu.

LT Lithuania

Germany attracts 22% of the young and mobile students from Lithuania, 15% head off for the Russian Federation, 14% are located in the UK, 12% in Latvia and 10% in the United States. 27% are spread over various countries (UNESCO 2008: Table 10). In 2006/07 2,082 Lithuanian students spent an Erasmus term abroad. 15% of these Erasmus students studied in Germany, 9.9% in Denmark, 8.4% in Finland, 6.7% in France and 6.5% in Italy (Erasmus statistics). The Eurostudent data confirm only that Germany is the most attractive target country. Lithuanian students indicated that they had gone to Germany (20%), Sweden (16%), Finland (14%), the UK (12%), and France (8%). The remaining 26% went to other European (22%) and non-European countries (4%).²⁴ However, a broadly based study on the migration intentions of Lithuanian university students emphasises that the propensity towards migration is quite high among those enrolled in Lithuania. The survey was carried out at nine universities in the country and comprises the answers of 1,252 students. The authors' findings indicate that the propensity to migrate is largest among younger students and among those who are enrolled in economics or business administration. 40% of these students were planning to work abroad (Aidis et al. 2005: 37-39). Unfortunately, the survey did not ask about intentions for student mobility therefore its results are not more than a general hint.

LV Latvia

The most attractive countries for study abroad students from Latvia were the Russian Federation (23%), Germany (21%), the United Kingdom (15%), the United States (11%), and Estonia (5%). 25% went to other countries. In total 3,524 Latvian students were enrolled abroad in 2006 (UNESCO 2008: Table 10). Over the period of only three years the market share of the UK increased from 5% in 2004 to 8% in 2005 and 15% in 2006 (UNESCO 2006, 2007, 2008: Table 10). Latvia is the only country from the EU-8+2 group that already participated in the Eurostudent 2005 survey. Thus, there is data available that allows the comparison of the attractiveness of certain target countries between 2005 and 2008. Opposite to what was expected, the UK has lost its attractiveness. While in 2005 the UK was the most attractive target country for study abroad students (22%) only 21% went to the UK in the 2008 survey. Anyhow, Germany as a target country has lost even more attractiveness (15% in 2005 and 11% in 2008). The third most attractive country is Sweden (11% in 2005 and 8% in 2008).²⁵

²⁴ 1003 respondents participated in February 2007 in the Eurostudent survey in Lithuania. The survey was carried out as face-to-face interview, compare: www.eurostudent.eu.

²⁵ The national report included in the Eurostudent 2005 report is based on a survey that was carried out in 2003/04 and 1.000 students at ISCED 5A-level participated. The questionnaire was filled in face-to-face (Eurostudent 2005: 19). Data on the method and sample size used for the 2008 version is not yet available (compare: www.eurostudent.eu).

PL Poland

In 2006 44% of all Polish students abroad were enrolled in German higher education. On the second position was the UK (14%), followed by France (11%), the United States (10%), and Austria (4%). 17% went to other countries than the ones mentioned above (Figure 10).

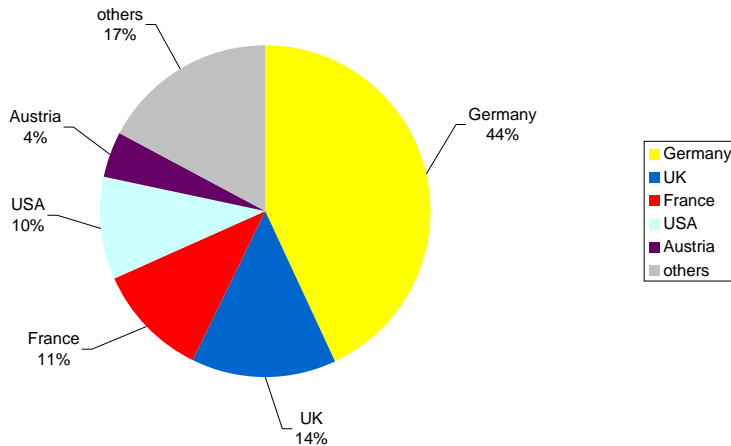


Figure 10: Target countries of Polish students abroad 2006

Source: UNESCO Global Education Digest 2008, Table 10, ISCED 5 and 6, International Flows of Mobile Students.

In 2005 the UK was for the first time included in the top 5 of target countries for Polish students abroad. In 2004 Italy was still the 5th most important target country (UNESCO 2006, 2007: Table 10). Only one year later (2006) the UK had already climbed up to the position of the second most important country. This improvement was at the expense of Germany. While in 2005 Germany still attracted 51%, in 2006 she welcomed only 43% of all Polish students abroad. As far as Erasmus-mobility is concerned Germany is again the most important target country. Detailed data on migration intentions among Polish university students is available. According to a survey carried out at ten public universities in 2004 23% of the respondents (N=2,014) had already been abroad for educational reasons and 11% were planning to do so (Sygnowski 2004: 84). Furthermore, 2/3 of the respondents indicated that they wanted to start working in another EU member state. 46% said they would rather do so and 20% said they were convinced to do so (Sygnowski 2004: 89). Other scholars who discussed the outcomes of this survey mentioned concern about such a high percentage of students willing to leave for work, not for education and that this may lead to a brain waste (Kaczmarczyk, Okólski 2005:128).

RO Romania

21,307 Romanians were seeking higher education abroad in 2006. 20% of them went to France, 19% to Germany, 16% each to the United States and to Hungary and 9% to Italy (UNESCO 2008: Table 10). In 2005 Germany pushed France from the position of the most important target country (UNESCO 2006, 2007: Table 10) which France regained in 2006. According to the Eurostudent data France is still the most important destination (16%). 15% of the inquired students went abroad to Germany, 13% to Italy, 7% to Hungary and to Austria and the UK 4% each.²⁶

SL Slovenia

The most important target country is Austria (24%) followed by Italy (17%), the United Kingdom (13%), Germany (12%) and the USA (10%). 24% of the mobile Slovenian students go to other countries (UNESCO 2008: Table 10). In the course of only one year Germany –formerly ranked first (23% in 2005) – slipped to the fourth position (12% in 2006) (UNESCO 2007, 2008: Table 10). According to the Eurostudent data Germany was still the most important target country for Slovenian exchange students. 17% went to Germany, 15% to Austria, 13% to the UK, 8% to France and 5% to Spain.²⁷

SK Slovak Republic

Slovakian students are the most mobile students from the EU-8+2 countries. In 2003/04 8.2% were enrolled in another member state or an associated country. Additionally, we observe a steep rise in this share between 1997/98 and 2003/04. During this time period the share rose from 2.6% to 8.2% (Eurydice 2007: 130 sqq.). However, if we take the most popular target countries of Slovakian students abroad into consideration, it becomes clear that most of their mobility is to the Czech Republic, which once formed one country with Slovakia. 66% of all mobile Slovakian students (in total: 14,664) decide to take up studies in the Czech Republic. Remarkably, the 2nd most important target country is a member of the EU-8+2 countries: 10% of the mobile Slovakian students are enrolled in Hungary. Germany was on the third position (6%), followed by Austria (5%) and the United States (3%) (UNESCO 2008: Table 10). The Eurostudent data reveals a slightly different picture: Enquired students indicated Italy as the most important target country (18%). The second largest group of the survey participants went to Germany (13%). 12% went to the UK, 11% to Austria

²⁶ The national questionnaire for the Eurostudent 2008 report was sent out to 10.000 Romanian students in May/June 2006 and received a response rate of 23.3% (compare: www.eurostudent.eu).

²⁷ In the Slovenian dataset for the Eurostudent 2008 report answers of 6.324 students are included. The survey was carried out in April 2007 and received a response rate of 31% (compare: www.eurostudent.eu).

and 10% to the United States.²⁸

To sum up this section on mobility patterns in the sending countries, we may state that changing patterns are observable. If we look at changing patterns of mobility from the EU-8+2 countries between 2004 and 2006 the general trend towards new target countries is in some cases already observable: In 2004 the UK was the fifth most important target country for Czech students. One year later it was already on the fourth position and two years later on the third position (UNESCO 2006, 2007, 2008: Table 10). These findings are supported by the Eurostudent 2008 report. 26% of the surveyed Czech students studied abroad in the UK, while only 20% went to Germany.²⁹ In the Estonian case in 2005 the UK was for the first time included in the list of the five most important target countries and improved its position to the third rank in 2006. The number of Hungarian students enrolled in the UK increased from 371 to 584 and to 805 students between 2004 and 2006. In the same period the share of international students from Latvia increased from 5% to 15%. In the case of Poland, the UK was in 2005 for the first time included in the top 5 of target countries for Polish students abroad and in 2006 it was already the second most important target country (14% of all Polish students abroad) (UNESCO 2006, 2007, 2008: Table 10). In the period of only one year the market share of Germany decreased from 51% in 2005 to 44% in 2006. The same refers to the case of Slovenia where the German market share decreased from 23% in 2005 to 12% in 2006. Thus, the data on outflows from the majority of the NMS countries gives a hint towards the changing patterns of attractiveness in favour of the UK.

6. Conclusion

This report started with a literature review of the interlinkage of student mobility and subsequent labour mobility. It was shown that the “academic gate” is an important subset of highly skilled migration. Knowledge economies in search of talent have recently introduced targeted policies in order to retain foreign graduates from their universities as a resource for the national labour market (2.1.). However, although European governments are eager to retain foreign talent from neighbouring EU member states as well as from outside the EEA, our knowledge about actual retention rates in Europe and the influence of student mobility on labour mobility still remains limited. The data from the UK on non-UK-EU citizens which offers a picture on the free movement of labour in Europe indicates that about 20-30% of a graduate cohort is retained (2.2). Empirical research on student

²⁸ The national survey in the Slovak Republic comprised 1.333 respondents (0.8% of the student population) and was carried out between May and June 2006. It seems questionable whether the results are representative. The high percentage of students who indicated that they had gone to Italy might be connected with the high participation rate of students from the Faculty of Christian Catholic Theology (compare: www.eurostudent.eu).

²⁹ Up to data there is no data available on the sample size, response rate and the month in which the survey was carried out, compare www.eurostudent.eu.

mobility shows that the likelihood for mobile students to be mobile in professional life is about twice as high as those of non-mobile students. The students who spent an Erasmus term abroad are more likely to be internationally mobile in professional life and as such they tend to return to their former host countries (2.3). A look at the structural side of the link between student mobility and labour mobility introduced the reader to the mechanisms that pull international students into the labour markets of their host societies. For students the study abroad period is a probation period during which he/she checks job opportunities. In times of the demand for international labour it is more advantageous for employers to hire foreign graduates instead of fresh talent from abroad. Hence, targeted recruiting of foreign graduates is already being observed (2.4). The findings presented in section 2.) indicate that student mobility has a huge influence on becoming a labour migrant.

The report moved further to explain which drivers or barriers change the flows of international students (3.). The determining factors were divided into (push) factors connected with the sending country that create a demand for studying abroad and pull factors connected with the target country and the decision on study abroad destinations. It became clear that the determining factors had changed over time. While in the past decades, colonial and historical ties as well as cultural proximity determined the flows, nowadays new factors are growing in importance. In Europe with its ageing societies, demand for education abroad from the EU-8+2 is influenced by demographic trends as well as admission to higher education back home. Policy makers in target countries are nowadays competitors in the growing market of international higher education. They may influence student flows to their countries by tuition fee policies as well as admission and retention policies to attract international students and to retain international graduates.

In order to answer the research questions the fourth part analysed educational statistics with regard to the inflow to eight target countries (4.). We have learnt that especially Bulgarian, Polish (AT, DE) and to some degree Romanian students (FR) constitute a considerable share of the enrolment in the target countries and saw a constant rise over the 1990s and the first half of the present decade. However, in some countries the enrolment of EU-8+2 students started to decrease recently.

Table 5 summarizes the observed trends:












	AT	DE	FI	FR	GB	IE	NL	SE
general trend							PL 	
exception from the general trend	BG 		EE, SL 					CZ, RO, BG, SI, SK 

Table 5: Enrolment trends with regard to EU-8+2 citizens

Among the target countries in Western Europe we may differentiate three different groups: One group of countries (AT, DE, and FR) that traditionally attracted many EU-8+2 students now faces declining enrolments. In Austria enrolments from the EU-8+2 decreased between 2003 and 2004 but are slowly recovering. An exception is the number of Bulgarian students that continues to decrease. A probable reason for the decrease between 2003 and 2004 was the anticipated different tuition regulation which might have convinced potential candidates to postpone their enrolment in Austria. The number of decreasing Bulgarian enrolment might be explained by shrinking young population in Bulgaria and hence an increasing supply of state funded university capacities back home. In Germany, Bulgaria and Poland ranked second and third of all inwards mobile students from the EU-8+2 but since winter term 2005/06 and 2004/05, respectively, their numbers have been declining. Again the reason for this is rather connected with a declining young population in Poland and Bulgaria. Furthermore, the decrease is expected to continue since Germany introduced tuition fees in 2007 and has lost some of its strategic advantages. France also experiences a decline in the traditionally strong enrolments of Romanian, Polish and Bulgarian students. In France, we observe a general decline in overall and foreign enrolments which might explain this decrease as well.

A second group of countries is characterized by increasing numbers of enrolments from the EU-8+2 (UK, IE). Both have seen a very steep increase in enrolments that started right after enlargement. Especially, the number of Polish students in the UK had been increasing tremendously (increase +56% between the academic years 2005/06 and 2006/07). The main reason for this is the changing tuition fee policy. The UK charges a seven times higher fee for international students than for EU or home students. From the day of accession on, NMS-students had to pay the home fee and studies in Britain became affordable. The situation improved with the new tuition scheme introduced in 2006/07. Before this, students had to pay the fees in advance but now, they are only charged upon graduation if they earn a certain amount.

A third group of countries (NL, SE, FI) attracts a smaller share of CEE-students than the above mentioned countries and shows diverse patterns which might be due to data restrictions. In the Netherlands, a fee charging country, the number of Polish students, especially, had been increasing but recently numbers have been decreasing. In Sweden we observe a downward trend for some countries (PL,LT, HU, LV, EE) and a slight upwards trend for others (CZ, BG,RO, SK,SL). Finland offers only data on credit mobility but even in credit mobility there has been a general downwards trend since 2006 from which Estonia and Slovenia are excluded.

The patterns of inflow into the main target countries were then compared to those of the outflow from the EU-8+2 countries (5.). The trends observed from section 4 are supported by section 5 although data only reaches back to 2006. There is a changing pattern towards the UK becoming more attractive as a destination country among outgoing students from the NMS. More precisely the UK improved its market share considerably among outgoing students from the Czech Republic, Estonia, Hungary, Latvia and Poland.

Although data availability still restricts insights into the topic, this report illustrated changing patterns of student mobility and identified reasons for the trends observed. The answer to the first research question is hence an affirmative one. The data from educational statistics allows concluding that student mobility from the NMS changed its direction after 2004. However, the second research question cannot be affirmed without reservations. It is not possible to say how much influence the labour market policy towards NMS-citizens had on their decision to study in the UK. But one may suppose some influence combined with a strong impact of tuition policies. As there is a limited range of the possible destination countries to influence the slowing demand for study abroad in the source countries due to demographic trends, destination countries will in future need to develop policies targeted at those who are willing to go abroad. Recent developments in the UK (new retention policies, report of retention rates, projections of future demand, strong marketing, and innovative tuition policies) give reason to believe that the UK is in a good position in the war for talent. However, former market leaders (DE, AT) will probably see a further decline in the numbers of NMS-students if they do not change their strategies.

These considerations have implications for further research. We are able to identify determining factors of student mobility and changing patterns. However, there is a lack of empirical research on the importance of certain factors in comparison to others. Especially, there are too few reliable, broadly-based empirical findings on the influence of policies towards international students on their migration behaviour. Thus a first task for further research is to analyse ex post by empirical means to what extent international students' migration decisions were influenced by the admission policies and policies in the area of labour market entrance during studies and upon graduation. A second field of activity for

further research is a better documentation of retention rates. Only if knowledge economies become aware how many skilled migrants enter their labour markets via the academic gate can they react to their needs.

References

- Abella, M. 2006. Global competition for skilled workers and consequences. Kuptsch, C., F.E. Pang (eds.) *Competing for global talent*, Geneva: International Institute for Labour Studies, p. 11-32.
- Aidis, R., D. Krupickaitė, L. Blinstrubaitė. 2005. The loss of intellectual potential: migration tendencies amongst university students in Lithuania. *Geografija* 2005, T 41, 2: 33-40. URL: http://images.katalogas.lt/maleidykla/Geo52/Geog_033_040.pdf.
- Alberts, H.C. 2007. Beyond the headlines: changing patterns of international student enrollment in the United States. *GeoJournal* 68: 141-153.
- Aston, L. 2004. Projecting Demand for UK Higher Education from the Accession Countries, Higher Education Policy Institute. URL: <http://www.hepi.ac.uk/pubdetail.asp?ID=122&DOC=Reports>.
- Baas, M. 2006. Students of migration: Indian overseas students and the question of permanent residency, *People and Place*, 14, 1: 9-24.
- Bracht, O., C. Engel, K. Janson, A. Over, H. Schomburg, U. Teichler, 2006. The Professional Value of Erasmus Mobility, INCHER Kassel November 2006. URL: http://forms.mundiconvenius.pt/docs_erasmus/2_Teichler_study_long.pdf.
- Brandenburg, U., J. Zhu, C. Berthold. 2007. Auslandsstudium im Zeichen des Studierendenhochs und danach! Analyse von Zielländern für Individualstudierende und Hochschulen. URL: http://www.che.de/downloads/Auslandsstudium_im_Zeichen_des_Studierendenhochs_AP93.pdf.
- Brandenburg, U., D. Carr, S. Donauer, C. Berthold. 2008. Analysing the Future Market – Target Countries for German HEIs. URL: http://www.che.de/downloads/Analysing_the_Future_Market_Target_Countries_for_German_HEIs_AP107.pdf.
- Bundesministerium für Arbeit und Soziales [BMAS 2006]. Material zur Information, Verlängerung der Übergangsregelungen bei der Arbeitnehmerfreizügigkeit bis 2009. URL: http://www.bmas.de/coremedia/generator/3008/property=pdf/2006_03_22_statement_muentefering_uebergangsregelungen_bei_der_arbeitnehmerfreizuegigkeit.pdf.
- Bundesministerium für Arbeit und Soziales [BMAS 2007]. Press Release (2007-09-19) Zuwanderung gestalten. Zugang ausländischer Hochschulabsolventen wird erleichtert, URL: http://www.bmas.de/coremedia/generator/19492/2007_09_15_zuwanderung_gestalten.html.
- Bundesministerium des Inneren [BMI 2007]. Migrationsbericht des Bundesamtes für Migration und Flüchtlinge im Auftrag der Bundesregierung, Migrationsbericht 2006. URL: http://www.bmi.bund.de/Internet/Content/Common/Anlagen/Broschueren/2008/Migrationsbericht_2006.templateId=raw.property=publicationFile.pdf/Migrationsbericht_2006.pdf.
- Bundesministerium des Innern [BMI 2008]: Migrationsbericht des Bundesamtes für Migration und Flüchtlinge im Auftrag der Bundesregierung, Migrationsbericht 2007. URL: http://www.bamf.de/clin_092/nm_442522/SharedDocs/Anlagen/DE/Migration/Publikationen/Forschung/Migrationsberichte/migrationsbericht-2007.templateId=raw.property=publicationFile.pdf/migrationsbericht-2007.pdf.
- Bundesministerium für Wissenschaft und Forschung [bm.wf 2008]: Studierende aus den neuen Mitgliedsstaaten an Universitäten nach Schulformen, bm.wf Abt. I/9, communication via e-mail 2008-06-26.

Bologna Process Working Group [BPWG 2007]. Key Issues for the European Higher Education Area – Social Dimension and Mobility. Report from the Bologna Process Working Group on Social Dimension and Data on Mobility of Staff and Students in Participating Countries. URL: <http://www.dcsf.gov.uk/londonbologna/uploads/documents/Socialdimensionandmobilityreport.pdf>.

Bundesministerium für Bildung, Wissenschaft und Kultur BMBWK [various years] Statistiken zum österreichischen Universitätswesen, Statistisches Taschenbuch. URL: http://archiv.bmbwk.gv.at/universitaeten/stats/stat_tb.xml.

Cerna, L. 2008. Towards an EU Blue Card? The Delegation of National High-Skilled Immigration Policies to the EU Level. URL: <http://www.compas.ox.ac.uk/publications/Working%20papers/WP0865%20Lucie%20Cerna.pdf>, last access: 2009-01-13.

CESifo 2007. Tuition Fees in Europe 2007/2008. URL: <http://www.cesifo-group.de/pls/guestci/download/CESifo%20DICE%20Report%202007/CESifo%20DICE%20Report%204/2007/dicereport407-db5.pdf>.

Chavdarova, T. 2006. Young people – those *New Bulgarians*: what do they think about Bulgaria? *South-East Europe Review*, p. 57-68. URL: <http://www.ceeol.com/aspx/issuedetails.aspx?issueid=c7a33c81-1cfa-4a1b-bc5a-12ca30179d38&articleId=01b66f12-1984-4a88-9bd9-0e1d35bfb6e0>.

Centre for International Mobility [CIMO 2006]. International Student Mobility in Finnish Higher Education 2006. URL: <https://www.cimo.fi/dman/Document.phx/~public/Julkaisut+ja+tilastot/English/summary2006.pdf>.

Centre for International Mobility [CIMO 2007]. International Student Mobility in Finnish Higher Education 2007. URL: https://www.cimo.fi/dman/Document.phx/~public/Julkaisut+ja+tilastot/English/english_summary_2007.pdf.

Deutscher Akademischer Austauschdienst [DAAD 2005]. Protokoll der AG 1: Studiengebühren: Chancen und Risiken für das Auslands- und Ausländerstudium, 2005-11-17. URL: http://www.daad.de/de/download/hochschulen/veranstaltungen/aaa_2005/ag1_protokoll.pdf.

Dawson, I., A. Jackson, M. Rhodes. 2006. Graduate Skills and Recruitment in the City. URL: http://217.154.230.195/NR/rdonlyres/77A68583-D0B5-4B33-BAFB-4077DC6D1F3B/0/BC_RS_graduateskills_0610_FR.pdf.

Deutscher Akademischer Austauschdienst, Hochschulinformationssystem GmbH [DAAD/HIS, various years]. Wissenschaft Weltoffen – Daten und Fakten zur Internationalität von Studium und Forschung. URL: <http://www.wissenschaft-weltoffen.de/>.

Department for Innovation, Universities & Skills [DIUS 2008]. European Union Students Studying in English Higher Education Institutions. URL: <http://www.dius.gov.uk/research/documents/DIUS-RR-08-09.pdf>.

Dreher, A., P. Poutvaara. 2005. Students Flows and Migration: An Empirical Analysis, CESifo Working Paper No. 1490. URL: http://www.cesifo-group.de/pls/guestci/download/CESifo%20Working%20Papers%202005/CESifo%20Working%20Papers%20June%202005/cesifo1_wp1490.pdf.

EduFrance.[various years]. Country portraits, rencontres. URL: <http://editions.campusfrance.org/pays/2006/pdfpays06/pologne.pdf>.

Erasmus Statistics [various years]. URL:

http://ec.europa.eu/education/programmes/llp/erasmus/stat_en.html.

Eurydice, Eurostat, European Commission 2007 [Eurydice 2007]. Key data on higher education in Europe. URL:

http://www.eurydice.org/ressources/Eurydice/pdf/0_integral/088EN.pdf.

Favell, A. 2008. *Eurostars and Eurocities. Free Movement and Mobility in an Integrating Europe*. Malden Oxford Victoria 2008: Blackwell Publishing.

Kelo, M., U. Teichler, B. Wächter. 2006 [Eurodata 2006]. EURODATA – Student Mobility in European Higher Education. Bonn: Lemmens

Hazen, H.D., H.C.Alberts 2006. Visitors or Immigrants? International Students in the United States. *Population, Space and Place*: 201-216.

Higher Education Authority [HEA 2007]. Domiciliary of origin of full-time students 2006/07. HEA Statistics Section. URL: <http://www.hea.ie/files/files/file/statistics/2007/FTDomiciliaryofOrigin07.xls>.

Higher Education Authority [HEA 2008]. Statistics Section, Domiciliary of origin of full-time students 1996/97-2006/07, communication via e-mail 2008-06-27.

Higher Education Policy Institute [HEPI 2008]. The Bologna Process and UK's International Student Market, URL: <http://www.hepi.ac.uk/downloads/36Bolognaprocessfull.pdf>.

Higher Education Statistics Agency [HESA 2008a]. Press Release 120. URL:

http://www.hesa.ac.uk/index.php?option=com_content&task=category§ionid=1&id=1&Itemid=161.

Higher Education Statistics Agency [HESA 2008b]. Data on student mobility from the EU-8+2 to the UK, communication via e-mail 2008-06-05.

Högskoleverket 2007a. *Universitet & Högskolor, Högskoleverkets årsrapport 2007*. URL:

<http://www.hsv.se/download/18.5b73fe55111705b51fd80004587/0733R.pdf>.

Högskoleverket 2007b. *Studentmobilitet-högskolestuderandes internationella rörlighet*. URL:

<http://www.hsv.se/download/18.44aba2dc11030072f75800084730/0709R.pdf>.

Högskoleverket 2008a. *Universitet & Högskolor, Högskoleverkets årsrapport 2008*. URL:

<http://www.hsv.se/download/18.8f0e4c9119e2b4a60c800023245/0819R.pdf>.

Högskoleverket 2008b. Number of incoming students to Sweden – study year 1997/98-2006/07 communication via e-mail 2008-06-19.

International Education Board Ireland [IEBI 2008, 2007]. International Students in Higher Education in Ireland 2006/07, International Students in Higher Education in Ireland 2005/06. URL:

http://www.educationireland.ie/index.php?option=com_docman&task=cat_view&gid=20&Itemid=251.

Isserstedt, W., J. Link 2008. Internationalisierung des Studiums in Deutschland – Ausländische Studierende in Deutschland – Deutsche Studierende im Ausland. Ergebnisse der 18. Sozialerhebung des Deutschen Studentenwerks durchgeführt durch HIS Hochschul-Informationssystem. URL:

http://www.sozialerhebung.de/pdfs/Soz18_Internat_Internet_180308.pdf.

Jahr, V., U. Teichler 2007. Graduates' International Experience and Mobility, Teichler, U. (ed.): *Careers of University Graduates – Views and Experiences in Comparative Perspective*. Dordrecht: Springer, p. 211-224.

Kaczmarczyk, P. 2006. Highly skilled Migration from Poland from Poland and other CEE countries – myths and reality, Centrum Stosunków Międzynarodowych, Reports and Analyses 17/06. URL: http://www.csm.org.pl/images/rte/File/EN/Publications/Reports%20&%20Analyses/2006/rap_i_an_17_06a.pdf.

Kaczmarczyk, P., M. Okólski 2005. Migracje Specjalistów wysokiej klasy w kontekście członkostwa Polski w Unii Europejskiej. Urząd Komitetu Integracji Europejskiej, Warsaw 2005. URL: [http://www.ukie.gov.pl/HLP/files.nsf/0/D5E80A5B329A01ACC12570F500518C47/\\$file/specjalisci.pdf](http://www.ukie.gov.pl/HLP/files.nsf/0/D5E80A5B329A01ACC12570F500518C47/$file/specjalisci.pdf).

King, R., E. Ruiz-Gelices 2003. International Student Migration and the European “Year Abroad”: Effects on European Identity and Subsequent Migration Behaviour. *International Journal of Population Geography*, 9: 229-252.

Kuption. C. 2006. Students and talent flow – the case of Europe: From castle to harbour?. Kuption, C., F.E. Pang, (eds.). *Competing for global talent*. Geneva: International Institute for Labour Studies, p.33-60.

Li, F.L.N., A.M, Findlay, A.J. Jowett, R. Skeldon 1996. Migrating to Learn and Learning to Migrate: A Study of the Experiences and Intentions of International Student Migrants. *International Journal of Population Geography*, 2: 51-67.

Lowell, L.B. 2005. Policies and Regulations for Managing Skilled International Migration for Work, UN/POP/MIG/2005/03. URL: <http://www.un.org/esa/population/meetings/ittmigdev2005/P03-LLowell.pdf>.

Mazzarol, T., G.N. Soutar 2002. “Push-pull” factors influencing international student destination choice. *The International Journal of Educational Management*, 16,2: 82-90.

Mechtenberg, L. 2005. Wettbewerb um kluge Köpfe. Die Länder Europas im Bologna-Prozess, *WZB-Mitteilungen*, Heft 107. URL: http://skylia.wz-berlin.de/fulltext/wzbmit_artikel/2005/f-12236.pdf.

Naidoo, V. 2007. Research on the flow of international students to UK universities: Determinants and implications. *Journal of Research in International Education* 6: 287-307.

NAEP 2008. Statistika mobilit studentu a pedagoga, Národní agentura pro evropské vzdělávací programy (NAEP). URL: http://www.naep.cz/index.php?a=view-project-folder&project_folder_id=60&view_type_code=document.

Netherlands Organization for International Cooperation in Higher Education [Nuffic 2006]: International Mobility in Education in the Netherlands 2006. URL: <http://www.nuffic.nl/international-organizations/docs/keyfigures/Mobmon-2006-ENG.pdf>.

Netherlands Organization for International Cooperation in Higher Education [Nuffic 2007] Internationalisation in Higher Education in the Netherlands. Key figures 2007. URL: <http://www.nuffic.nl/international-organizations/docs/keyfigures/Mobility-Key-Figures-2007.pdf>.

Oosterbeek, H., D. Webbink 2006. Assessing the returns to studying abroad, CPB Netherlands Bureau for Economic Policy Analysis, CPB Discussion Paper No. 64. URL: <http://www.cpb.nl/eng/pub/cpbreeksen/discussie/64/disc64.pdf>.

OECD 2007. Education at a Glance OECD Indicators, URL:
<http://www.oecd.org/dataoecd/36/4/40701218.pdf>.

OECD 2008a. International Migration Outlook, SOPEMI 2008. URL:
<http://browse.oecdbookshop.org/oecd/pdfs/browseit/8108071E.PDF>.

OECD 2008b. Education at a Glance: OECD Indicators, vol. 2008, no. 11. URL:
<http://browse.oecdbookshop.org/oecd/pdfs/browseit/9608041E.PDF>.

Papademetriou, D.G. 2003. Innovation in the selection of highly skilled immigrants. Presented at the Athens Capstone Conference on Managing Migration for the Benefit of Europe sponsored by the Greek Presidency of the European Union, Athens 15-17 May 2003.

Parey, M., F. Waldinger. 2008. Studying Abroad and the Effect on International Labor Market Mobility: Evidence from the Introduction of ERASMUS, IZA Discussion Paper No.3430. URL:
<http://ftp.iza.org/dp3430.pdf>.

Repères et références statistiques sur les enseignements, la formation et la recherche [RERS 2007]. Le ministère de l'éducation nationale et le ministère de l'enseignement supérieur et de la recherche. URL:
<http://media.education.gouv.fr/file/61/2/6612.pdf>.

Repères et références statistiques sur les enseignements, la formation et la recherche [RERS 2008]. Le ministère de l'éducation nationale et le ministère de l'enseignement supérieur et de la recherche. URL:
http://media.education.gouv.fr/file/2008/13/0/RERS-2008_34130.pdf.

Rivza, B., Teichler, U. 2007. The Changing Role of Student Mobility. *Higher Education Policy*, 20: 457-475.

Schomburg, H., U. Teichler 2006. *Higher Education and Graduate Employment in Europe. Results from Graduate Surveys in Twelve Countries*. Dordrecht: Springer.

Statistik Austria 2008. Bildung in Zahlen 2006/07 – Tabellenband. URL:
http://www.statistik.at/web_de/dynamic/services/publikationen/5/publdetail?id=5&listid=5&detail=462.

Statistisches Bundesamt [Federal Statistical Office] 2007. Bildung und Kultur. Studierende an Hochschulen, Wintersemester 2006/2007. Fachserie 11, Reihe 4.1. URL: https://www-ec.destatis.de/csp/shop/sfg/bpm.html.cms.cBroker.cls?CSPCHD=0010000100003i2bkXWv000000C4qR95fGnJUOvItZ1jmc7w--&cmspath=struktur,sfgsuchergebnis.csp&action=newsearch&op_EVASNr=startswith&search_EVASNr=2131.

Statistisches Bundesamt [Federal Statistical Office] 2008. Bildung und Kultur. Studierende an Hochschulen, Wintersemester 2007/2008. Fachserie 11, Reihe 4.1. URL: <https://www-ec.destatis.de/csp/shop/sfg/bpm.html.cms.cBroker.cls?cmspath=struktur,vollanzeige.csp&ID=1022759>.

Suter, B., M. Jandl. 2006. Comparative Study on Policies towards Foreign Graduates – Study on Admission and Retention Policies towards Foreign Students in Industrialised Countries, ICMPD Vienna. URL: <http://www.imiscoe.org/news/newsletters/documents/ComparatovestudyICMPD.pdf>.

Suter, B., M. Jandl. 2008. Train and Retain: National and Regional Policies to Promote the Settlement of Foreign Graduates in Knowledge Economies, *International Migration and Integration*, 9: 401-408.

Sygnowski, G. 2004. Gotowość migracyjna studentów państwowych szkół wyższych, Urząd

Komitetu Integracji Europejskiej (UKIE). *Migracje zarobkowe polskiej młodzieży. Badania i analizy*, p. 73-107. URL:

[http://www.ukie.gov.pl/HLP/files.nsf/0/38ABA8813C746441C1256F3400417A09/\\$file/be31.pdf](http://www.ukie.gov.pl/HLP/files.nsf/0/38ABA8813C746441C1256F3400417A09/$file/be31.pdf).

Teichler, U., K. Janson. 2007. The Professional Value of Temporary Study abroad in Another European Country: Employment and Work of Former Erasmus Students. *Journal of Studies in International Education*, 11: 486-495.

Thissen, L., S. Ederveen. 2006. Higher education: Time for Coordination on a European level?, CPB Netherlands Bureau for Economic Policy Analysis, CPB Discussion Paper No. 68. URL:

<http://www.cpb.nl/eng/pub/cpbreeksen/discussie/68/disc68.pdf>.

Tremblay, K. 2001. Student Mobility Between and Towards OECD countries in 2001 – a Comparative Analysis. URL:

http://www.uniroma1.it/internazionale/relazioni/conferenza_51203/proceedings/Tremblay.pdf

Tremblay, K. 2005. Academic Mobility and Immigration. *Journal of Studies in International Education*, 9: 196-228.

UNESCO 2006. Global Education Digest 2006. Comparing Education Statistics Across the World.

URL: <http://www.uis.unesco.org/TEMPLATE/pdf/ged/2006/GED2006.pdf>.

UNESCO 2007. Global Education Digest 2007. Comparing Education Statistics Across the World.

URL: http://www.uis.unesco.org/template/pdf/ged/2007/EN_web2.pdf.

UNESCO 2008. Global Education Digest 2008: Comparing Education Statistics Across the World.

URL: http://www.uis.unesco.org/template/pdf/ged/2008/GED%202008_EN.pdf.

Universities UK International Unit [UUK 2008a]. International Focus 16/01/08, Making it easier for international students to stay. URL:

<http://www.international.ac.uk/resources/International%20Focus%20Issue%2016.01.08%20final.pdf>.

Universities UK Europe Unit [UUK 2008b]. Briefing for UK participants, Bologna 2020. URL:

<http://www.europeunit.ac.uk/resources/Ghent%20Briefing%20for%20UK%20participants.pdf>

Universities UK 2005-2007. Patterns of higher education institutions in the UK: seventh report.

URLS: <http://bookshop.universitiesuk.ac.uk/downloads/patterns7.pdf>

<http://bookshop.universitiesuk.ac.uk/downloads/patterns6.pdf>

<http://bookshop.universitiesuk.ac.uk/downloads/patterns5.pdf>

Varghese, N.V. 2008. Globalization of higher education and cross-border student mobility, UNESCO International Institute for Educational Planning. URL:

http://www.unesco.org/iiep/PDF/pubs/2008/Globalization_HE.pdf?class=IIEP_PDF_pubs&page=Globalization_HE&estat_url=http://www.unesco.org/iiep/PDF/pubs/2008/Globalization_HE.pdf.

Verbik L., V. Lasanowski 2007. International Student Mobility: Patterns and Trends. The Observatory on Borderless Higher Education, Report September 2007. URL:

http://www.eua.be/fileadmin/user_upload/files/newsletter/International_Student_Mobility_-_Patterns_and_Trends.pdf.

Wächter, B. 2002. Studiengebühren und ausländische Studierende. Ein Diskussionspapier, Academic Cooperation Association 2002. URL: http://www.gate-germany.de/downloads/hintergrund/diskussionspapier_studiengebuehren.pdf.

West, A., A. Dimitropoulos, P. Noden, E. Stokes, A. Hind, A. Wilkes et al. 2001. Higher Education

Admission and Student Mobility within the EU. ADMIT, Centre for Educational Research, London School of Economics and Political Science, Clare Market Papers No. 18. URL: <http://www.lse.ac.uk/collections/ERG/pdf/cmp18.pdf>, last access 2008-07-21.

Wiers-Jenssen, J. 2008. Does Higher Education Attained Abroad Lead to International Jobs. *Journal of Studies in International Education*, 12: 101-130.

Zirra, P. 2006. International Mobility in Finnish Education – Trends and Developments in Tertiary and Secondary Education 2000-2004, Centre for International Mobility CIMO, Occasional Papers 1/2006. URL: http://www.cimo.fi/dman/Document.phx/~public/Julkaisut+ja+tilastot/occasional/occasionalpaper_12006.pdf.